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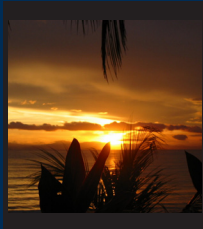


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Letter from the Editor

Welcome to Costa Rica

Welcome
Bienvenidos



On behalf of the Staff and the IBFR, I welcome you to San Jose and the 2009 Global Conference on Business and Finance. We hope you have a productive conference and enjoy your time in Costa Rica. If we can be of any assistance to you during your time in Costa Rica please do not hesitate to contact us.

We all know that college professors must balance their teaching, research, and service obligations. Finding the right forum to share and obtain feedback on our research, new teaching techniques, and innovative administrative processes can be challenging at times. The Institute for Business and Finance Research was created to facilitate your work by providing an environment conducive to knowledge and experience sharing. We encourage the academic community to come and share their work at our conferences and Journals. We welcome articles which are of interest to scholars and practitioners in all fields of business, economics and related fields.

The 2009 Costa Rica GCBF represents a long term commitment to bring individuals from around the world together to share their ideas and promote research on business and finance. The response to the conference has been outstanding. We wish to thank you for selecting the GCBF as your research outlet. We also wish to thank the many people that have contributed to making the conference a success. We are delighted to report that the conference is truly a global conference. We have participants from all corners of the globe at this academic conference. These individuals come from a variety of high quality institutions and will present work on a broad mix of academic issues.

We are proud to announce two upcoming conferences. Our eighth conference will be held Kailua-Kona, Hawaii, January 3-6, 2010. Our ninth conference will be held once again in Costa Rica. We will be announcing the location and dates of this conference in the coming weeks. We hope that you are able to join us at these events.

We hope you take the time to enjoy the hotel facilities as well as to take in Costa Rica and the surrounding countryside. Costa Rica is a wonderful destination with much to offer. We recognize that in addition to presenting research and participating in the conference activities, it is also important to relax and rejuvenate yourself. Have some fun! You deserve it! We hope that you will go home refreshed and with a sense of accomplishment.

Warmest Regards,

Mercedes Jalbert
Conference Chair

Carta del Editor

Bienvenidos a Costa Rica

Welcome
Bienvenidos



El Instituto y su personal les da la bienvenida a San Jose, Costa Rica y al 2009 Global Conference on Business and Finance. Esperamos que su participación sea productiva y que disfruten Costa Rica.

Todo profesor de educación superior debe encontrar un balance entre su rol como educador, investigador y como servidor a su comunidad y su universidad. Encontrar un foro donde podamos compartir y obtener retroalimentación sobre nuestra investigación, nuevas técnicas de educación, procesos administrativos innovadores es retador. El Institute for Business and Finance Research (IBFR) fue creado para facilitar el trabajo del profesional en educación superior, profesional del sector públicos y profesional del sector privado al crear una plataforma global conducente al enriquecimiento de nuestro conocimiento a través de:

1. La exposición de trabajos investigativos en todas las áreas académicas de las ciencias administrativas, ciencias económicas, financieras, etc.;
2. La exploración de nuevos avances tecnológicos, teóricos, pedagógicos;
3. El intercambio de conocimiento en una plataforma verdaderamente global.

El Congreso 2009 GCBF representa un compromiso a largo plazo para unir a nuestros colegas de todos los continentes en nuestros congresos y compartir nuestras ideas, investigación y cultura en una plataforma bilingüe. Deseamos agradecer su participación, la cual hace realidad nuestros objetivos; el realizar un Congreso realmente Global con participación de educadores y profesionales de todas partes del mundo.

Con gran alegría anunciamos nuestros próximos Congresos en Kailua-Kona, Hawaii, enero 3-6, 2010. Las fechas y destino de nuestro Congreso en Costa Rica para el 2010 se anunciarán próximamente. Será un placer el contar con su participación nuevamente.

Deseamos que disfruten su estancia en el Hotel Ramada y que tengan la oportunidad de explorar Costa Rica. Sabemos que además de exponer sus trabajos, es también importante tomar tiempo para relajarse, rejuvenecerse y conocer sobre otras culturas, tradiciones, etc. Esperamos que al regresar a sus hogares e instituciones se sientan rejuvenecidos y satisfechos con sus alcances y aprendizaje durante el Congreso.

Estamos para asistir durante el congreso y el futuro.

Saludos Cordiales,
Mercedes Jalbert
Conference Chair

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ENGLISH PROCEEDINGS

DID FINANCIAL PERFORMANCE OF EUROPEAN FIRMS IMPROVE AND CONVERGE AFTER INTRODUCTION OF THE EURO?

Sergiy Rakhmayil, Ryerson University

ABSTRACT

This paper examines the effect of the Euro on financial performance of companies in the European countries. The main objective is to study the impact of the financial liberalization on firm performance in individual countries, and on cross-country convergence of firms in different aspects of financial performance, including profitability, investment, leverage, and firm valuation. I find evidence of improvements in financial performance for European companies after the introduction of the Euro. Furthermore, evidence points at significant convergence in financial performance for countries that implemented the common currency. Overall, financial liberalization had a positive effect on firm performance in Europe.

INTRODUCTION

The purpose of this paper is to examine the effect of the Euro on financial performance of European companies. I study the changes in profitability, capital investment, leverage, dividend policies, and market valuation of European firms around the introduction of the common currency, and perform cross-country convergence analysis of these performance measures. Theory suggests that the common currency should reduce transaction costs and lead to improvements in firm performance and to business cycle convergence. I use financial statements data from the Datastream between 1980 and 2006 and analyze median performance measures using quantile regression analysis. I discover additional evidence of improvements in financial performance, and evidence of convergence in performance for European countries.

The introduction of the common currency in Europe in 1999 presents researchers with a chance to study the influence of financial liberalization on companies in different countries. Errunza and Senbet (1981), Morck and Yeung (1991), Rose (2001), Rose and van Wincoop (2001), Efthymios et al (2003) find that deregulation should increase firm performance. Several studies, for example Dumas and Solnik (1995), De Santis and Gerard (1998), Carrieri (2001), and De Santis et al (2003) find that currency risk is significant risk factor, and thus elimination of the currency risk as a result of the Euro should make company cash flows more stable and increase market valuation, ceteris paribus. Bris et al (2004) study changes in corporate valuations that followed after the introduction of the Euro and find that the common currency resulted in higher firm valuation as measured by Tobin's Q.

Financial liberalization should lead to an increased degree of capital market integration, which subsequently changes company cost of capital and leverage. Many studies, for example Errunza and Losq (1989), Bekaert and Harvey (1995), and Hardouvelis et al. (2006), present evidence linking financial liberalization to increased integration of the capital markets. Adler and Dumas (1983) offer a theory, which implies that capital market integration should lead to a reduction in the cost of capital. Empirical evidence found by De Santis and Gerard (1998) and Carrieri (2001), among others, provides support to the theory.

Some studies suggest that financial liberalization is not the only factor that should lead to changes in firm performance. Stulz (1999, 2005) finds that liberalization reduces the cost of equity capital but the effect is smaller than expected, and argues that this may be in part due to firm-specific factors, and La Porta et al

(1998) discover that legal system and law enforcement may have an effect in determining corporate governance practices within specific countries.

Research of business cycle convergence in the countries that undergo financial liberalization produced mixed results. A theory by Davis (2003) suggests that countries should converge in business cycle after liberalization, and Artis and Zang (1999), Frankel and Rose (1998), and Babetskii (2005) find evidence of convergence. Conversely, Krugman (1991) and Kalemli-Ozcan et al. (2001) suggest that economic integration should lead to greater specialization and subsequently lower convergence, and Massmann and Mitchell (2004) find periods of both convergence and divergence in business cycles of European companies.

I conduct a study of changes in company financial performance related to introduction of the Euro. Present analysis investigates financial liberalization in the European countries and its effect on the company performance around the introduction of the Euro in 1999, and on convergence in performance in the European countries. To the best of my knowledge, this research is the first comprehensive study of convergence in firm financial performance related to the introduction of the common currency in Europe.

The paper is organized as follows. The next section describes the data, hypotheses and methodology. Section three presents the results and is followed by the conclusion.

DATA, HYPOTHESES, AND METHODOLOGY

Data

This study examines annual financial reporting of European corporations between 1980 and 2006 in order to investigate whether or not introduction of the Euro resulted in material performance gains for European companies, and whether companies in different countries converged in their financial performance. I use data for the following eleven countries that implemented the euro: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, and Spain. As a benchmark I also include firms from Denmark, Sweden, and the U.K., as these three EU countries are not EMU members, and from non-union countries Norway and Switzerland. Even though Luxemburg also implemented the Euro, I omit it from the analysis due to lack of data.

The company specific information is obtained from the Datastream. I collect data on Net Income, Sales, Total Assets, Shareholders' Equity, Capital Expenditures, Total Debt, and Cash Dividends for the firms. I use these data to construct firm performance measures for profitability, investment, leverage, dividends, and firm valuation. Some country datasets are relatively small and have a lot of missing observations. Therefore, I include companies for which it is possible to construct at least one performance proxy during 1980-2006.

I use company balance sheet and income statement data to construct performance proxies. I construct performance measures for profitability (return on sales, return on assets, return on equity), capital investment (capital expenditure to sales, capital expenditure to total assets), leverage, dividends (cash dividends to sales and dividend payout ratios), and Tobin's Q as a measure of market valuation. In constructing variables I use local currency data.

In order to obtain aggregate measures of firm performance for each country, I compute median performance measures. Median is good measure of the center of the distribution because it is less sensitive to outliers in the data than the mean, and medians are routinely used in corporate finance studies such as Megginson et al (1994) or Hartford et al (2008), among others. The final dataset includes nine median performance measures for each of the sixteen countries in the sample. I use 27 annual

observations, between 1980 and 2006, for all countries except Greece and Portugal. The data for Greece are available only starting from 1984 and the data for Portugal are available from 1985; therefore, there are only 23 annual data points for Greece and 22 annual data points for Portugal.

Hypotheses

The study examines whether firms change their financial performance, including profitability, capital expenditure, dividend policies, capital structure, and Tobin's Q after the introduction of the Euro. In particular, I investigate whether the performance improved after financial liberalization, and whether firms in European countries display convergence in performance.

Economic theory suggests that liberalization process should lead to reduction of risk, increasing use of comparative advantage, economies of scale, technology transfer, and subsequent economic growth. See for example Rivera-Batiz and Romer (1991), Obstfeld (1994), Lee et al (1997), Kao et al (1999), and Kutan and Yigit (2007). It implies that we should expect to see improvements in financial performance, including profitability and firm valuation. Opponents of liberalization, on the other hand, argue that reduction of import tariffs should hurt local companies because it will expose them to harsher competition from overseas.

A reduction in transaction costs following implementation of the common currency should in theory lead to better investment opportunities offered by the comparative advantage and economies of scale. Thus, one would expect investment increases for the firms whose competitive position improved in the foreign markets and they need to produce more, or firms that need to re-allocate productive resources in order to become more competitive in the home markets because of increased foreign competition at home. Alternatively, some firms may be unable or unwilling to increase investment, especially if these firms have liquidity problems and are very vulnerable to foreign competition.

The common currency reduces transaction costs in the financial markets. Adler and Qi (2000) and Mittoo (2003), among others, discuss the effect of liberalization on stock market integration in North America. Stulz (1999) and Bris et al (2004) argue that stock market integration reduces cost of equity capital and leverage. Alternatively, a greater degree of risk sharing and comparative advantage that in theory come with liberalization should reduce cash flow volatility for businesses. More stable cash flows lower probability of financial distress and allow companies to use greater financial leverage. See for example Opler and Titman (1994) for the discussion of the relationship between financial distress and leverage.

The dividends may increase after the introduction of the Euro, especially if private investors see greater profitability for companies benefiting from the financial liberalization, and subsequently demand greater cash distributions. Alternatively, firms most vulnerable from foreign competition may find it difficult to sustain pre-liberalization payout levels, and may decrease dividends. In addition, if firms identify great investment opportunities resulting from the reduction in transaction costs, then there will be less cash available for distribution and thus dividends may decrease. Finally, companies may keep their dividends stable and it is possible to see no effect of the Euro on dividend payout.

An interesting question is whether there has been any business cycle convergence as a result of European integration. Davis (2003) offers a theoretical model where economic integration should lead to a diversified industrial structure. This implies that output in different countries should be more correlated if these countries enter a monetary union such as EMU. On the other hand, Krugman (1991) and Kalemli-Ozcan et al. (2001), among others, suggest that economic integration should lead to greater specialization and subsequently lower output synchronization across countries. Several recent studies examine business cycle convergence among European countries. For example, Artis and Zang (1999), Frankel and

Table 1: Summary of testable implications.

Characteristics	Financial Ratios	Predicted relationship
Profitability	Return on sales (ROS) = Net Income/Sales	ROS _A >ROS _B ROS converge in EMU
	Return on assets (ROA) = Net Income/ Total Assets	ROA _A >ROA _B ROA converge in EMU
	Return on equity (ROE) = Net Income/Shareholders Equity	ROE _A >ROE _B ROE converge in EMU
Capital Investment	Capital expenditure to sales (CESA) = Capital expenditure / Sales	CESA _A >CESA _B CESA converge in EMU
	Capital expenditure to total assets (CETA) = Capital expenditure / Total assets	CETA _A >CETA _B CETA converge in EMU
	Debt to assets (TDTA) = Total debt / Total assets	TDTA _A <TDTA _B Leverage converge in EMU
Dividends	DIVSAL = Cash dividend / Sales	DIVSAL _A >DIVSAL _B DIVSAL converge in EMU
	Payout = Cash dividend / Net Income	Payout _A > Payout _B Payout converge in EMU
Company valuation	Tobin's Q = (Market value of equity +Total Debt)/ Total assets	Q _A >Q _B Tobin's Q converge in EMU

This table presents firm characteristics that we expect to change as a result of the liberalization process in Europe, and empirical proxy variables used to measure these characteristics. Subscriptions A and B denote firm characteristics after and before, respectively.

Rose (1998), and Babetskii (2005) find evidence of business cycle convergence. At the same time, Massmann and Mitchell (2004) discover that European countries were undergoing periods of economic convergence followed by periods of divergence and that the convergence test results are sensitive to the way business cycle is measured. This study uses several measures to examine whether firms in different European countries converge in their financial performance.

Table 1 summarizes the hypotheses investigated in this study. I check whether the Euro led to improvements in profitability, investment, and dividends. I also study whether European firms display significant changes in capital structure and firm valuation, and whether there is any cross-country evidence of convergence after the introduction of the Euro.

Methodology

To detect changes in performance I estimate the following equation using quantile regression for 50th percentile of the distribution of the dependent variable:

$$y_t = c_1(1 - D_{Euro}) + c_2 D_{Euro} + \varepsilon_t \quad (1)$$

where y_t is the median performance measure in question, D_{Euro} takes value of 1 after the introduction of the Euro in 1999 and zero otherwise, c_1 and c_2 are regression coefficients, and ε_t is residual. Equation (1) estimates medians of the performance proxies before and after the introduction of the Euro. I use coefficient equality test for inference whether the performance proxy median changed. The equality test involves computing Wald test statistics for the null hypothesis that $c_1 = c_2$.

The data used in this study are annual medians (50th percentiles) for performance proxies. Therefore, the choice of quantile regression modeling 50th percentile of the response variable seems more appropriate than least squares regression that models mean of the dependent variable, see Koenker and Bassett (1978). Furthermore, the quantile regression approach does not require strong distributional assumptions, which provides more robust estimates.

In order to find evidence of convergence or divergence in a performance proxy across different countries I compute mean absolute deviation between country i 's performance proxy and corresponding performance proxies for all the other countries:

$$\hat{y}_{i,t} = \frac{1}{n_j} \sum_{j \neq i} |y_{i,t} - y_{j,t}| \quad (2)$$

where $\hat{y}_{i,t}$ is the mean absolute deviation in a performance proxy for year t and n_j is the number of the other countries (excluding country i). I compute mean absolute deviation between any country and three subsets which include EMU, EU but not EMU, and non-EU countries. Next, I estimate the following equation using quantile regression for the 50th percentile of the dependent variable:

$$\hat{y}_{i,t} = c_1 + c_2 D_{Euro} + \varepsilon_t. \quad (3)$$

In equation (3) coefficient c_1 estimates median of the dependent variable before the introduction of the Euro in 1999, and coefficient c_2 estimates change in the median after 1999. Therefore, a negative and statistically significant coefficient c_2 will imply convergence, and positive coefficient will imply divergence from the corresponding group of countries.

EMPIRICAL RESULTS

Performance changes

A reduction in transaction costs produced by the common currency in the EMU countries in theory should improve profitability and market valuation for companies. It could also lead to increased investment and dividend payout, and to lower financial leverage. In addition, the EMU may result in positive externalities for the rest of the Europe. For example, firms in neighboring countries may enjoy increased performance because they are linked with the firms in the EMU countries.

Table 2 presents test results for the hypotheses that introduction of the Euro should lead to improvements in financial performance for European companies. Panel A of Table 2 shows significant evidence of improvements in profitability for firms in Austria, Finland, Denmark, Spain, and Switzerland. For example, median ROS increased in Austria from 0.0213 in pre-1999 to 0.0437 in post-1999 years, and the increase is significant at 10%. At the same time Greece and the U.K. display signs of decreases in firm profitability. For example, median ROA for the U.K. decreased from 0.0539 to 0.0128 and the decrease is significant at 1% level.

Table 2 Panel B shows estimated changes in capital investment and leverage. I discover evidence pointing that the investment in European countries declined after the introduction of the common currency, contrary to expected. For example, CESA in France declined from median 0.0482 to 0.0290, and the decline is statistically significant at 1% level. This decline in investment is not specific to EMU countries only, since investment proxies CESA or CETA significantly drop in Belgium, Finland, France, Germany, Italy, the Netherlands, Denmark, Sweden, the U.K., Norway, and Switzerland.

The results for leverage are country-specific. Median leverage significantly decreased in Finland, Sweden, and Norway, and increased in Ireland, Italy, the Netherlands, Portugal, Spain, and Denmark. For example, median leverage for Portugal is 0.2688 before the Euro and 0.3802 after the Euro, and the difference is significant at 1% level. Therefore, I find little evidence that the companies reduced leverage

Table 2: Estimated Performance Changes

PANEL A: PROFITABILITY									
	ROS			ROA			ROE		
	Median before	Median after	Equality test	Median before	Median after	Equality test	Median before	Median after	Equality test
Austria	0.0213***	0.0437***	(0.052)	0.0075*	0.0181***	(0.142)	0.0697***	0.0787***	(0.628)
Belgium	0.0383***	0.0422***	(0.708)	0.0342***	0.0340***	(0.971)	0.1076***	0.0923***	(0.398)
Finland	0.0116*	0.0522***	(0.001)	0.0100*	0.0445***	(0.001)	0.1070***	0.1264***	(0.522)
France	0.0331***	0.0338***	(0.934)	0.0263***	0.0273***	(0.861)	0.1131***	0.0905***	(0.221)
Germany	0.0196***	0.0198***	(0.974)	0.0199***	0.0145**	(0.384)	0.0843***	0.0623***	(0.225)
Greece	0.0555***	0.0313***	(0.056)	0.0469***	0.0188**	(0.013)	0.1327***	0.0489*	(0.021)
Ireland	0.0459***	0.0416***	(0.706)	0.0432***	0.0370***	(0.491)	0.1324***	0.1524***	(0.343)
Italy	0.0313***	0.0327***	(0.890)	0.0130***	0.0119***	(0.843)	0.0706***	0.0614***	(0.646)
Netherlands	0.0436***	0.0346***	(0.254)	0.0543***	0.0404***	(0.125)	0.1463***	0.1142***	(0.312)
Portugal	0.0355***	0.0290**	(0.650)	0.0212***	0.0104	(0.221)	0.0925***	0.0553*	(0.353)
Spain	0.0607***	0.0774***	(0.085)	0.0237***	0.0333***	(0.145)	0.0813***	0.1311***	(0.048)
Denmark	0.0355***	0.0547***	(0.095)	0.0249***	0.0206***	(0.385)	0.0010***	0.0009***	(0.784)
Sweden	0.0351***	0.0332**	(0.890)	0.0242***	0.0307**	(0.663)	0.1535***	0.1111***	(0.324)
UK	0.0541***	0.0248***	(0.003)	0.0539***	0.0128*	(0.000)	0.1338***	0.0563***	(0.001)
Norway	0.0230**	0.0323*	(0.648)	0.0162***	0.0116	(0.596)	0.0013***	0.0008***	(0.185)
Switzerland	0.0368***	0.0536***	(0.064)	0.0259***	0.0326***	(0.353)	0.0798***	0.0991***	(0.235)

PANEL B: INVESTMENT ABD LEVERAGE									
	CESA			CETA			LEVERAGE		
	Median before	Median after	Equality test	Median before	Median after	Equality test	Median before	Median after	Equality test
Austria	0.0545***	0.0520***	(0.773)	0.0475***	0.0418***	(0.405)	0.2259***	0.2805***	(0.115)
Belgium	0.0422***	0.0379***	(0.353)	0.0489***	0.0335***	(0.012)	0.1890***	0.2133***	(0.234)
Finland	0.0850***	0.0381***	(0.007)	0.0827***	0.0422***	(0.006)	0.3554***	0.2262***	(0.000)
France	0.0482***	0.0290***	(0.000)	0.0593***	0.0289***	(0.001)	0.1976***	0.1896***	(0.599)
Germany	0.0523***	0.0299***	(0.004)	0.0732***	0.0286***	(0.000)	0.1576***	0.1551***	(0.949)
Greece	0.0319***	0.0380***	(0.568)	0.0304***	0.0244**	(0.643)	0.2076***	0.2496***	(0.299)
Ireland	0.0379***	0.0316***	(0.367)	0.0385***	0.0273***	(0.126)	0.1944***	0.2376***	(0.032)
Italy	0.0540***	0.0398***	(0.085)	0.0304***	0.0252***	(0.384)	0.2337***	0.2832***	(0.069)
Netherlands	0.0412***	0.0255***	(0.001)	0.0641***	0.0312***	(0.000)	0.1587***	0.2366***	(0.000)
Portugal	0.0567***	0.0496***	(0.588)	0.0442***	0.0340***	(0.165)	0.2688***	0.3802***	(0.002)
Spain	0.0553***	0.0560***	(0.956)	0.0342***	0.0283***	(0.452)	0.2013***	0.2666***	(0.044)
Denmark	0.0676***	0.0327***	(0.002)	0.0728***	0.0222**	(0.001)	0.1684***	0.2196***	(0.010)
Sweden	0.0505***	0.0234***	(0.001)	0.0567***	0.0234***	(0.000)	0.2159***	0.1508***	(0.056)
UK	0.0420***	0.0273***	(0.018)	0.0539***	0.0256***	(0.000)	0.1326***	0.1140***	(0.355)
Norway	0.0948***	0.0621***	(0.117)	0.0796***	0.0440***	(0.034)	0.3369***	0.2548***	(0.065)
Switzerland	0.0482***	0.0330***	(0.059)	0.0503***	0.0268***	(0.004)	0.2546***	0.2079***	(0.111)

This table present quantile regression results for equation (1), $y_t = c_1(1 - D_{Euro}) + c_2 D_{Euro} + \varepsilon_t$, and the results of Wald coefficient test for the null hypothesis that $c_1 = c_2$. Column "Median before" presents estimation results for coefficient c_1 , column "Median after" present coefficient estimates for c_2 , and column "Equality tests" presents p-values (in parentheses) for the Wald test statistic with the null hypothesis that $c_1 = c_2$ and an alternative hypothesis that $c_1 \neq c_2$. *** indicates 1% significance, ** indicate 5% significance, * indicates 10% significance

Table 2: Estimated Performance Changes (continued)

PANEL C: DIVIDENDS AND MARKET VALUATION									
	DIVSAL			PAYOUT			TOBIN'S Q		
	Median before	Median after	Equality test	Median before	Median after	Equality test	Median before	Median after	Equality test
Austria	0.0094***	0.0092***	(0.961)	0.2926***	0.1863***	(0.243)	0.6589***	0.6675***	(0.872)
Belgium	0.0118***	0.0104***	(0.636)	0.3800***	0.1895***	(0.000)	0.8093***	0.8779***	(0.528)
Finland	0.0078***	0.0191***	(0.001)	0.4812***	0.3568***	(0.330)	0.8266***	1.0252***	(0.178)
France	0.0070***	0.0045***	(0.051)	0.2110***	0.0782***	(0.000)	0.7172***	0.8545***	(0.200)
Germany	0.0074***	0.0000	(0.000)	0.4258***	0.0000	(0.000)	0.7908***	0.8588***	(0.623)
Greece	0.0252***	0.0109***	(0.004)	0.3939***	0.2187***	(0.017)	1.0169***	0.8485***	(0.431)
Ireland	0.0097***	0.0069***	(0.278)	0.2310***	0.0447	(0.002)	0.8207***	1.1610***	(0.019)
Italy	0.0142***	0.0104***	(0.157)	0.3438***	0.2145***	(0.015)	0.6077***	0.7707***	(0.055)
Netherlands	0.0097***	0.0071***	(0.230)	0.2943***	0.1525***	(0.000)	0.7422***	0.9860***	(0.096)
Portugal	0.0064***	0.0056**	(0.822)	0.2002***	0.0590	(0.060)	0.6599***	0.7078***	(0.612)
Spain	0.0219***	0.0158***	(0.100)	0.3513***	0.2577***	(0.013)	0.6780***	0.8204***	(0.336)
Denmark	0.0097***	0.0089***	(0.548)	0.1747***	0.1154***	(0.069)	0.6117***	0.7070***	(0.245)
Sweden	0.0107***	0.0031	(0.008)	0.2843***	0.0000	(0.006)	0.6634***	1.1238***	(0.007)
UK	0.0184***	0.0000	(0.000)	0.3032***	0.0000	(0.000)	0.9416***	1.1119***	(0.245)
Norway	0.0088***	0.0000	(0.002)	0.1148***	0.0000	(0.060)	0.8908***	0.9210***	(0.834)
Switzerland	0.0111***	0.0099***	(0.486)	0.3436***	0.1639***	(0.000)	0.6983***	0.8373***	(0.122)

This table present quantile regression results for equation (1), $y_t = c_1(1 - D_{Euro}) + c_2D_{Euro} + \varepsilon_t$, and the results of Wald coefficient test for the null hypothesis that $c_1=c_2$. Column "Median before" presents estimation results for coefficient c_1 , column "Median after" present coefficient estimates for c_2 , and column "Equality tests" presents p-values (in parentheses) for the Wald test statistic with the null hypothesis that $c_1=c_2$ and an alternative hypothesis that $c_1 \neq c_2$. *** indicates 1% significance, ** indicates 5% significance, * indicates 10% significance

due to lower cost of equity in the integrated European equity market. It appears that the increase in leverage may have been caused by increased stability of cash flows that are less subject to exchange rate uncertainty after the common currency is implemented.

Table 2 Panel C shows test results for dividend payout variables DIVSAL and PAYOUT, and for Tobin's Q. I find that only in Finland firms significantly increased their dividend payout, with median DIVSAL increasing from 0.0078 to 0.0191. Test results show that either one or both dividend payout proxies decreased for Belgium, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Denmark, Sweden, the U.K., Norway, and Switzerland. For example, I discover that for France median DIVSAL decreased from 0.0070 to 0.0045 with median change significant at 10%, and PAYOUT decreased from 0.2110 to 0.0782 with median change significant at 1%. Hence, the hypothesis that dividends increase with financial liberalization is strongly rejected.

Test results provide support for the hypothesis that the Euro resulted in greater firm valuations. I find that Tobin's Q significantly increased in Ireland, Italy, the Netherlands, and Sweden. For example, in Ireland median Tobin's Q prior to the introduction of Euro is estimated at 0.8207 and after the introduction of the Euro it is 1.1610, the change in medians is significant at 5%. There is no evidence pointing at significant decrease in market valuation for any country in the dataset. Thus, evidence suggests that the market value effect of the common currency was positive.

Convergence in Performance

To examine the convergence hypothesis I estimate equation (3) and present the results in Table 3. Panel A of Table 3 presents the results of convergence tests for profitability measures ROS, ROA, and ROE. I find evidence pointing at profitability convergence in many EMU countries. For example, the convergence

with EMU parameter for Netherlands is -0.0038 and 5% significant for ROS, -0.0090 and 1% significant for ROA, and -0.0226 and 10% significant for ROE. This indicates that firms in the Netherlands display convergence in profitability with the other EMU countries. Overall, I find evidence of profitability convergence with the EMU countries for Austria, Belgium, Finland, France, Greece, Italy, the Netherlands, and the U.K.

Table 3 Panel B presents empirical results for convergence tests in CESA, CETA, and Leverage. The evidence shows that investment as a proportion of total assets CETA converged throughout Europe to the investment rates in the EMU, regardless whether a particular country belongs to EMU or EU. In particular, the estimated convergence to EMU parameters for CETA are negative for all countries. For example, the CETA convergence coefficient for France with respect to EMU is -0.0099, significant at 1%. The EMU coefficients are significant at 1% for Belgium, Finland, France, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden, the U.K., and Switzerland, significant at 5% for Germany, and Norway, and significant at 10% for Austria. Similarly, I find evidence of CETA convergence to non EMU countries for Germany, Italy, Spain, Denmark, U.K., Sweden, Norway, and Switzerland. Overall, the results indicate a great deal of investment convergence in Europe that followed the introduction of the Euro.

The estimation results for Leverage are country-specific. Finland displays convergence in Leverage to the other EMU countries, significant at 1% level. France, Portugal, and the U.K. diverge from the EMU, with the corresponding coefficients significant at 10%, 5%, and 1%, respectively. Austria, Italy, the Netherlands, and Portugal diverged from the EU but non-EMU countries. The reported coefficient is positive and significant, for example the non-EMU coefficient for Leverage in Portugal is estimated 0.1796 and significant at 1% level, hence we conclude mean absolute deviation in Leverage for these countries increased after the introduction of the Euro. It is interesting to see that many EMU countries converged in Leverage to non EU countries, for example France converged to non EU countries with the estimated coefficient of -0.1238, significant at 5% level. Thus, the convergence hypothesis for Leverage in the EMU countries is not supported by the data.

Table 3 Panel C presents test results for dividend payout variables DIVSAL and PAYOUT, as well as for Tobin's Q. There is little evidence to suggest any convergence in the European countries in dividend proxies DIVSAL and PAYOUT. I do not find significant changes in deviation in dividend proxies for many countries. Finland displays signs of divergence from all groups of countries, for example the DIVSAL coefficient for EMU is 0.0045 and significant at 10%. The evidence shows U.K. converges to non-EU countries in DIVSAL, because its non-EU coefficient is -0.0075 and significant at 5%, and the U.K. diverges from the EU countries in PAYOUT, since the EMU coefficient is estimated at 0.0810 and significant at 5% level. Thus, it does not appear that there is any regularity with respect to common dividend policies across European countries resulting from financial liberalization.

Test results for convergence in Tobin's Q across European countries also do not yield much systematic evidence. I find that Italy converged to the EMU countries, since the coefficient for EMU is -0.0959 and significant at 5% level. The rest of the countries do not display any signs of convergence and divergence. Thus, the evidence does not support the convergence hypothesis for Tobin's Q.

As a robustness check, I conducted a series of nonparametric median equality tests for the performance proxy variables using company-level data, including Wilcoxon/Mann-Whitney, Wilcoxon/Mann-Whitney (tie-adjusted), Median Chi-square, Adjusted Median Chi-square, Kruskal-Wallis, Kruskal-Wallis (tie-adjusted), and van der Waerden median equality test. I also estimate equations (1) and (3) using least squares regression. All tests produce similar results.

Table 3: Estimated Convergence in Financial Performance

PANEL A: PROFITABILITY									
	ROS			ROA			ROE		
	EMU	non EMU	non EU	EMU	non EMU	non EU	EMU	non EMU	non EU
Austria	-0.0025	-0.0117	-0.0207*	-0.0079**	-0.0291***	-0.0185**	-0.0158**	-0.0361*	0.0132
Belgium	-0.0007	0.0030	0.0025	-0.0014	-0.0033	0.0026	-0.0072**	-0.0209	-0.0258
Finland	-0.0112*	-0.0058	-0.0091	-0.0038	0.0038	0.0182**	-0.0122	0.0090	0.0098
France	-0.0032*	-0.0009	0.0046	-0.0034**	-0.0076	0.0016	-0.0058	-0.0035	-0.0290
Germany	0.0040	-0.0014	0.0253	-0.0003	-0.0096	0.0014	0.0041	-0.0303	0.0094
Greece	-0.0048	0.0102	-0.0201	-0.0114*	-0.0188**	-0.0304	-0.0082	-0.0356	-0.0654
Ireland	-0.0034	0.0096	0.0000	-0.0053	0.0003	-0.0138	0.0033	0.0424***	0.0176
Italy	-0.0060**	-0.0009	-0.0110	-0.0024	-0.0050	0.0033	-0.0071	-0.0409**	0.0094
Netherlands	-0.0038**	0.0047	0.0022	-0.0090***	0.0046	-0.0075	-0.0226*	0.0127	-0.0191
Portugal	-0.0036	-0.0050	-0.0104	-0.0005	-0.0143*	-0.0097	-0.0118	-0.0284	0.0055
Spain	0.0094	0.0066	-0.0008	-0.0023	0.0008	0.0028	0.0108	0.0255	0.0744**
Denmark	0.0027	0.0154***	0.0016	-0.0021	-0.0062	0.0040	-0.0197	-0.0401	0.0182
Sweden	-0.0004	0.0041	0.0133	-0.0019	-0.0066	0.0041	-0.0204	-0.0117	-0.1002**
UK	-0.0008	0.0025	0.0077	-0.0117*	-0.0128	-0.0273*	-0.0064	-0.0250	-0.0782**
Norway	-0.0071	0.0036	-0.0007	-0.0047	-0.0001	0.0041	-0.0193	-0.0388	0.0182
Switzerland	0.0024	0.0114***	-0.0007	-0.0023	-0.0059	0.0041	-0.0079	-0.0224	0.0182

PANEL B: INVESTMENT AND LEVERAGE									
	CESA			CETA			LEVERAGE		
	EMU	non EMU	non EU	EMU	non EMU	non EU	EMU	non EMU	non EU
Austria	-0.0038	0.0092	-0.0236	-0.0060*	0.0054	-0.0211***	0.0068	0.0855***	-0.0914
Belgium	-0.0047	-0.0060	-0.0347	-0.0099***	-0.0011	-0.0262	0.0043	0.0066	-0.1205**
Finland	-0.0223	-0.0336*	-0.0450*	-0.0314***	-0.0044	-0.0399*	-0.1167***	-0.1496***	-0.0905***
France	-0.0040	-0.0113***	-0.0382*	-0.0099***	-0.0041	-0.0260*	0.0151*	-0.0029	-0.1238**
Germany	-0.0027	-0.0109**	-0.0235	-0.0153**	-0.0120***	-0.0198	0.0231	-0.0463**	-0.2185**
Greece	-0.0102	-0.0041	-0.0305	-0.0115	-0.0147	-0.0233	0.0028	0.0345	-0.1056
Ireland	-0.0070	-0.0176*	-0.0494**	-0.0109***	-0.0209**	-0.0369*	0.0036	0.0070	-0.1430***
Italy	-0.0057	-0.0022	-0.0345*	-0.0142***	-0.0282***	-0.0323*	0.0040	0.0931***	-0.0540
Netherlands	-0.0012	-0.0129**	-0.0450**	-0.0168***	-0.0054	-0.0191	-0.0171	0.0412*	-0.1987***
Portugal	-0.0082	-0.0026	-0.0139	-0.0109***	-0.0198	-0.0259	0.0635**	0.1796***	0.1255
Spain	-0.0024	0.0066	-0.0219	-0.0182***	-0.0279***	-0.0497***	0.0075	0.0429	-0.1054*
Denmark	-0.0109*	-0.0142**	-0.0302	-0.0086	-0.0145***	-0.0180	-0.0030	0.0169	-0.1583***
Sweden	-0.0034	-0.0076**	-0.0165	-0.0078***	-0.0101***	-0.0212	0.0212	-0.0320*	0.0267
UK	-0.0038	-0.0119**	-0.0390*	-0.0084***	-0.0082***	-0.0225	0.0632***	-0.0113	-0.0762
Norway	-0.0241*	-0.0277	-0.0187	-0.0211**	-0.0158	-0.0139	-0.0223	-0.1200*	-0.0245
Switzerland	-0.0107*	-0.0144***	-0.0187	-0.0106***	-0.0188***	-0.0139	-0.0249	-0.0539***	-0.0245

This table present quantile regression results for equation (3), $\hat{y}_{i,t} = c_1 + c_2 D_{Euro} + \varepsilon_t$. Column "EMU" presents estimation results for coefficient c_2 when the dependent variable is mean absolute deviation from the EMU countries, column "non EMU" presents estimation results for coefficient c_2 when the dependent variable is mean absolute deviation from the countries that are EU but not the EMU members, column "non EU" presents estimation results for coefficient c_2 when the dependent variable is mean absolute deviation from countries in our sample that are not the EU members. *** indicates 1% significance, ** indicates 5% significance, * indicates 10% significance

Table 3: Estimated convergence in financial performance (continued).

	PANEL C: DIVIDENDS AND MARKET VALUATION								
	DIVSAL			PAYOUT			TOBINS Q		
	EMU	non EMU	non EU	EMU	non EMU	non EU	EMU	non EMU	non EU
Austria	-0.0015	-0.0019	0.0019	-0.0131	-0.0647	-0.1276	-0.0024	0.1434	0.0467
Belgium	-0.0012	0.0004	0.0048	-0.0188	0.0021	-0.0839	-0.0157	0.0183	-0.1115
Finland	0.0045*	0.0131***	0.0204***	0.0244	0.1610	0.1849	0.0432	0.0086	0.0620
France	0.0001	-0.0027*	0.0010	-0.0006	-0.0263	-0.0966	-0.0290	0.0916	-0.0969
Germany	0.0032**	0.0011	0.0028	0.0520*	-0.1718***	-0.1356	-0.0341	0.0500	-0.0365
Greece	-0.0049*	-0.0076	-0.0119	-0.0313	0.0028	-0.0577	-0.0516	0.0111	-0.0544
Ireland	-0.0008	-0.0018	0.0009	-0.0052	-0.0015	-0.0376	0.0199	-0.0404	0.1248
Italy	-0.0011	0.0016	0.0002	0.0058	0.0161	-0.0385	-0.0959**	0.0158	0.0028
Netherlands	-0.0006	-0.0004	0.0008	0.0073	0.0269	0.0181	-0.0371	0.0152	-0.1535
Portugal	-0.0004	-0.0037	-0.0060**	0.0017	-0.0254	-0.0250	-0.0389	0.0501	0.1162
Spain	-0.0009	0.0040	-0.0017	0.0210	0.1027*	0.0684	-0.0257	0.0179	-0.0280
Denmark	-0.0004	0.0013	0.0028	-0.0455	-0.0280	-0.0473	-0.0333	0.1299	-0.0306
Sweden	0.0017	0.0017	0.0008	0.0200	-0.0217	-0.1068	0.1421	0.0577	0.0875
UK	-0.0005	-0.0022	-0.0075**	0.0810***	-0.0564	-0.0436	-0.0325	-0.0043	-0.1095
Norway	0.0016	0.0001	0.0046*	-0.0637	-0.0996	-0.0376	-0.0300	-0.0382	0.0539
Switzerland	-0.0004	0.0001	0.0046*	-0.0018	-0.0078	-0.0376	-0.0395	0.0865	0.0539

This table present quantile regression results for equation (3), $\hat{y}_{i,t} = c_1 + c_2 D_{Euro} + \varepsilon_{i,t}$. Column "EMU" presents estimation results for coefficient c_2 when the dependent variable is mean absolute deviation from the EMU countries, column "non EMU" presents estimation results for coefficient c_2 when the dependent variable is mean absolute deviation from the countries that are EU but not the EMU members, column "non EU" presents estimation results for coefficient c_2 when the dependent variable is mean absolute deviation from countries in our sample that are not the EU members. *** indicates 1% significance, ** indicates 5% significance, * indicates 10% significance

CONCLUSION

This study explored the effect of the Euro on financial performance of companies in the European countries by studying changes in various performance measures. I carried out tests based on quantile regression analysis to evaluate changes in median performance measures before and after the introduction of the common currency, and analyzed whether European companies converged in their financial performance.

The analysis revealed a number of interesting results. I find that implementation of the Euro corresponds with increases in profitability and leverage, and decreases in investment and dividend payout for many European countries. I also find significant increases in market valuation for Ireland, Italy, the Netherlands, and Sweden. The tests showed that the EMU countries exhibit convergence in profitability, and all European countries converged to the EMU countries in the amount of capital investment as a proportion of total assets.

After considering test results, I conclude that the common currency is beneficial for financial performance of companies in the European countries. The findings are consistent with economic theory suggesting that financial liberalization should improve firm performance and lead to convergence in performance across countries.

REFERENCES

Adler, Michael and Bernard Dumas (1983): "International Portfolio Choice and Corporation Finance: A Synthesis", *Journal of Finance* vol. 38 (3), p. 925-984.

- Adler, Michael, and Rong Qi (2000) "Mexico's integration in the North American capital market", *Emerging Markets Review* vol. 4, p. 91-120.
- Artis, M., & Zang, W (1999). "Further evidence on the international business cycle and the ERM: Is there a European business cycle?", *Oxford Economic Papers*, vol. 51, p.120–132.
- Babetskii, I. (2005). "Trade integration and synchronization of shocks: Implications for EMU enlargement", *Economics of Transition*, vol. 13(1), p.105–138.
- Bekaert, G., and C. Harvey (1995) "Time-Varying World Market Integration", *Journal of Finance*, vol. 50, p. 403-444.
- Bris, A., Y. Koshkien, and M. Nilsson (2004) "The Euro and Corporate Valuation", *Yale University working paper*.
- Carrieri, F. (2001) "The effects of liberalization on market and currency risk in the European Union", *European Financial Management*, vol. 7, p. 259-290.
- Davis, Donald (1988), "The Home Market, Trade, and Industrial Structure," *American Economic Review*, vol. 88(5), p.1264-1276.
- De Santis, G., and Gerard, B. (1998) "How big is the premium for currency risk", *Journal of Financial Economics*, vol. 49, p. 375-412.
- De Santis, G., Gerard, B., and P. Hillion, (2003) "The relevance of currency risk in the EMU", *Journal of Economics and Business*, vol. 55, p. 427–462.
- Dumas, B., and Solnik, B (1995) "The world price of foreign exchange risk", *Journal of Finance*, vol.50 (2), p. 445-479.
- Efthymios, G T., S. E G Lolos, D. K Christopoulos (2003) "The performance of the Greek banking system view of the EMU: Results from a non-parametric approach", *Economic Modelling*, vol. 20 (3), p. 571-592.
- Errunza, V., and E. Losq (1989) "Capital flow controls, international asset pricing, and investors' welfare: a multi-country framework", *Journal of Finance*, vol. 44 (4), p. 1025-1037.
- Errunza, V. R & Senbet, L. W, (1981). "The Effects of International Operations on the Market Value of the Firm: Theory and Evidence" *Journal of Finance*, vol. 36(2), p.401-417.
- Frankel, Jeffrey and Rose, Andrew, (1998), "The Endogeneity of the Optimum Currency Area Criteria," *The Economic Journal*, vol. 108(449), p.1009-1025.
- Hardouvelis, G. A., Malliaropulos, D., and R. Priestley (2006) "EMU and European stock market integration", *The Journal of Business*, vol. 79, p. 365–392.
- Harford, J., Sattar A. M., Maxwell W.F. (2008). "Corporate governance and firm cash holdings in the US." *Journal of Financial Economics*, vol. 87, p. 535-555.
- Kalemli-Ozcan, Sebnem; Sørensen, Bent and Yosha, Oved, (2001), "Economic Integration, Industrial Specialization, and the Asymmetry of Macroeconomic Fluctuations," *Journal of International*

Economics, vol. 55(1), p.107-137.

Kao, C., Chiang, M., Chen, B. (1999). "International R&D spillovers: an application of estimation and inference in panel cointegration." *Oxford Bulletin of Economics and Statistics*, vol. 61, p.691–709.

Koenker, Roger and Gilbert Bassett, Jr. (1978). "Regression Quantiles," *Econometrica*, vol. 46(1), p.33-50.

Krugman, Paul, (1991), "Increasing Returns and Economic Geography," *Journal of Political Economy*, vol. 99(3), p.483-99.

Kutan, A. M., and Yigit, T. M. (2007). "European integration, productivity growth and real convergence." *European Economic Review*, vol. 51, p.1370–1395

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and R. W. Vishny, (1998) "Law and Finance", *Journal of Political Economy*, p.1113-1155.

Lee, K., Pesaran, M.H., Smith, R., (1997). "Growth and convergence in multi-country empirical stochastic Solow model." *Journal of Applied Econometrics*, vol. 12 (4), p.357–392.

Massmann, M., & Mitchell, J. (2004). "Reconsidering the evidence: Are Euro area business cycles converging?" *Journal of Business Cycle Measurement and Analysis*, vol. 1(3), p.275–307.

Meggison, W., R. Nash, and M. Randenborgh. (1994). "The financial and operating performance of newly privatized firms: An international empirical analysis." *Journal of Finance*, vol. 49, p. 403-452.

Mittoo, U. (2003). "Globalization and the Value of U.S. Listing: Revisiting Canadian Evidence." *Journal of Banking and Finance*, vol. 27, p. 1629-1661.

Morck, R. and B. Yeung, (1991), "Why Investors Value Multinationality," *Journal of Business*, University of Chicago Press, vol. 64(2), 1991, p. 165-187.

Obstfeld, M. (1994) "Risk-taking, global diversification, and growth", *American Economic Review*, vol. 84 (5), p. 1310-1329.

Rivera-Batiz, R.A., Romer, P.M., (1991). "Economic integration and growth." *Quarterly Journal of Economics*, vol. 56, p. 531–555.

Rose, A. (2000) "One Money, One Market: Estimating the Effect of Common Currencies on Trade", *Economic Policy*, vol. 15, p. 9-48.

Rose, A., van Wincoop, E. (2001), "National Money as a Barrier to Trade: The Real Case for Monetary Union", *American Economic Review*, vol. 91, p. 386-390.

Stulz, R., (1999) "Globalization of Capital Markets and the Cost of Capital", *Journal of Applied Corporate Finance*, p. 8-25.

Stulz, R. (2005) "The Limits of Financial Globalization", *The Journal of Finance*, vol. 60,p. 1595-1638.

BANK LENDING CHANNEL OF MONETARY POLICY: EVIDENCE FOR COLOMBIA, USING A FIRMS' PANEL DATA

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ABSTRACT

In this paper we find empirical evidence of bank lending channel for Colombia, using a balanced panel data of about four thousand non-financial firms. We find that increases in the interest rate, proxying for the monetary policy instrument, lead to a reduction in the proportion of bank loans, out of total debt, of the firms. This bank lending channel amplifies the effect of the traditional interest rate channel, which leads to a reduction in total debt and spending when monetary policy tightens. Our evidence suggests that firm size matters in the transmission of monetary policy through the bank lending channel: smaller firms have a higher probability of being credit rationed after a tightening of monetary policy than (otherwise identical) larger firms.

JEL: E5; E52; E59; G39

Keywords: Monetary transmission; bank lending channel; Colombia

INTRODUCTION

The mechanisms through which monetary policy affects the economy have been subject of intense academic debate. A long-standing question has been whether financial institutions in general and banks in particular, play an important role in the transmission of monetary policy to the real economy. The literature identifies two channels in which financial institutions might play a significant role, namely, the balance sheet channel and the bank lending channel. In order to have a bank lending channel two conditions are required: first, some firms must be dependent on bank loans; second, the central bank must be able to shift bank loan supply schedules.

Empirical work on the existence of a bank lending channel has focused on the correlations among aggregate variables, such as bank debt, monetary policy instruments, and variables proxying for economic activity (see, for example, Romer and Romer (1990) and Ramey (1993)). However, this work is subject to an important identification problem, as with aggregate data it is impossible to identify shifts in the demand for loans from shifts in the supply of loans (see Kashyap and Stein (2000)). Several country-specific studies have used microeconomic data to overcome this identification problem. Most of these studies have focused in identifying this channel using bank-specific data (for instance, see Alfaro et al. (2005), for the case of Chile, Altunba et al. (2002) for a list of European countries, Huang (2003) for the case of the UK, and Gómez González and Grosz (2007) for the case of Argentina and Colombia). The empirical evidence shows that more solvent and liquid banks are more capable of maintaining the level of their credit investments when faced with a tightening of monetary conditions, without needing to resort to other alternative sources of finance.

In the case of non-financial firms, however, there is very limited empirical evidence, particularly for developing countries. The identification problem affecting the evidence on the bank lending channel can be solved by comparing the movements of bank loans and other sources of financing on firms' balance sheets after changes in the monetary policy instrument. After a tightening of monetary policy, the traditional interest rate channel would imply a reduction in the demand for loans and other types of debt

equally. Therefore, a reduction in the proportion of firms' bank debt out of total debt provides evidence of a fall in the supply of bank loans, consistent with the operation of a bank lending channel.

This study uses a panel data of firm-specific variables for the period 1995-2007, and provides evidence of a bank lending channel for Colombia. We are particularly interested in the effect of firm's size on the response of the firm's financing after a monetary policy shock. The literature linking liquidity constraints to capital market conditions points out that the propensity of a firm to be credit rationed depends on the firm size. Due to adverse selection in a market with asymmetric information, the likelihood of credit rationing tends to increase as firm size decreases (Stiglitz and Weiss, 1981). In a seminal empirical study on financial constraints, Fazzari et al (1988) find evidence that liquidity constraints tend to be more binding as firm size decreases. Consistent with the literature on financial constraints, in this study we show that the bank lending channel is stronger for smaller firms.

Empirical specification and results

Based on the model of Kashyap, Stein, and Wilcox (1993), the empirical specification in the panel approach is the following:

$$\left(\frac{B}{D}\right)_{it} = \gamma_i + \sum_{j=1}^2 \left(\frac{B}{D}\right)_{it-j} \alpha + \sum_{j=0}^2 i_{t-j} \beta + \sum_{j=0}^2 size_{t-j} \eta + \sum_{j=0}^2 cap_{t-j} \phi + \sum_{j=0}^2 i_{t-j} size_{t-j} \delta + \sum_{j=0}^2 i_{t-j} cap_{t-j} \lambda + \xi_{it}$$

where $(\gamma, \alpha, \beta, \eta, \phi)$ is the vector of unknown parameters we wish to estimate, i represents the real interbank interest rate, cap is a financial variable proxying for the solvency of the firm, $size$ represents the size of the firm, measured as the firm's total assets, and ξ_{it} represents the error term, which is assumed to be identically and independently distributed. We are particularly interested in the sign of β , which we expect to be negative. A solvency variable is included in order to control for other financial factors which might influence the proportion of bank debt out of total debt a firm holds.

The inclusion of $size$ as a regressor follows the literature linking liquidity constraints to capital market conditions, which shows that smaller firms face a higher probability of being credit rationed than larger firms of similar financial conditions.

It is natural to consider that the current level of $\frac{B}{D}$ strongly depends on past levels of $\frac{B}{D}$ (see Gómez González and Grosz (2007)). For that reason, lags of the dependent variable are included as regressors in the empirical equation. Thus, we have a dynamic panel data model. In order to estimate this model, we use the Arellano and Bond (1991) GMM methodology, which corrects the inconsistency of the within estimator and provides heteroscedastic-consistent parameter estimates. Additionally, this methodology allows controlling for non-observable firm effects and for potential endogeneity of the variables included as regressors. The lag structure was defined following standard information criterion.

Estimations were run on first differenced data to remove firm-specific effects. Instrumental variables of $t - 2$ lagged values of the variables were used, to account for possible endogeneity in the model.

The main results are summarized in Table 1, which presents the long run coefficients for the monetary policy instrument, $size$, the interaction variable, and the lagged dependent variable.

Table 1: Dependent variable is $\frac{B}{D}$

Variable	Coefficient	Standard Error
Lagged B/D	-0.255*	0.010
Interest Rate	-0.092*	0.0394
Solvency	0.000	0.000
Solvency Interaction	0.005	0.005
Size	-0.000	0.000
Size Interaction	0.001	0.002

*Significant at the 5% level.

The results in Table 1 provide strong evidence of the presence of a bank lending channel of monetary policy in Colombia: increases in the interest rate induce reductions in the proportion of bank debt of firms, even after controlling for other variables which affect significantly the dependent variable, such as solvency, size and its own lagged values. Colombian firms, independently of their size, experiment a reduction of bank credit as a proportion of their total sources of finance, after a monetary policy tightening.

Note that the interaction variables do not appear to affect significantly the dependent variable. Thus, we do not find evidence, under this specification, that differences on firm size or solvency explain differences in the response of firms to changes in the interbank interest rate. In other words, we do not find evidence that firm size or firm solvency affect the magnitude of the bank lending channel in Colombia.

As a robustness test for the evidence of a bank lending channel presented before, we separate firms into four groups according to their size. Group 1 is composed by the firms in the lowest quartile (smallest firms), while Group 4 is composed by the firms in the highest quartile (largest firms). The intuition behind grouping firms this way, is that a tightening of monetary policy should affect more the firms in the lowest quartile, in the sense that these will be more credit constrained than firms in higher quartiles (according to the credit constraints literature). We run the same regression we ran above for each group of firms excluding, obviously, *size* and the interaction between this variable and the interest rate from the group of regressors. Results are presented in tables 2 to 5.

Table 2: Dependent variable is $\frac{B}{D}$ (GROUP 1)

Variable	Coefficient	Standard Error
Lagged B/D	-0.232*	0.020
Interest Rate	-0.199*	0.083
Solvency	0.000	0.000
Solvency Interaction	0.005	0.007

*Significant at the 5% level.

Table 3: Dependent variable is $\frac{B}{D}$ (GROUP 2)

Variable	Coefficient	Standard Error
Lagged B/D	-0.299*	0.019
Interest Rate	-0.092*	0.074
Solvency	0.000	0.000
Solvency Interaction	0.010	0.016

*Significant at the 5% level.

Table 4: Dependent variable is $\frac{B}{D}$ (GROUP 3)

Variable	Coefficient	Standard Error
Lagged B/D	-0.300*	0.019
Interest Rate	-0.112*	0.077
Solvency	0.002	0.002
Solvency Interaction	0.024	0.034

*Significant at the 5% level.

Table 5: Dependent variable is $\frac{B}{D}$ (GROUP 4)

Variable	Coefficient	Standard Error
Lagged B/D	-0.204*	0.020
Interest Rate	-0.047*	0.078
Solvency	0.002	0.002
Solvency Interaction	-0.145	0.099

*Significant at the 5% level.

Tables 2 to 5 provide interesting evidence about the way in which the bank lending channel operates. Particularly, note that only the smallest firms (those belonging to Group 1) appear to reduce significantly the proportion of bank debt out of total debt when the interbank interest rate increases. Those firms pertaining to the other groups do not appear to be significantly affected in their financing structure when monetary policy tightens. Therefore, there is evidence that the bank lending channel operates fundamentally over small firms. This result is consistent with the credit constraints literature, that establishes that in a world with asymmetric information firms with lower collateral have a higher probability of being credit rationed by banks than larger (otherwise identical) firms. Our evidence suggests that the solvency of the firm, proxied by *cap*, does not have any effect on the debt structure of firms. We also find that the probability of being credit rationed does not vary with the degree of solvency of the firm.

CONCLUSIONS

In this paper we find empirical evidence of a bank lending channel for Colombia, using a balanced panel data of about four thousand non-financial firms. We find that increases in the interest rate, proxied for the monetary policy instrument, lead to a reduction in the proportion of bank loans, out of total debt, of the firms. This bank lending channel amplifies the effect of the traditional interest rate channel, which leads to a reduction in total debt and spending when monetary policy tightens.

Our result agrees with, and complements, those obtained by Gómez González and Grosz (2007), who provides evidence of the existence of a bank lending channel in Colombia using bank-specific financial variables.

We also find evidence suggesting that firm size matters in the transmission of monetary policy through the bank lending channel: smaller firms have a higher probability of being credit rationed after a tightening of monetary policy than (otherwise identical) larger firms. This result agrees with the literature linking financial constraints to credit market conditions that suggests that the propensity of a firm to be credit rationed depends inversely on the firm's size.

REFERENCES

Arellano, M. and S. Bond (1991): "Some Tests of Specification for Panel Data: Monte Carlo evidence and an application to employment equations", *Review of Economic Studies*, 58, P. 277-297.

Bernanke, B. S. and M. Gertler (1995): "Inside the Black Box: The Credit Channel of Monetary Policy Transmission", *Journal of Economic Perspectives*, 9, P. 27-48.

Gómez González, J.E. and F. Grosz (2007): "Evidence of a Bank Lending Channel for Argentina and Colombia", *Cuadernos de Economía Latin American Journal of Economics*, 44(129), P. 109-126.

Kashyap, A. and J. Stein (1995): "The Impact of Monetary Policy on Bank Balance Sheets", *Carnegie-Rochester Conference Series on Public Policy*, 42, P. 151-95.

Kashyap, A.; J. Stein and W. Wilcox (1993): "Monetary Policy and Credit Conditions: Evidence from the Composition of External Finance", *American Economic Review*, 83, 78-98.

Ramey, V. (1993): "How Important is the Credit Channel in the Transmission of Monetary Policy?", *Carnegie-Rochester Conference Series on Public Policy*, 39, P. 1-45.

Romer, C. and D. Romer (1990): "New Evidence on the Monetary Transmission Mechanism", *Brookings Papers on Economic Activity*, 1, P. 149-213.

Stiglitz, J. and A. Weiss (1981): "Credir Rationing in Markets With Imperfect Information", *American Economic Review*, 71, P. 393-410.

DISCLAIMER

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HOUSEHOLD BUYING DECISIONS RELATIONSHIP TO CUSTOMER-BASED BRAND EQUITY

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ABSTRACT

With changing family structures and the appearance of more wives in the workforce, retail strategies must adapt to this environment to retain and attract customers in this segment. Furthermore, brand equity has become a major component of a firm's financial value. This study identifies the husbands' and wives' shopping characteristics and their perceptions of the retailers' marketing mix that influences brand equity. The results reveal that there are key factors which are consistently influencing husbands' and wives' customer-based brand equity.

INTRODUCTION

Currently, businesses worldwide are facing not only the accustomed competitive consumer markets, but also economies that are in a recession. As consumers decrease spending resulting from lower household earned income or even unemployment, and increasing personal debt (Colvin, 2008), retailers during 2008 experienced only a .9% sales increase, the lowest in 50 years (D'Innocenzio, 2009). While retailers are using discounts and other markdown methods as new or seasonal products are introduced and at peak retailing periods (O'Connell and Dodes, 2009), consumer product manufacturers are experiencing a decline in sales resulting from consumers buying down from national brands to private, or store brands (Neal, 2009). Furthermore, total households have almost doubled (now 116 million) and non-married households more than tripled (now 57 million) since 1970 while married households increased by only 31% (now 58 million). There has been a significant increase in the number of working wives. In 1980, there were an average of 8.3 husbands and 5.8 wives employed in every 10 married households. By 2007, fewer husbands (7.9) and more wives (6.5) were working in these households. This higher number of working wives has contributed to an increase of an average household having 1.41 in 1980 to 1.44 in 2007 working spouses (U.S. Bureau of the Census, 2000, 2007).

Moreover, branding has experienced through the 1990s and well into the 2000s enormous growth from consumers' preferences and for increased business financial value. This brand equity has risen to as high as 80% of some firms' financial value, e.g., Nike (Gerzema and Lebar, 2008). As expected, during the economic recession consumers' purchases have been for bargain-priced brands. Consumer product manufacturers with a large product mix are able to minimize revenue loss by having multiple brands in product categories. However, retailers, e.g., Target, have not had this advantage, and most of them have experienced a lost customer base to low price competitors, e.g., Wal-Mart (Bustillo and Zimmerman, 2008). The challenge is to recapture the brand preference consumers and their household purchases in the next decade's post-recession market.

The purpose of this research is to establish the consumers' characteristics, retailers' marketing strategy and branding relationship as perceived by married men and women. The objective is to determine the shoppers' (husbands and wives) characteristics, retailers' marketing mix (product, price, place, promotions) that leads to, or cause, brand equity (brand loyalty, brand awareness, perceived quality, brand association). This study is to determine: What are the personal and shopping characteristics of the husband or wife and the marketing strategies that influence brand equity?

LITERATURE AND STUDY FRAMEWORK

In a study of Belgian married households, Davis and Rigaux (1974) theorized that the decision-making roles changes between spouses in each phase (problem recognition, search, decision) of the buying process. The empirical results determined that there were, in fact, changes and established the decisions by automatic, husband-dominated, wife-dominated, and joint (syncratic) roles. Furthermore, these roles have implications to marketing strategy, branding and brand selections. Yoo, Donthu and Lee (2000) recognize the marketing mix elements (marketing efforts) as antecedents of brand equity, and operationalized the retail marketing mix as (1) price, (2) advertising spending, (3) price deals, (4) store image, and (5) distribution intensity.

For this study, consumer-based brand equity (CBBE) is the basis and is empirically tested for husbands' and wives' value of brands. Therefore, branding includes the consumers' (1) brand loyalty, (2) brand awareness, (3) perceived quality and (4) brand association dimensions (Aaker, 1991; Keller, 1993). Furthermore, branding is applicable to retail brands, e.g., retail and store image, perceived retail brand association, as well as to retail brand equity measurement (Ailawadi and Keller, 2004). For this study, the customer is either a married male or female retail shopper. Hence, this research is within the framework of the husband-wife consumer decision making role (Davis and Rigaux, 1974) and retailers' marketing strategy (McCarthy, 1960) that influence customer-based brand equity (Aaker, 1991; Keller 1993).

Customer-based brand equity dimensions have been defined as follows, and included a brief explanation as applicable to this study. First, loyalty in the context of branding is "a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior" (Oliver, 1999, p. 34). Brand loyalty is influenced by the value, e.g., low or competitive price, coupons, convenience, that consumers place on a specific product or store which results in continuous purchases (Strober and Weinberg, 1980; Zeithaml, 1985). Second, brand awareness is the "customers' ability to recall and recognize the brand, as reflected by their ability to identify the brand under different conditions linking the brand – the brand name, logo, symbol, and so forth – to certain associations in memory" (Keller, 2003, p. 76). Brand awareness relies on marketing communications and to provide effective retrieval cues from consumers' memory for specific brands (Lynch and Srull, 1982). Married shoppers use information more in purchase decisions than non-married consumers (Zeithaml, 1985).

Third, perceived quality is the "customer's judgment about a product's overall excellence or superiority (that) is (1) different from objective or actual quality, (2) a higher level abstraction rather than a specific attribute of a product, (3) a global assessment that in some cases resembles attitude, and (4) a judgment usually made within a consumer's evoked set" (Zeithaml, 1988, pp. 3 and 4). These can be functional and psychological experiences resulting from the brand or store image. For retailers, this would require an interest and effort for store layout, pricing strategies, product offerings and assortment, retail format and service level that meets the expected (perceived) quality by the consumers (Lindquist, 1974-1975). Finally, brand association "consists of all brand-related thoughts, feelings, perceptions, images, experiences, beliefs, attitudes," (Kotler and Keller, 2006, p. 188) and "is anything 'linked' in memory to a brand" (Aaker, 1991, p. 109). By definition, store image is a critical influence on brand association. The psychological attributes of store image, e.g., sense of belonging, feelings, excitement/atmosphere (Lindquist, 1974-1975), are important to brand association. Emotional, e.g., pleasantness, arousal, dominance, and cognitive, e.g., quality and variety of merchandise, value of money, price spending, factors also influence purchase decisions (Donovan, Rossiter, Marcoolyn and Nesdale, 1994).

In addition, we are proposing certain shoppers' characteristics (e.g., age, education, occupation, income) and select shopping experiences (e.g., purchase amount, prior purchase experience, shopping frequency, retail store) that could further explain differences in husband and wife brand equity. Therefore, this study examines shopper and shopping characteristics, marketing strategies as perceived by the consumer and customer-based brand equity.

METHODOLOGY AND RESULTS

Data were collected in a major Taiwan city at four major mega-retailers, or hypermarkets. The questionnaire included three parts – (1) the researcher-developed 9-question shopper demographic profile and shopping characteristics section, (2) 15-item retail marketing mix instrument developed by Yoo, Donthu and Lee (2000) and (3) a 23-item customer-based brand equity instrument developed by Pappu and Quester (2006). The sample includes 263 participants with near equal representation of husbands ($n=132$) and wives ($n=131$). About two-thirds of the males and 78% of the females were between the age of 25 and 44 years. The men were less educated (50% high school and 32% college graduates) as compared to women (40% high school and 45% college graduates). Almost 65% of the husbands and 75% of the wives were employed in sales, clerical, technician and skilled labor positions, but the females earned higher incomes (84% over US \$1,120 per month as compared to 44% for males). The majority of husbands (60%) and wives (53%) purchased between US \$16.00 and US \$80.00 per shopping visit, and had similar shopping frequency and were generally repeat customers (91%) to that hypermarket.

The 13 independent variables – 8 shoppers' characteristics (age, education, occupation, income, purchase amount, prior purchase experience, shopping frequency, retail store) and 5 retail marketing mix (price, advertising spending, price deals, store image, and distribution intensity) – were tested using several stepwise (forward) regressions to explain the relationship in creating husband or wife brand equity. Basically, the first major run was for husbands' (1) brand loyalty, (2) brand awareness, (3) perceived quality, (4) brand association and (5) brand equity (total, or all four brand dimensions). The explained variance for the five equations ranges from 45.3% (brand association) to 58.3% (perceived quality). All variables are significant ($p < 0.05$). However, two of the marketing mix elements – store image and price deals – are major factors in creating higher husbands' brand equity. Store image is the strongest predictor in four of the five equations as found from the standardized coefficients. Brand awareness is second, logically following purchase experience (having prior shopping visit to that hypermarket). Price deal is included in four of the five equations and the second strongest (standardized coefficient) in three of the four in which it appears. In addition, distribution intensity, an important value offering of hypermarkets, is in three of the five equations, including brand equity.

The second major multiple regression run was for wives' (1) brand loyalty, (2) brand awareness, (3) perceived quality, (4) brand association and (5) (total) brand equity. The explained variance for the five equations ranges from 52.6% (brand awareness) to 69.4% (brand equity). All variables are significant ($p < 0.05$). Three variables – store image, price deal, and distribution intensity – are primary predictors for wives' brand equity. Store image is included in all equations and has the highest standardized coefficient (strength) in three regression models, including brand equity and first of only two for perceived quality. Price deal, too, is included in all five equations, and the second strongest of only two variables for perceived quality. Distribution intensity is a predictor in four of the five models, including the strongest predictor for brand loyalty.

In summary, the regression results between husband and wife brand equity are consistent. The explained variances are similar but all are higher for wives as compared to husbands for each brand dimension and total brand equity. Besides the importance of the independent retail marketing mix, store image, price deal and distribution intensity variables, purchase experience is included in four equations for each

Table 1 : Regression Models Summary for Husband-Wife Shoppers Brand Equity

Brand Dimensions	Husband		Wife	
	Explained Variance	Significant Factors	Explained Variance	Significant Factors
Brand Loyalty	46.1%	Store Image Price Deal Shopping Frequency Purchase Experience Purchase Amount	54.9%	Distribution Intensity Store Image Price Deal Purchase Experience
Brand Awareness	52.5%	Purchase Experience Store Image Distribution Intensity Hypermarket* Price*	52.6%	Purchase Experience Price Deal Store Image Distribution Intensity
Perceived Quality	58.3%	Store Image Distribution Intensity Advertising Spend* Price Deal Purchase Amount Occupation	66.5%	Store Image Price Deal
Brand Association	45.3%	Store Image Price Deal Purchase Experience Price*	58.6%	Store Image Price Deal Distribution Intensity Purchase Experience
Brand Equity	57.7%	Store Image Price Deal Purchase Experience Distribution Intensity	69.4%	Store Image Distribution Intensity Price Deal Purchase Experience

This table shows the (forward) stepwise multiple regression results summary for husband and wife brand equity. It is noted that * indicates inverse (-) relationship to the brand dimension.

spouse. As shown in Table 1, husband brand equity has 10 out of the 13 predictors in at least one equation, while wife brand equity has only 4 (store image, price deal, distribution, distribution intensity, purchase experience). Perceived quality has particularly interesting results. Wives perceived quality can be explained with an R^2 of 66.5% by only two independent variables – store image and price deal. On the other hand, husbands' perceived quality can be explained with an R^2 of 58.3% by six independent variables – store image, price deal and four others. In addition, married males were the only one with inverse relationships (coefficients). Price was inversely related to brand awareness and brand association, hypermarket to brand awareness and advertising spending to perceived quality.

IMPLICATIONS

Several important findings with brand strategy implications have become apparent from this study. First, store image was a significant, positive influence for all brand dimensions and brand equity for husbands and wives. Price deal also was a consistent influence for both spouses except for husbands' brand awareness. In addition, purchase experience also was an influence for all brand dimensions and brand equity except for perceived quality. Therefore, it can be inferred that store image is an important driver for married shoppers' retention and repeat purchases. Second, price deal is a significant, positive influence for all brand dimensions and brand equity except for husbands' brand awareness. At the same time, price only appeared as a significant, negative influence for husbands' brand awareness and association. Hence, given the retail format of hypermarkets with large product assortments and the competitive prices for the product offerings, price is not necessarily a driver for hypermarket customer-based brand equity.

Third, studies have shown that married women are more price sensitive and economizer shoppers than husbands (Zeithaml, 1985). Furthermore, in their traditional role, wives have been the primary shopper for household needs and products that would be offered at hypermarkets. However, in this study husbands, not wives, were more price sensitive with opinions (survey responses) that their hypermarket has higher prices (inverse relationship) for two brand dimensions (awareness, association), while price was not a factor for married women. This could be caused by the recent trend of fewer husbands working and more wives are (U.S. Bureau of the Census, 2000, 2007) that might prevent them with enough time for shopping, and when they do shop, they are not sensitive to price considerations. On the other hand, not working husbands do have time to shop and to better know competitive pricing and household shopping budgets.

The purpose for this study was to determine the answer to the question, what are the personal and shopping characteristics of the husband or wife and the marketing strategies that influence brand equity? Only four factors (store image, price deal, distribution intensity, purchase experience) strongly influenced married females' brand dimensions and brand equity. While these same four factors strongly influenced married males' brand dimensions and brand equity, distribution intensity and purchase experience were lesser factors for wives (e.g., perceived quality) and husbands (e.g., brand loyalty, brand association), than store image and price deal. Furthermore, there were additional influences, e.g., price (inverse), advertising spending (inverse), hypermarket (inverse), purchase amount, shopping frequency, occupation. For husband and wife consumers, they were all significant and with relatively high explained variance (R^2 ranges from 45.3% to 69.4%). Hence, store image, price deal, distribution intensity and purchase experience are key factors in building husband and wife brand equity.

REFERENCES

- Aaker, David A. (1991). *Managing Brand Equity*. New York: The Free Press
- Ailawadi, Kusum L. and Kevin Lane Keller (2004). "Understanding Retail Branding: Conceptual Insights and Research Priorities," *Journal of Retailing*, vol. 80(4), p. 331-342
- Bustillo, Miguel and Ann Zimmerman (2008). "Wal-Mart Defies Retail Slowdown," *Wall Street Journal*, (November 14), p. A1, A11
- Colvin, Geoff (2008). "The Next Credit Crunch," *Fortune*, (September 1), p. 30
- Davis, Harry L. and Benny P. Rigaux (1974). "Perception of Marital Roles in Decision Processes," *Journal of Consumer Research*, vol. 1(June), p. 51-62
- D'Innocenzio, Anne (2009). "Retail Year Slowest Since '69," *Palm Beach Post*, (February 6), p. 6B
- Donovan, Robert J., John R. Rossiter, Gilian Marcoolyn, and Andrew Nesdale (1994). "Store Atmosphere and Purchasing Behavior," *Journal of Retailing*, vol. 70(3), p. 283-294
- Gerzema, John and Ed Lebar (2008). *The Brand Bubble*. San Francisco: Jossey-Bass
- Keller, Kevin Lane (1993). "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity," *Journal of Marketing*, vol. 57(1), p. 1-22
- Keller, Kevin Lane (2003). *Strategic Brand Management* (2nd edition). Upper Saddle River, NJ: Prentice Hall

- Kotler, Philip and Kevin Lane Keller (2006). *Marketing Management* (12th edition). Upper Saddle River, NJ: Prentice Hall
- Lindquist, Jay D. (1974-1975). "Meaning of Image," *Journal of Retailing*, vol. 50(4), p. 29-38
- Lynch, Jr., John G. and Thomas K. Srull (1982). "Memory and Attention Factors in Consumer Choice: Concepts and Research Methods," *Journal of Consumer Research*, 9(June), p. 18-37
- McCarthy, E. Jerome (1960). *Basic Marketing*. Homewood, IL: Richard D. Irwin
- Neal, Molly (2009). "Unilever's Weak Defense," *Wall Street Journal*, (February 6), p. C12
- O'Connell, Vanessa and Rachel Dodes (2009). "Saks Upends Luxury Market with Strategy to Slash Prices," *Wall Street Journal*, (February 9), p. A1, A16
- Oliver, Richard L. (1999). "Whence Consumer Loyalty," *Journal of Marketing*, vol. 63(Special Issue), p. 33-44
- Pappu, Ravi and Ray W. Cooksey (2006). "A Consumer-Based Method for Retail Equity Measurement: Results of an Empirical Study," *Journal of Retailing and Consumer Services*, vol. 13(4), p. 317-329
- Strober, Myra H. and Charles B. Weinberg (1980). "Strategies Used by Working and Nonworking Wives to Reduce Time Pressures," *Journal of Consumer Research*, vol. 6(March), p. 338-348
- U.S. Bureau of the Census (2000). *Statistical Abstract of the United States*. Washington, DC: Government Printing Office
- U.S. Bureau of the Census (2007). *Statistical Abstract of the United States*. Washington, DC: Government Printing Office
- Yoo, Boonghee, Naveen Donthu, and Sungho Lee (2000). "An Examination of Selected Marketing Mix Elements and Brand Equity," *Journal of the Academy of Marketing Science*, vol. 28(2), p. 195-211
- Zeithaml, Valarie A. (1985). "The New Demographics and Market Fragmentation," *Journal of Marketing*, vol. 49(Summer), p. 64-75
- Zeithaml, Valarie A. (1988). "Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence," *Journal of Marketing*, vol. 52(July), p. 2-22

ADOPTING SIX SIGMA IN THE FINANCIAL SERVICES INDUSTRY: WHAT IT MAKES TO BE SUCCESSFUL

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ABSTRACT

Although the Six Sigma methodology has been successfully implemented in many industries, its application in the service sector is still in question. This paper provides results from the first empirical survey on the status quo and the success factors of Six Sigma in the financial services sector. The survey included banks, insurance companies, and related service providers in Germany, Switzerland, Austria, and Great Britain. The study reveals that one quarter of financial services providers has identified the Six Sigma methodology as being suitable for their continuous process improvement efforts. Respondents estimate a high cost-benefit ratio of 1 to 4.3. A clear project definition and hard efforts in data collection to ensure sufficient data quality and quantity are proved to be success factors as well as communication throughout the project, management support, and staff involvement.

INTRODUCTION

Six Sigma was introduced by Motorola in 1986 and was initially adopted by organizations in the manufacturing sector including prominent examples such as the Six Sigma roll-out at General Electric in the mid-1990s. Since, it spread tremendously toward the end of the twentieth century and is used heavily in the area of manufacturing (Goh, 2002). Recently, the usage of Six Sigma spread to service industries such as health care (Burge, 2008; Barry et al., 2002; Buck, 2001), education (Bandyopadhyay and Lichtman, 2007), call centers (Hensley and Dobie, 2005), and the financial services industry (Antony, 2006).

According to Yilmaz and Chatterjee (2000) most service processes perform at a quality level of less than 3.5 sigma, i.e. a defect rate of 22,700 parts per million (ppm). Therefore, the financial services industry – being no exception among other service industries – stands to benefit significantly from the ultimate goal of Six Sigma, i.e. a defect rate of only 3.4 parts per million. Among others, a reduced number of non-value added steps leading to faster delivery, reduced costs of poor quality and an improved consistency level of services through systematic reduction of variability in processes are the main benefits in service industries (Antony, 2004b).

In contrast to other quality improvement programs such as TQM, Six Sigma emphasizes the importance of proper process design. The end-to-end view aims particularly at problems arising from interfaces and redundancies caused by inter-divisional processes. The availability of data and the measurement of key performance indicators is crucial to the success of the methodology (Breyfogle et al., 2001). This paper focuses on Six Sigma as an increasingly popular approach to understand and improve processes in the financial services sector. While a comprehensive body of knowledge exists on the set of tools and methods that constitute the Six Sigma methodology, little is known about the spreading and the success factors of Six Sigma in the financial services arena.

The paper is structured as follows. First, we will review the related literature regarding the Six Sigma approach and its relevance in the financial services industry. Then, we will introduce the research methodology, i.e. an empirical survey-based study. In the following section, the survey results will be

presented in respect to the adoption and the success factors of Six Sigma in the financial services industry. Finally, we will give a conclusion and discuss potential pathways for future research.

LITERATURE REVIEW

Six Sigma is a methodology that uses data and statistical analyses to measure and improve the output of production- and service-oriented processes (Magnusson/Kroslid/Bergman, 2004). The methodology was named Six Sigma, because it has been derived from the definition of a normal distribution by Carl Friedrich Gauss (1777-1885). The standard deviation (σ) shows the deviation (rate of defects) from the statistical mean. Based on a standard deviation of 1σ , only 68.27% of all outcomes would be produced within acceptable limits. A standard deviation of 3σ would result in 99.73%, and with 6σ the value would be 99.99985% which equals to 1.5 defect parts at a production of 1 million parts (Breyfogle, 2003). Since most authors (Breyfogle, 2003; Kumar and Gupta, 1993) agree to accept a permanent fluctuation of outputs – which is especially relevant in financial services – a correction of 1.5σ is common sense. This results in a 99.99966% quality level which means 3.4 defects per 1 million opportunities (DPMO) (Pande et al., 2000). For most manufacturing processes a 5σ deviation is considered to be sufficient because the costs for process improvement would exceed the costs caused by defects (Chowdhury, 2005). For processes in other industries however, e.g. landing process of airplanes, even 6σ would be disastrous. Here, 7σ is a more appropriate goal (pursued by airline companies such as Lufthansa and United).

The procedure of any Six Sigma process improvement project is based on the DMAIC cycle. This five stage model consists of the phases Define, Measure, Analyze, Improve, and Control (George, 2003; Pande et al., 2000). While running through these phases a large variety of tools and techniques is used, such as Project Charter, SIPOC diagram, Critical-to-Quality (CTQ) matrix, graphical and statistical methods, Cause-and-Effect diagrams (Harry and Schroeder, 2006). For newly established processes the so-called DMADV cycle is used in which the Improve and Control phases are replaced by Design and Verify phases (El-Haik and Roy, 2005).

The Six Sigma methodology is well documented in terms of its tools and methods. Besides individual case studies, however, there are no academic empirical studies available on the usage of Six Sigma providing more generalized findings.

RELEVANCE OF SIX SIGMA IN THE FINANCIAL SERVICES INDUSTRY

Competitive pressure forces banks, insurance companies, and other financial services organizations, such as credit cards organizations or transaction banking providers, to permanently improve their business processes. Recent turbulences (financial markets crisis, erratic fluctuations at stock exchanges, trading scandals, etc.), new requirements set by regulatory authorities, and ever increasing customer demands are not the basis to stick to processes which are costly, opaque, and error-prone. Instead, the financial services industry is increasingly committed to the idea of straight through processing (STP) based on standardized, automated, and transparent processes. Although many banks and insurers still rely to a large extent on legacy IT systems the idea of process-based management combined with the potential of emerging technologies such as Service-oriented Architectures, workflow management systems, and business intelligence has created an appetite for complementary methodologies such as Six Sigma (Hayler and Nichols, 2006).

While many techniques and tools of Six Sigma have been piloted in the manufacturing sector, they are by no means restricted to this domain and can be applied across different verticals (Pande et al., 2000). As Harry and Schroeder (2006) put it, the result of a service often affects a customer more directly than a

physical product. In fact, Chakrabarty and Tan (2007) show that Six Sigma is increasingly applied in almost all service industries.

Large American financial companies like AIG Insurance, American Express, Bank of America, Citigroup, and JP Morgan Chase are known for their intensive usage of Six Sigma (Snee and Hoerl, 2005). In Europe, however, the methodology was virtually unknown in the financial services arena until the middle of this decade. For instance, Lieber and Moormann (2004) studied the application of Six Sigma in the top 100 German banks. At this point of time just 2% of the respondents stated to use Six Sigma. In almost every second bank the methodology was completely unknown. Since then a number of projects have been started and reports on new initiatives have been released. Financial services providers are amidst of a transformation process from traditional bureaucratic organizations to highly process-oriented companies with manufacturers as their benchmark (Hayler and Nichols, 2006). Many processes in the finance sector can be performed in a standardized way, especially in the field of processing customer-related outputs like payments/credit cards transactions, processes using self service devices like ATMs, and loan approval processing. A similar potential can be found in the insurance sector, e.g. with application handling, contract issuing and processing of claims.

RESEARCH METHODOLOGY

In order to explore the application and the success factors of Six Sigma in the financial services industry the survey method has been chosen. The selection of this method was motivated by the desire to gain a representative overview within one industry and to come up with findings that are at least within the selected region sufficiently general.

For the development of the questionnaire we used literature that describes the Six Sigma method in detail (e.g., Harry and Schroeder, 2006; Pande, 2006; Benbow and Kubiak, 2005). In order to build on as much relevant research as possible, we included the work by Gijo and Rao (2005) who have already identified numerous problem areas of Six Sigma implementation.

The empirical data for this study have been collected between January and September 2007. A 10-page questionnaire containing 41 questions was sent to process managers of the largest financial institutions in Germany, Austria, Switzerland, and Great Britain and to 24 service provider companies operating in Germany. The companies of our sample had been selected on the basis of their size. The total asset base as of December 31, 2005, was used to determine a bank's size (above €5.0 bn) whereas the size of an insurance company was determined on the basis of the total gross premium amount as of December 31, 2005 (above €0.4 bn). The questionnaire was pre-tested prior to the study to identify any possible flaws. The pre-tests indicated that the questionnaire was overall consistent, concise, and only minor revisions to its design were required.

A total of 274 questionnaires were mailed, of which 145 were returned. This equates to a response rate of 52.9 percent which is well above average for empirical studies of this nature. The rate shows the enormous interest of the respondents in this field of research. Thus, 93 banks (64,1%), 43 insurance companies (29,7%), and 9 service providers (6,2%) participated in our survey. All returned questionnaires were complete and suitable for the subsequent analysis.

SURVEY RESULTS

In the following the application of the Six Sigma methodology among financial services providers will be presented briefly. Then, the reasons for the adoption of Six Sigma as well as the scope and benefits of conducted Six Sigma initiatives will be explored. Finally, problem areas and success factors in Six Sigma projects will be analyzed.

Application of Six Sigma in the Financial Services Industry

According to Chakrabarty and Tan (2007) the application of Six Sigma is growing throughout service industries. However, there are numerous factors that effect this adoption. Quantifying and gathering of data from service processes is seen as a problem by several authors (Antony, 2004a; Sehwall and DeYong, 2003). This makes the Measure and Control phase more difficult to cope with compared to manufacturing. Whereas data collection is usually a routine in asset-intensive manufacturing processes, this is not necessarily the case in human-centered services (Hensley and Dobie, 2005).

93.1 percent of all responding financial services providers regard process improvement as important within their own organization – 64.2 percent even consider this topic as very important. Obviously, interest in the process improvement methodology Six Sigma has increased significantly. Nine out of ten respondents were acquainted with the methodology – at least with its main features. Only 9.6 percent of all respondents indicated that they do not know about Six Sigma, while 49.7 percent were familiar with its main features. 17.9 percent of the respondents have been engaged in a comprehensive study of the Six Sigma methodology. The remaining 22.8 percent have already completed Six Sigma training, carried out or even managed one or more Six Sigma projects. Banks and insurance companies exhibited a similarly strong interest in the Six Sigma methodology. Service providers indicated an even stronger interest – all nine responding process managers of service providers have studied literature on Six Sigma and/or participated at conferences, and four among them have already completed Six Sigma training.

According to a survey by Rigby and Bilodeau (2007) Six Sigma belongs to the top 25 management tools and is used by 40% of companies throughout all industries worldwide. However, the reasons for applying Six Sigma and the scope of its implementation seem to vary significantly among companies. At the time of our survey one quarter of the financial service providers were applying Six Sigma (in the following called “Six Sigma companies”, $n = 36$). In detail, 16.7 percent of all companies have already completed Six Sigma projects, while 7.6 percent are currently gaining their first experiences with the methodology. A comparative study of the responses based on regions showed that especially British financial service providers apply Six Sigma intensively (44.4 percent of all responding British banks and insurers). Austrian financial services providers, on the other hand, exhibit a greater reluctance to use the methodology – 85.7 percent of the companies were not planning the introduction Six Sigma. In Germany, Six Sigma has been used already by 26.7 percent of the respondents, while in Switzerland 16.7 percent of the financial services providers utilized Six Sigma for continuous process improvement.

However, half of the responding banks, insurers, and service providers had not yet used Six Sigma for an extended period of time; on average they have been applying Six Sigma for approximately one year. Only five banks indicated that they possess more than three years of experience with Six Sigma. The mean value for use of Six Sigma among financial services providers that had deployed the methodology has been approximately 18 months (standard deviation: 13.4 months). On average, each company had carried out 4.4 projects (standard deviation: 5.0 projects). A very small number of financial services providers have completed a truly large number of projects. Some British companies, in particular, could look back at more than 100 completed projects. In these companies, Six Sigma has become a cornerstone of the organizations’ business philosophy.

Concerning the deployment of Six Sigma methodologies, 90.9 percent of the companies utilized the DMAIC cycle. Merely one fifth of the respondents also made use of the DMADV cycle for developing new processes (18.2 percent). However, in the medium-term banks and insurance companies strive to extend their Six Sigma activities on designing new processes as well – 39.4 percent of all financial services providers using Six Sigma indicate that they are going to apply DMADV for new process development in the future.

Success of Six Sigma Initiatives and Projects

One quarter of the financial services providers have identified the Six Sigma methodology as being suited for their continuous process improvement efforts. As the main reasons for the introduction of Six Sigma, respondents mentioned first and foremost pressures to reduce costs (65.6 percent), possibilities to exploit market opportunities (34.4 percent), and dissatisfied customers (31.3 percent). Changes in management (31.3 percent) represented an additional reason for the introduction of Six Sigma. Eight out of ten financial services providers opted for Six Sigma because, with its DMAIC and DMADV cycles, this methodology offers strict procedures for process analysis and optimization (81.3 percent).

84.4 percent of the Six Sigma companies were convinced that Six Sigma can be very helpful or helpful for optimizing processes. Only 15.6 percent of the respondents were not able to render a final verdict concerning the methodology's usefulness. Financial services providers viewed the success rate of Six Sigma within their organizations not quite as positively: 12.1 percent regarded the success of the Six Sigma methodology in their company as very high, 51.5 percent estimated the success as high, and 15.2 percent considered the success as on average. An additional 18.2 percent stated that the success has been low and 3.0 percent felt that it has been very low ($n=36$). However, the positive Spearman correlation of 0.6484 ($p \leq 0.01$) indicates that respondents with a favorable attitude towards Six Sigma as a process improvement methodology have been able to achieve positive results.

When it comes to realized cost-benefit ratios, most financial services providers have been very successful in their first attempts to apply the Six Sigma methodology in their organizations. Only one bank achieved an average cost-benefit ratio of merely 1 to 1 per year. All other companies report higher ratios. On average, respondents estimated a cost-benefit ratio of 1 to 4.3 (standard deviation of 3.1). After eliminating an extreme value of one company that had reported a ratio of 1 to 15, the average estimated cost-benefit ratio stands at 1 to 3.8 (standard deviation of 2.1). Most financial services providers were expecting similar high cost-benefit ratios in the future. They are aiming for ratios ranging between 1 to 3 and 1 to 5 respectively. Three companies were even hoping for a cost-benefit ratio of 1 to 10. The desired cost-benefit ratio for the short-term future is on average 1 to 5.3 with a standard deviation of 2.7.

Problem Areas and Success Factors of Six Sigma Projects

Notwithstanding the results above, one fifth of all responding companies indicated limited success with Six Sigma projects. The application of the Six Sigma methodology can be problematic (Gijo and Rao, 2005). The following major problems can be identified with respect to the responding financial services providers:

- Six Sigma is a fact-based methodology. In order to determine process performance (Sigma value) and to conduct process analysis, a comprehensive data collection is required (Adams, 2003). However, a substantial number of respondents (51.6 percent) stated that they did not have access to sufficient data during their Six Sigma projects (mean value 2.61, standard deviation of 1.28). This underpins findings of Hensley and Dobie (2005) that – in contrast to most manufacturing processes – gathering and quantifying data from more human-centered service processes is a particular problem service industries have to cope with.
- Many financial services providers regarded it as advantageous that Six Sigma allows them to engage their own staff members in process optimization efforts. This requires access to substantial human resources, both in terms of quantity and quality (Buch and Tolentino, 2006). Yet, 45.2 percent of the respondents met problems in this particular area – they lacked the necessary resources to implement

the projects (mean value 2.74; standard deviation of 1.06). In particular, they lacked personnel for process measurement and process analysis.

- A significant number of companies (41.4 percent) possessed a corporate culture that was incompatible with the Six Sigma mindset (mean value 3.00; standard deviation of 1.22). Employees were insufficiently prepared for change management processes and were not willing to embrace changes in their day-to-day routines. Resistance was noticeable in the form of employee fear of change (27.6 percent) and resistance from workers' councils (24.1 percent). Larson (2003) stresses, however, that Six Sigma can only be successful if accompanied by changes in an organization's culture, structure, and processes. Therefore, support in the form of training as well as reward systems are required (Shani and Docherty, 2003).

An analysis of the correlation between problem areas and the achieved success through Six Sigma illustrates that particularly those financial services providers that did not experience the problem areas „Selection of wrong project“ (Spearman coefficient of -0.5992; $p \leq 0.01$) and/or „Insufficient top management support“ (Spearman coefficient of -0.4055; $p \leq 0.05$) reported a very high or high success. Especially the problem of selecting the wrong project has already been investigated in various articles and studies (Banuelas and Antony 2003; Pande et al., 2000).

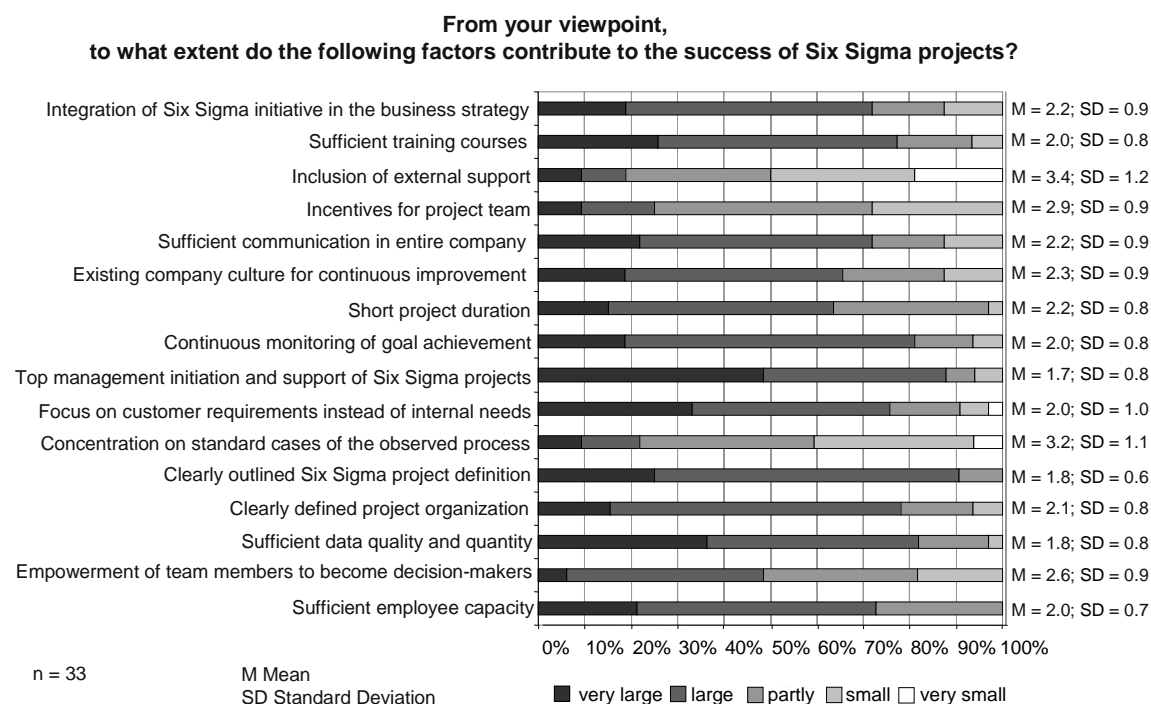
Studies highlight a multitude of factors that are critical for the successful implementation of Six Sigma projects. Coronado and Antony (2002) regard the following factors as necessary: management commitment, staff training, a change in company culture, customer focus, and precise monitoring of goals. Jacobson (2008) and Sandholm and Sorqvist (2002) stress the importance of management support, tools and training, customer focus, project selection as well as the focus on results and on communicating success. The availability of resources in terms of staff and funding are essential for success. Furthermore, the expertise of the project team is critical (Johnson and Swisher, 2003). Also, the availability of relevant data on one hand and the metrics that have to be implemented on the other are two necessary preconditions for a successful application of a data-focused methodology such as Six Sigma (Sehwal and DeYong, 2003). Finally, Henderson and Evans (2000) argue that management responsibility and monitoring of financial benefits are important factors for success.

In our survey the participants also regard the classic project management factors as important (Figure 1). In particular, three areas could be identified which are central for successful Six Sigma projects:

1. The cornerstone of a successful optimization project is the existence of a clearly outlined project definition and project organization that are evident to the project leader, project staff, and project sponsor (90.6 percent). This entails having clearly defined goals, milestones, timelines, and budgets. The project goals should be based on customer requirements rather than on internal needs (75.7 percent). Continuous monitoring of goal achievement should be performed in accordance with the project plan (81.2 percent).
2. Six Sigma projects require a substantial data collection effort, and, thus, the quality and quantity of data are critical (91.9 percent). Data for various performance measures related to time, costs, quality, and flexibility of the process have to be gathered. This comprises dedicating sufficient resources – not only with respect to quantity – to the data collection and data analysis phase (72.7 percent). Moreover, sufficient training methods are necessary to ensure the necessary Six Sigma know-how (77.3 percent).
3. A Six Sigma project is considered to be successful if process changes result in an increased effectiveness and efficiency. However, such process changes always affect employees who should participate in the re-design of business processes and should actively support the changes. In order to

accomplish this goal, sufficient communication within the entire organization is necessary (71.9 percent), as well as support from top and middle management for the Six Sigma initiative (87.9 percent). The integration of Six Sigma into the company's strategic planning process highlights the importance of this major change initiative (71.9 percent). Communication, management support and staff involvement also proved to be success factors in the construction industry as shown by Pheng and Hui (2004).

Figure 1: Success factors of Six Sigma projects



The figure shows that top management support has the dominating influence on the success of Six Sigma projects which is typical for projects with a high impact on the organization.

The correlations between success factors illustrate the relationships between these factors. It becomes apparent that financial services providers that regard employee capacity as a critical success factor consider the following success factors as important as well: sufficient data quality and quantity (Spearman coefficient of 0.3886; $p \leq 0.05$), focus on customer requirements (Spearman coefficient of 0.4757; $p \leq 0.05$), continuous monitoring of goal achievement (Spearman coefficient of 0.4201; $p \leq 0.05$), and integration of the Six Sigma initiative within the overall business strategy (Spearman coefficient of 0.3564; $p \leq 0.05$). It appears that these five factors are the key factors for the success of a Six Sigma initiative or a Six Sigma project.

SUMMARY AND CONCLUSION

Six Sigma has become a well-established methodology in the manufacturing sector. Meanwhile, also financial services providers have adopted Six Sigma to continuously improve their processes. In order to determine how far this methodology has spread out in the financial services sector, we conducted an empirical study among banks, insurance companies, and service providers in Germany, Switzerland, Austria, and Great Britain.

It was found that 25 percent of the respondents use the Six Sigma methodology in their process improvement projects. 90 percent of the process managers of the included companies are acquainted with the main features of Six Sigma. The prime reason for applying Six Sigma is the pressure to reduce costs. An outstanding goal mentioned by almost all respondents is quality improvement followed by increased process productivity as well as an increase in customer satisfaction. On average, companies have completed only 4.4 projects so far and their experiences seldom date back more than 18 months. Some companies have not yet moved beyond a pilot project. The average cost-benefit ratio was estimated to be 1 to 4.3.

When it comes to satisfaction with Six Sigma initiatives, 23.3 percent of the companies stated that they are very satisfied and 53.3 percent reported being satisfied. Especially those companies were satisfied that had been able to reduce their process costs (Spearman coefficient of -0.4282; $p \leq 0.05$) and raise their productivity (Spearman coefficient of -0.4261; $p \leq 0.05$). It becomes apparent that those companies being convinced of Six Sigma as an appropriate methodology for process improvement were also very satisfied with the Six Sigma initiatives within their company (Spearman coefficient of 0.5107; $p \leq 0.01$).

The outcomes of our survey provide a number of inspirations for potential pathways for future research. (a) One promising research area is a detailed comparison of Six Sigma with other process improvement methodologies such as Lean Management or Business Process Management. (b) An investigation of the differences of Six Sigma projects between the financial services industry and other industries will be required to further contextualize the findings of our study. Further research could assist a distinct choice of proper tools used for different types of processes (i.e., manufacturing vs. service processes). (c) It would be interesting to analyze the collected data using Structured Equation Modeling (SEM). The aim of SEM is to validate a constructed hypothetic model with the collected empirical data. As a result it would be possible to develop a model that explains the interrelationship between success factors of Six Sigma in the financial services industry. (d) Conducting a similar survey in more countries could produce insights in how far the application of Six Sigma differs e.g. in Anglo-Saxon countries compared to continental Europe or Asia.

REFERENCES

- Adams, C.W. (2003), *Six Sigma Deployment*, Elsevier, New York, NY.
- Antony, J. (2006) "Six Sigma for Service Processes", *Business Process Management Journal*, Vol. 12, No. 2, pp. 234-248.
- Antony, J. (2004a), "Some pros and cons of six sigma: an academic perspective", *The TQM Magazine*, Vol. 16, No. 4, pp. 303-306.
- Antony, J. (2004b), "Six Sigma in the UK service organizations: results from a pilot survey", *Managerial Auditing Journal*, Vol. 19, No. 8, pp. 1006-1013.
- Bandyopadhyay, J. and Lichtman, R. (2007), "Six Sigma Approach to Quality and Productivity Improvement in an Institution for Higher Education in the United States", *International Journal of Management*, Vol. 24, No. 4, pp. 802-807.
- Banuelas, R. and Antony, J. (2003), "Going from six sigma to design for six sigma: an exploratory study using analytic hierarchy process", *The TQM Magazine*, Vol. 15, No. 5, pp. 334-344.
- Barry, R., Murcko, A.C., Brubaker, C.E. (2002), *The Six Sigma Book for Healthcare*, Health Administration Press, Chicago, IL.

Benbow, D.W. and Kubiak, T.M. (2005), *The Certified Six Sigma Black Belt Handbook*, ASQ Quality Press, Milwaukee, Wis.

Breyfogle, F., Cupello, J. and Meadows, B. (2001), *Managing Six Sigma*, Wiley, New York, NY.

Breyfogle, F.W. (2003), *Implementing Six Sigma: smarter solutions using statistical methods*, 2. ed., Wiley Hoboken, NJ.

Buch, K. and Tolentino, A. (2006), "Employee perceptions of the rewards associated with six sigma", *Journal of Organizational Change Management*, Vol. 19, No. 3, pp. 356-364.

Buck, C. (2001), "Applications of six sigma to reduce medical errors", *ASQ Annual Quality Congress Proceedings*, ASQ, Milwaukee, Wis., pp. 239-242.

Burge, R. (2008), "Lollipops for excellence", *Industrial Engineer: IE*, Vol. 40, No. 8, pp. 24-28.

Chakrabarty, A. and Tan, K.C. (2007), "The current state of six sigma application in services", *Managing Service Quality*, Vol. 17, No. 2, pp. 194-208.

Chowdhury, S. (2005), *Design for Six Sigma: the revolutionary process for achieving extraordinary profits*, Dearborn Trade Publications, Chicago, IL.

Coronado, R.B. and Antony, J. (2002), "Critical success factors for the successful implementation of six sigma projects in organizations", *The TQM Magazine*, Vol. 14, No. 2, pp. 92-99.

El-Haik, B. and Roy, D.M. (2005), *Service Design for Six Sigma: A Roadmap for Excellence*, John Wiley & Sons, Hoboken, NJ.

George, M.L. (2003), *Lean Six Sigma for Service*, McGraw-Hill, New York, NY.

Gijo, E.V. and Rao, T.S. (2005), "Six Sigma Implementation – Hurdles and More Hurdles", *Total Quality Management*, Vol. 16, No. 6, pp. 721-725.

Goh, T.N. (2002), "A strategic assessment of six sigma", *Quality Reliability Engineering International*, Vol. 18, No. 5, pp. 403-410.

Harry, M. and Schroeder, R. (2006), *Six Sigma: The Breakthrough Management Strategy Revolutionizing the World's Top Corporations*, Doubleday, New York, NY.

Hayler, R. and Nichols, M.D. (2006), *Six Sigma for Financial Services: How Leading Companies Are Driving Results With Lean, Six Sigma, and Process Management*, McGraw-Hill, New York, NY.

Henderson, K.H. and Evans, J.R. (2000), "Successful implementation of six sigma: benchmarking General Electric company", *Benchmarking: An International Journal*, Vol. 7, No. 4, pp. 260-281.

Hensley, R.L. and Dobie, K. (2005), "Assessing readiness for six sigma in a service setting", *Managing Service Quality*, Vol. 15, No. 1, pp. 82-101.

Johnson, A. and Swisher, B. (2003), "How six sigma improves R&D", *Research Technology Management*, Vol. 46, No. 2, pp. 12-15.

- Kumar, S. and Gupta, Y. (1993), "Statistical process control at Motorola's Austin assembly plant", *Interface*, Vol. 23, No. 2, pp. 84-92.
- Larson, A. (2003), *Demystifying Six Sigma*, Amacom, New York, NY.
- Lieber, K. and Moormann, J. (2004), „Six Sigma, Neue Chancen zur Produktivitätssteigerung?“, *Die Bank*, Vol. 44, No. 1, pp. 28-33.
- Magnusson, K., Kroslid, D. and Bergman, B. (2004), *Six Sigma. The Pragmatic Approach*, 2. ed., Studentlitterature, Lund.
- Pande, P.S. (2006), *The Six Sigma Leader: How Top Executives Will Prevail in the 21st Century*, McGraw-Hill, New York, NY.
- Pande, P., Neuman, R. and Cavanagh, R. (2000), *The Six Sigma Way: How GE, Motorola and Other Top Companies are Honing their Performance*, McGraw-Hill, New York, NY.
- Pheng, L.S. and Hui, M.S. (2004), "Implementing and Applying Six Sigma in Construction", *Journal of Construction Engineering and Management*, Vol. 130, No. 4, pp. 482-489.
- Rigby, D. and Bilodeau, B. (2007), "Management Tools and Trends 2007", available at: http://breakthroughimperative.com/management_tools/Management_Tools_and_Trends_2007.pdf (accessed October 22, 2008).
- Sandholm, L. and Sorqvist, L. (2002), "12 Requirements for Six Sigma Success", *Six Sigma Forum Magazine*, Vol. 2, No. 1, pp. 17-22.
- Sehwall, L. and DeYong, C. (2003), "Six sigma in health care", *International Journal of Health Care Quality Assurance*, Vol. 16, No. 6, pp. 1-5.
- Shani, A.B. and Docherty, P. (2003), *Learning by Design: Building Sustainable Organizations*, Blackwell, Oxford.
- Snee, R.D. and Hoerl, R.W. (2005), *Six Sigma beyond the factory floor: deployment strategies for financial services, health care, and the rest of the real economy*, Pearson Prentice Hall, Upper Saddle River, NJ.
- Yilmaz, M.R. and Chatterjee, S. (2000), "Six sigma beyond manufacturing – a concept for robust management", *IEEE Engineering Management Review*, Vol. 28, No. 4, pp. 73-80.

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TRIPLE BOTTOM LINE AND SUSTAINABILITY REPORT

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ABSTRACT

Although the concepts of sustainability and sustainable development have been around for decades, they are even more topical now than ever. In fact, the growing attention to sustainability has led organisations, whether private or public, to adopt monitoring systems aimed at assessing the sustainability of their operations. This paper starts from some general considerations on the so-called Triple Bottom Line approach, and then provides insight into the voluntary reporting instruments that organisations may use to present their economic, environmental and social results. After a brief description of the social and environmental reports, whereby organisations account for their business impacts respectively on social aspects and ecosystems, the paper discusses on the sustainability report as a combination of the two former reports. Sustainability reports, in fact, are designed to present, in a single document, financial, economic, social and environmental impacts of an organisation's decision-making process.

INTRODUCTION

The concept of sustainable development, introduced within the constitutional principles of the European Union, has been evolving since the 1960s with the creation of the first environmental groups, becoming a focus of increasing interest by civil society over the years. Such interest stems from the growing awareness of the exhaustibility of global resources and from the ever more urgent need to preserve the quality of the natural environment, promoting better balanced economic and social development patterns than in the past.

Article 2 of the Amsterdam Treaty states: “*The Community shall promote [...] a harmonious, balanced and sustainable development of economic activities, a high level of employment and social protection, equality between men and women, sustainable and non-inflationary growth [...] a high level of protection and improvement of the quality of the environment, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States*”.

It is fairly evident that one of the peculiarities of sustainable development is its wide-ranging and multidisciplinary approach, combining environmental, economic, social and institutional issues. Additionally, the Lisbon Strategy, that is a reference point of the European Union's political commitment for economic and social renewal, identifies sustainable development as the most important factor when assessing the economical, social and environmental impacts of the initiatives undertaken through decision-making processes (*triple bottom approach*).

SUSTAINABILITY AND SUSTAINABLE DEVELOPMENT

Sustainability and sustainable development are currently debated topics, however, in order to provide them with scientific value, it is necessary to analyze how those concepts have evolved over time and look back throughout the history of sustainability. Thus, the main definitions of *sustainability* and a brief review of the milestones of sustainable development are presented in this chapter. The first, thorough definition of “sustainability” is contained in the “Our Common Future” report of the World Commission on Environment and Development (1987). In this report, development is sustainable when it “*meets the needs of the present without compromising the ability of future generations to meet their own needs*”.

Here, sustainable development embodies the need to protect and safeguard the resources of humankind, the endeavour to achieving a better quality of life, the diffusion of growing and equitable prosperity and the attainment of levels of exploitation and conservation of the environment, that would not be harmful to human beings and other living species and that would enable more equitable access to resources.

We would say that development is sustainable if it is able to generate situations with substantial balance among the social, economic, and environmental contexts (known as the balance of the *three “E’s”* : environment, equity and economy). The vision in such definition is certainly anthropocentric, since it is not focused on the ecosystem, and thus on the well-being of all living species, but rather on human generations.

A subsequent definition of sustainable development, where a more global vision is encompassed, was provided in 1991, by the World Conservation Union, UN Environment Programme and World Wide Fund for Nature. It defined sustainability as “*improving the quality of life while living within the carrying capacity of supporting ecosystems*”. In the same year, Hermann Daly provided a further vision of sustainability. Development is sustainable when it fulfils the following three general conditions:

- the rate of depletion for renewable resources should not be greater than their rate of reproduction;
- the emissions rates should not exceed the depuration and assimilation capacity of the environment;
- non-renewable resources should be depleted at a rate no greater than the creation of renewable alternatives

In 1994, ICLEI (International Council for Local Environmental Initiatives) laid down a further definition of sustainable development, as “*development that delivers basic environmental, social and economic services to all residents of a community without threatening the viability of the natural, built and social systems upon which the delivery of these services depends*”. This means that the three dimensions – economic, social and environmental – are closely related, and any planning action must take the mutual relationships between them into consideration. ICLEI, in fact, defines sustainable development as development that provides all residents of a given community with environmental and social benefits as well as economic opportunities, without threatening the vitality of the natural, urban and social systems that depend upon these opportunities.

In 2001, UNESCO broadened the concept of sustainable development stating that “*cultural diversity is as necessary for humankind as biodiversity is for nature (...) cultural diversity is one of the roots of development, understood not simply in terms of economic growth, but also as a means to achieve a more satisfactory intellectual, emotional, moral and spiritual existence*” (Articles 1 and 3, Universal Declaration on Cultural Diversity, UNESCO, 2001). In this vision, cultural diversity becomes the fourth pillar of sustainable development, alongside the traditional balance of the three E’s.

The Milestones of Sustainability

The milestones in the history of sustainability are the 1972 Stockholm Conference, The United Nations Conference in Rio de Janeiro in 1992 and the Johannesburg Summit in 2002. The 1972 Stockholm Conference was the first major global event focusing on environmental issues and adopting a declaration in which environment became an integral part of development.

At the 1992 Earth Summit in Rio de Janeiro, sustainable development was finally recognized as an integrated concept, involving not only the environment, but also economy and society. The Conference put significant emphasis on the need to promote sustainable technological progress, aimed at responsible use of natural resources, decreasing consumption of non-renewable resources and limiting waste

production. In its Declaration, the Conference set out 27 Principles on environment and development, the Statement of Forest Principles and Agenda 21, and launched the Convention on Biological Diversity, the Convention on Climate Change and the Convention on Desertification, that was later adopted, in 1994.

Other significant events on sustainable development were held after the Conference in Rio, and they include:

- the 1997 Kyoto Protocol on Climate Change;
- the 1998 Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters;
- the 2000 United Nations Millennium Declaration, regarding the values upon which the third millennium international relationships should be founded;
- the 2000 Montreal Protocol on Biosafety;
- the **2001 Stockholm Convention on Persistent Organic Pollutants**;
- the **2002 Monterrey Conference on Financing for Development**.

The 2002 Johannesburg Summit confirmed the strengthening of the global commitment to sustainable development, although highlighting the considerable difficulties of the path to sustainability: even the post-Rio perspectives, except for some isolated cases at a national or regional level, have not been honoured. The Summit culminated in the presentation of an implementation plan and the setting out of five new *targets*, and considered the accomplishment of the Agenda 21 process as eminently important for the achievement of sustainable development.

Special mention should be made of the European situation: already in the Maastricht Treaty sustainable development was included among the European Union's goals. The strategy for integrating environmental protection into Community policies was presented both in the conclusion of the Cardiff European Council and in the Introductory Paper of the Vienna European Council in 1998. The need for implementing this strategy is stressed in the Conclusion of the Helsinki European Council in 1999. Parallel to the Conference in Rio and the launch of Agenda 21, the guidelines on environmental protection and sustainable development were set out. Government representatives of 178 countries, besides 100 Heads of State and over 1000 Non Governmental Organizations participated in the Conference in Rio. Two Conventions and three declarations of principles were signed:

- *the Framework Convention on Climate Change* followed by the Convention on Desertification, setting out general obligations aimed at controlling and stabilising greenhouse gas emissions;
- *the Framework Convention on Biological Diversity*, aiming at protecting species in their natural habitats and rehabilitating endangered species;
- *Agenda 21: the Action Plan for the 21st Century*, placing sustainable development as a perspective to be pursued for all the peoples of the world. It pinpoints the actions, the parties and the instruments necessary to implement the approaches proposed at the Conference, and in particular states that “[...] *the need to operate towards sustainable development is recognised to be a primary responsibility of governments, calling for strategies, policies and plans at national level* [...]”. These premises paved the way to issues such as integrated strategic planning, concertation, participation of the community in decision-making, exploration and experimentation of suitable operational instruments, etc. For decades, international and national communities at the various levels, although not without facing several difficulties, have been trying to find a solution to such issues.
- *The Statement of Forest Principles*, reaffirming the right of States to exploit forests according to their requirements, without prejudicing the principles for their conservation and development;
- *the Declaration on Environment and Development*, setting out, in 27 principles, the rights and responsibilities of nations as regards sustainable development. Emphasis is placed on the spirit of partnership that States will have to adopt in order to conserve, protect and restore the health and integrity of the Earth's ecosystem, on the need to encourage public awareness and participation in the

decision-making processes in relation to environmental issues and on the promotion of a supportive and open international economic system that would lead to economic growth and sustainable development in all countries.

In 2000, the summits of the European Council held in Nice and Lisbon laid the foundations for a global socio-economic strategy and the Stockholm European Council, in 2001, reaffirmed the need to ensure the balance among the three dimensions of sustainable development – Environment, Economy and Society.

The European Strategy for Sustainable Development, started with the Gothenburg European Council in 2001 and strengthened with the Barcelona European Council in 2002, affirms that economic, social and environmental effects of all policies should be taken into account in decision-making. Of special importance, in this regard, is the Sixth Environment Action Programme of the European Community 2002-2010 “Environment 2010: Our Future, Our Choice”, as an essential instrument for sustainable development. It provides a strategic framework for the Community's environmental policy for 2002-2012 based on four priority areas for action (climate change; nature and biodiversity; environment, health and quality of life; and sustainable use of natural resources) and emphasises the importance to promote Local Agenda 21, rethink transport policies and adopt urban environmental indicators.

The Situation in Italy

In 1993, Italy approved the National Plan for Sustainable Development. The plan states: *“Pursuit of sustainable development means seeking to improve the quality of life, while living within the carrying capacity of the environment. Sustainable development does not mean stopping economic growth, also because, even in some areas of our country, environment itself is a victim of poverty and of the spiral of degradation caused by poverty. An action plan for sustainable development should not only promote conservation of natural resources, but also encourage economic activities that would be compatible with future uses. Hence, the application of the concept of sustainable development is dynamic on one side, i.e. linked to the knowledge and the current state of environment and ecosystems, and on the other side it recommends a precautionary approach with regard to the situations and actions that may compromise the environmental equilibria, thereby triggering a continuous process of error correction”.*

In 2002, the Interministerial Economic Planning Committee (CIPE) approved the *National Strategy for Sustainable Development* in line with the aforementioned Sixth Environment Action Programme “Environment 2010: Our Future, Our Choice” (2001). The strategy pinpoints goals and actions, along with a number of indicators to measure progress towards sustainable development, according to four priority areas:

- Climate Change and Protection of the Ozone Layer;
- Protection and Sustainable Enhancement of Nature and Biodiversity;
- Quality of the Environment and Life in Urban Areas and in the Region;
- Sustainable Management of Natural Resources.

Each thematic area is associated with a set of indicators selected on the basis of the requirements of existing law and including the seven indicators of the Barcelona Council, the European Common Indicators (ECI) and the eleven European Environmental Indicators of 2000. The Strategy includes, within the action instruments: the incorporation of the environmental factor into all sectoral policies starting from the environmental assessment of plans and programmes; the incorporation of the environmental factor into the markets; the promotion of public awareness and participation; the development of the Local Agenda 21 processes; the incorporation of environmental accounting systems into the national accounting.

Many Italian cities have already started the process of Agenda 21, thereby promoting more sustainable development patterns.

In the Strategy of Environmental Action for Sustainable Development, the Ministry of Environment and Territorial Protection stresses the importance of the environmental impact assessment (EIA) on projects and the Strategic Environmental Assessment (SEA), in order to ensure projects overall sustainability and environmental compatibility with territorial Plans and Programmes.

The issue of *Environmental Damage* should also be mentioned among the instruments used to promote sustainable development. In this respect, a key role is played by the instrument of Civil Liability for environmental damage introduced at a national level (Art. 18 L. 349/86) and at a Community level (Article 174 of the Treaty establishing the EEC - Rome, 1957; White Paper on Liability for Environmental Damage – Brussels, 2000; Proposal for a Directive on the prevention and remedying of environmental damage - Brussels, 2002) establishing the “polluter pays” principle. The principle, among other things, aims at preventing environmental damages by making the operators who adopt practices and behaviours which endanger the environment, aware of their liability for any damage that could be caused.

SOME VOLUNTARY CONTROL INSTRUMENTS

The growing attention to sustainability prompted public and private organisations to adopt supervision systems aimed at assessing the sustainability and environmental impact of their own activities.

Agenda 21 was the first voluntary control instrument to be implemented along with a number of legally “binding” instruments, set out in specific Community and national directives, whose application is of great importance in the planning and design of major projects. They are, in particular, the Strategic Environmental Assessment (SEA) and the Environmental Impact Assessment (EIA), an instrument ratified with a specific European directive, which has been in force for a few years also in Italy.

To mitigate the impact of production processes and encourage demand for environmentally-sound products, the European Commission has for some time identified a product and process certification system for enterprises: the most important are EMAS, ISO 9000 and ISO 14001. They are voluntary instruments aimed at improving environmental performance of products and services. The next revision of the ISO 9004 standard – for decades, an international reference point for quality management systems of companies and other institutions – will change the title from “Guidelines for Performance Improvements” (in the 2000 revision) into “Managing for sustainability” (in the 2009 draft revision), just to provide organizations with guidelines for a sustainable success. In the same standard, the proposed definition of “sustainability” is as the “ability of an organization or activity to maintain or develop its performance in the long term” through a balance between the economic-financial interests and the environmental interests. Finally, other voluntary control instruments include the social report, the environmental report and the sustainability report.

THE SOCIAL REPORT

The Corporate Social Responsibility report is an account reporting model on the quantity and quality of the relationships between an organisation and its stakeholders, with the aim of providing a comparable, complete and transparent framework for the interdependence between economic factors and the social factors originating from the organisation’s decisions (Rubino F., 2007).

With this instrument, the organisation informs stakeholders of its social and ethical commitment. It, in fact, describes the organisation’s identity, its value system, the interactions between the organisation and its surrounding environment, providing details on how these are translated into decision-making criteria, management approach and outcomes, illustrating the goals for continuous improvement that the organisation intend to pursue, and showing added value and how it is allocated.

The Global Reporting Initiative defines it as an account reporting model on the quantity and quality of the relationships between a company and external social groups, necessary to outline a comparable, accurate,

complete and transparent framework for the complex interdependence among economic factors, on the one hand, and social and political factors, on the other hand, and the impact of business decisions within this framework.

The social report has already a consolidated tradition, especially in European countries such as France, Germany and Belgium: it is complementary to statutory financial statements and is, for the organisations, a carrier of further and more specific information on the one hand, and a device to gain social consensus on the other hand. It assesses the social impact of business decisions and considers issues related to employment, working conditions and safety.

In for-profit organisations, the social report may be considered as a communication instrument with stakeholders, aimed at gaining support by the public opinion as a socially responsible organisation. Whilst, in no-profit organisations, the social report has a “social legitimization” function, necessary to operate in the reference community and to gather financial resources – fund raising – and human resources – voluntary service – (Puntillo P., 2008).

Among the various study associations on social reporting, a key role is played by the Study Group for the establishment of standards for Social Reporting (GBS), an organisation created in 1998 and composed of scholars and experts from universities and consulting firms that has proposed social reporting as an act illustrating the concept of Corporate Social Responsibility.

According to GBS, only documents containing some minimum elements set out in the social reporting standards issued by the same organisation can be regarded as “social report”, namely:

- Responsibility towards the stakeholders to which the business must report;
- Identification of the business, the responsibilities connected with its activity and its mission by highlighting its ethical values, principles, rules and objectives;
- Transparency towards stakeholders: all stakeholders should be able to understand the social report;
- Involvement: all stakeholders should have the right to express their opinion, either directly or indirectly;
- Consistency of management policies to the declared corporate values;
- Neutrality, fairness and freedom from third-party interests;
- Accrual basis;
- Prudence, in order to prevent overestimation of social impacts, both positive and negative;
- Comparability in time and space;
- Meaningfulness, clarity and intelligibility based on the correct balance between style and content;
- Regularity and timeliness in the presentation of social reports that, being complementary to statutory financial statements, must cover the same period as the latter;
- Uniformity of currency values;
- Relevance of information, aimed at satisfying stakeholders;
- Materiality and significance of the reported impacts: any estimates or valuations must be based on clear and consistent assumptions;
- Verifiability of the information by tracking back the gathering and reporting processes;
- Reliability and true presentation of information;
- Independence from any third parties engaged in preparing the social report.

The detailed distinction of the standards to be complied with in preparing a social report highlights its importance. The information contained in the social report, in fact, must be verifiable, significant and intelligible also by readers unversed in the subject.

The GBS model of social report is structured into the following three sections:

1. The corporate identity: it entails a description of the shareholding structure, the framework of ethical values, the mission, the strategy and the policies of the business;
2. The creation and allocation of added value: it is based on two statements, the first quantifying added value and the second describing its allocation;
3. The social statement: it provides a qualitative and quantitative description of the results achieved by the business in relation to the commitments undertaken, the plans implemented and the impacts generated on the individual stakeholders.

The social report has been a significant step forward, bringing organisations closer to their stakeholders and triggering a process of open and fruitful dialogue based on the principles of responsibility and clarity. The positive experience made so far seems to demonstrate that social report has a central role, since it is able to drive change processes, and is an important support for the strategic and decision-making processes, for communication, and for the participation of stakeholders. In fact, the organisations which adopt social report, increase their ability to pinpoint their results and present them to the outsiders.

THE ENVIRONMENTAL REPORT

The Environmental Report is a voluntary “control” instrument that both public and private organisations can adopt to develop broader knowledge of environmental issues related to its operations. This instrument derives its name from the analogy with the traditional annual report. Both statements, in fact, refer to the results achieved by organisations within a given time frame, although in different areas.

The matrix of environmental report lies in the social report. Like the social report, the environmental report is, for an organisation, another important instrument to testify its willingness to implement an effective integrated information system which, as such, would facilitate a “global” evaluation of the organisation. Suitable environmental information must already be contained in the statutory financial statements, since it is here that all the contents - including environmental issues - relating to an organisation must be reported.

Environmental accounting stems from the need to have better understanding of the impacts of business decisions on the environment, as compared to the information that can be obtained from the traditional accounting instruments. This kind of accounting helps assessing the environmental impact of economic policies and costs of economic development in terms of pollution, restoration expense and compensation.

The final objective of environmental accounting is the construction of an environmental report, as a joining element between the external environment and the organisations, from which it is possible to obtain physical data on the natural resources used as input in the production process, atmospheric emissions, water discharge, waste and noise produced by an organisation, and monetary data relating to the expense borne by an organisation for environment protection (Puntillo P., 2008).

Organisations, by means of this communication instrument, provide stakeholders with all the necessary information in order that they be able to understand the actions undertaken, the resources employed and the results obtained by the organisation in performing its activity.

The parties mostly interested in such information are the following:

- a. Customers and consumers, who are able to verify products’ compatibility with the environment;
- b. The workers, in order to know the risks related to their work;
- c. The environmental groups, with respect to the environmental impacts of the organisation’s decisions;
- d. Financial institutions and shareholders, for monitoring possible causes of environmental risks;
- e. Local communities, as regards the negative effects of the external diseconomies caused by production processes;

- f. Governmental supervising authorities, so that they may know the characteristics and effects of the environmental management systems adopted by organisations;
- g. Suppliers, business partners, etc. as for possible causes of limitation of the organisation's reliability;
- h. Trade associations, to gather information on environmental protection on a sectoral basis.

The role of environment in modern management approaches is necessarily linked to the awareness that the uncontrolled exploitation of natural resources may lead the system to a crisis of unsustainability. Companies that do not consider, in its decision-making processes, the impacts of their activities on the environment, will impose its costs on the community, according an "*externalisation process*". Hence, it must be pointed out that, although the environmental report is a "voluntary" instrument, considerable benefits may be obtained, from an operational standpoint, on the one hand, since the organisation is able to monitor environmental performance not only in relation to costs and waste (assessment of the level of protection and enhancement of the territory; assessment on the use of less environmentally damaging equipment; development of instruments that are ever more suitable for environmental communication, etc.) and, on the other hand, as regards the corporate image perceived by stakeholders.

THE SUSTAINABILITY REPORT: THE GLOBAL REPORTING INITIATIVE (GRI) FRAMEWORK

While social and environmental reports highlight the impacts of corporate management respectively on social aspects and on the ecosystem, the sustainability report is a combination of both reports in economic, social and environmental terms. It allows organisations to report, in a single document, multiple aspects related to business activity, namely, financial, economic, social and environmental aspects. For that reason, the definition *triple bottom line* reporting is used (Romolini A., 2006). The sectoral approach of the environmental report and the social report does not allow for transversal comparison of the social impacts of environmental policies and the environmental impacts of social policies. Such comparison, instead, is possible in sustainability reporting (Vaccari A., 2005).

The sustainability report is an instrument for account reporting, planning and strategic monitoring, whereby an organisation may be evaluated taking economic efficiency, environmental protection and social equity into consideration. The sustainability report is aimed at:

1. improving governance processes in order to facilitate the management of confrontation among the social, economic and environmental variables;
2. improving integration among sectoral policies;
3. analysing the confrontation factors among environmental, social and economic policies and describing the balance point achieved;
4. ensuring greater reporting transparency and a higher level of participation of stakeholders and in-house staff.

The preparation of a sustainability report can be based on the guidelines issued by the Global Reporting Initiative (GRI), created in 1997 from the *Coalition for Environmentally Responsible Economies* and the *United Nations Environment Program*, whose mission is to set up a trustworthy and reliable sustainability reporting system for all organisations regardless of size, sector, or location.

A sustainability report provides a balanced and reasonable representation of the sustainability performance of the reporting organization, including both positive and negative impacts generated by operations.

The sustainability reporting guidelines consist of the Reporting Principles and Guidance and the Standard Disclosures.

The first part contain:

- Principles to define report content;
- Principles to define report quality;

- Guidance on how to set the report boundary.

This part is useful to define content and the relevant indicators to be included in the report by using the principles of *materiality*, *stakeholder inclusiveness*, *sustainability context*, and the instructions to set the report boundary. Based on the contents and the identified indicators, organisations are able to prioritize topics in accordance with their nature and the principle of *completeness*. Thus, according to GRI guidelines, only “significant” topics and indicators should be included in the report: that is, those topics and indicators which may be regarded as being significant in terms of organisation’s economic, environmental and social impacts. Moreover, the organisation should identify the stakeholders, indicate where and how it has responded to their expectations and interests, and describe their engagement in the reporting activity. Additionally, reporting should not be limited to presenting an organisation’s individual performance, but it should also describe how an organisation contributes, or aims to contribute in the future, to the improvement or deterioration of economic, environmental and social conditions at the local, regional or global level. All the information included in the report should be complete as for:

- the objective to reflect significant economic, environmental and social impacts;
- the boundary of entities whose performance is represented by the report;
- the time period the report refers to.

Besides the principles defining the report content, it is necessary to ensure the quality of the reported information, so as to allow the reporting organisation to be transparent in its communication. Quality is therefore ensured in compliance with six principles:

1. *Balance*: the report should reflect both positive and negative aspects to provide an unbiased picture of the organisation’s overall performance;
2. *Comparability*: the information contained in the reports should be comparable both in relation to time, with respect to the reporting organisation, and vis-à-vis other organisations;
3. *Accuracy*: the reported information should be sufficiently accurate and detailed for stakeholders to assess the reporting organisation’s performance;
4. *Timeliness*: reporting should occur on a regular schedule and information should be available in time to stakeholders to make informed decisions;
5. *Clarity*: information should be made available in a manner that is understandable to all stakeholders using the report;
6. *Reliability*: the reported information should be subject to internal controls or documentation proving its veracity, that could be reviewed by third parties.

In parallel with defining the report content and the transparency of the reported information, an organisation must define the boundary of the entities whose performance will be represented in the report. Therefore, the report boundary will have to include both the entities over which the reporting organisation exercises control or significant influence and the entities exercising control or significant influence over the reporting organisation. Obviously, not all entities must be described using the same methods. The thoroughness of such description depends on the type of control and the type of information.

While the first part of the GRI guidelines defines the report content and boundary, the second part specifies three different types of information disclosure:

1. *Strategy and Profile* set the overall context for understanding organisational performance. This macro-area contains four sections:
 - a) Section One, *strategy and analysis*, provides organisational strategic view, through a statement from the most senior decision-maker about the relevance of sustainability to the organisation, the strategic priorities, the key events occurred in the reporting period, views on performance with respect to targets, outlook on the organisation’s main future targets and any other items pertaining to the organisation’s strategic approach;

- b) Section Two of the *profile* macro-area focuses on the organisational structure, size and production;
 - c) Section Three sets out *report parameters*, i.e. a series of general items on the reporting period for the information provided, the date of any previous report, the reporting cycle, the report scope and boundary – which must also include a report explanatory table of contents (GRI content index);
 - d) Section Four, *governance, commitments and engagement*, provides a set of information items on the governance structure of the organisation, its commitments in external initiatives, and on stakeholder engagement, mostly contained within the report;
 - e)
2. Management Approach of the organisation with reference to the economic aspects for each information category;
 - 3.
 4. Performance Indicators organised by economic, environmental, and social categories. Performance Indicators are divided into Core Indicators, that are generic and are assumed to be material for most organisations regardless of their nature, and Additional Indicators that, due to their nature, may be material only for some organisations. Economic Performance Indicators refer, in addition to economic performance, also to market presence and to indirect economic impacts, while Environmental Performance Indicators are divided into a number of aspects: materials; energy; water; biodiversity; emissions, effluents, and waste; products and services; compliance; transport; and an overall aspect for environmental protection expenditure and investment. As to Social Performance Indicators, key aspects are identified regarding labour practices, human rights, society, and product responsibility.

Lastly, any organisation applying the GRI Reporting Framework, will have – based on its own assessment of its report content and via the “GRI application levels” system – to declare the level to which it has applied the GRI Reporting Framework. GRI application levels are three: A, B, and C. An organisation can add a “plus” (+) at each level, self-declaring its own reporting level.

It must be pointed out that this reporting model is applicable to any type of organisation, including the public sector. Furthermore, in order to better represent the Public Administration sector, a specific supplement has been developed, that is the Sector supplement for public agencies. In this model, besides the three standard sections, amended and supplemented to better fit the requirements of local authorities, regional governments and central Governments, a further section has been added, namely “public policies and implementation measures”, for the description of public policies, the level of importance and the measurement approach.

FINAL REMARKS

Development is sustainable when it meets the needs of the present without compromising the ability of future generations to meet their own needs, or when, in other terms, is able to generate situations with substantial balance among the social, economic, and environmental contexts, that is when the balance of the *three “E’s”* – environment, equity and economy – is achieved. Thus, a “sustainable organisation”, regardless of the type, is not only sound from a financial standpoint, but it minimises its negative impacts on the environment and acts in line with societal expectations, by considering the fact that needs of future generations must be met, adopting a responsible behaviour, not only in economic, but also in ethical, environmental and social terms

A large number of different instruments may be used for social reporting, however, the sustainability report is certainly the most complete in order to know, measure, understand and account for the outcomes of an organisation’s activity in a joint perspective. Sustainable development should be a priority for all

organisations, whether private or public, and sustainability reporting seems to be a very good instrument to improve the governance processes among the social, economic and environmental variables and ensure greater reporting transparency. At present, there is not a universally recognized sustainability reporting model. However, the guidelines issued by the Global Reporting Initiative are flexible and, therefore, adaptable to a large variety of organisations, and make sustainability reports comparable over time and space.

Although the instruments designed to measure the typical elements related to sustainability, through an integrated approach, are mainly used, at present, in the for-profit industry, it is desirable that the need to account for economic, environmental, and social impacts at all levels should lead all types of organisations to adopt, in the future, a universally recognised document, as in the case of economic and financial reporting.

REFERENCES

Cisi, M. (2003), *Il bilancio ambientale*. Torino, *Giappichelli*.

GBS, Principi di redazione del bilancio sociale. www.gruppobilanciosociale.org.

GRI, Linee Guida per il reporting di sostenibilità. www.globalreporting.org.

Jonas, H. (1978), *Principio responsabilità*. Torino, *Einaudi*.

Puntillo, P. (2008), *Il bilancio ambientale*. Regione Calabria, *FabbricaVerde*.

Rete del sistema Informativo Nazionale Ambientale. <http://www.sinanet.apat.it>.

Romolini, A. (2006), *Il Bilancio di sostenibilità*, in Mulazzani M, *I servizi pubblici locali di distribuzione del gas*. Milano, *Franco Angeli*.

Rubino, F. (2007), *Il bilancio sociale nelle aziende pubbliche locali*. Cosenza, *Centro editoriale e librario dell'Università della Calabria*.

Tenuta, P. (2007), *Crisi finanziaria e strumenti di previsione del risk management nelle aziende pubbliche locali*. Milano, *Franco Angeli*.

Vaccari A., 2005. *Dal bilancio sociale al bilancio di sostenibilità*. Roma, *Forum PA2005*.

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RESEARCH IN THE FIELD OF IAS/IFRS – A COMPARISON OF THE IAS/IFRS ACCOUNTING SYSTEM WITH THE ACCOUNTING SYSTEM BASED ON THE CZECH REPUBLIC LEGISLATION

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ABSTRACT

Accounting system according Czech legal regulation and both of international distinguished accounting systems (IAS/IFRS and US GAAP) go out of different fundamental requirements and that is why it is evident that these systems includes a lot of differences. It is possible to find these variations in the area of valuation bases, accounting elements, goals of financial reporting, formal aspects of accounting, financial reporting statements etc. This contribution tries to identify the main divergences between Czech accounting system and IAS/IFRS. The solutions of individual problems according US GAAP is signed only by selected areas for reserved degree of application in the Czech Republic.

INTRODUCTION

The differences between the two continental accounting systems, i.e. IAS/IFRS (IASB, 2005, 2007) and the Czech accounting legislation will be dealt with in the following comparison of the individual solutions. A solution based on the Anglo-Saxon accounting system US GAAP will be suggested only in case of a significant difference. A relatively low degree of use of US GAAP in the Czech business environs is the reason for this methodology. Moreover, IAS/IFRS is largely based on the principles defined by the US GAAP accounting system, and so they are based on a similar “conceptual vision.” The comparison will be carried out within the following topics:

Comparing Basic Assumptions and Qualitative Characteristics in Financial Reporting

The individual standards of IAS/IFRS are based on the Conceptual framework which defines the basic assumptions and qualitative characteristics of the financial statement. Basic assumptions are as follows: the accrual basis and going concern. The assumptions can be found both in the US GAAP accounting system and in the Czech accounting legislation, namely in the following articles:

- The Accounting Act, Article 3, paragraph 1: Accounting units use double entries to keep records of the facts that are subjects of the accounts up to the period to which these facts are related by time and by its factual nature, they keep records of all expenses and revenues regardless of the moment of the payment or receipt.
- The Accounting Act, Article 7, paragraph 1: An accounting unit is obliged to use the accounting methods in a way that is based on an assumption it will continue its activity . . .

In the US GAAP Accounting system there are also some specific assumptions, namely the assumption of the stable dollar, which implies that this currency should not succumb to a higher rate of inflation and it is a monetary unit suitable for property and obligations.

However, since its beginning the IAS/IFRS accounting system has been formed with the intention to be used internationally and that is why such an assumption is defined neither in the Conceptual framework, nor in the individual standards. On the contrary, the Board of IASC issued a specific standard dealing

specifically with financial reporting in the areas of an instable rate of inflation – IAS 29 – Reporting in the hyperinflation economies - and it presents a solution for financial reporting of the accounting units with a high inflation rate and it aims to remove the influence of hyperinflation on the comparability of the economic results. The Czech legislation does not contain any assumption of stable currency (because of a long-term non-existence of hyperinflation) and does not suggest any specific procedures within the financial accounting.

The concepts of the IAS/IFRS and US GAAP accounting systems are based on the qualitative characteristics of the financial statement, such as comprehensibility, relevance, reliability and comparability. The Accounting Act, Article 8 mentions that accounting units are obliged to keep accounts correctly, completely, conclusively, comprehensively, transparently and in such a way that would guarantee the durability of entries. In the following paragraphs, the individual qualities are analysed further. All the three mentioned accounting systems are, as a matter of fact, also based on the principle of caution (even though the extent of sticking to this principle varies), the principle of periodicity of detecting the financial position and performance and on the principle of setting up an accounting unit and the requirement of comparability also stresses the principle of consistency or constancy of the used accounting methods.

Uniformity in the accounting units also dominates the most frequently used valuation base, i.e. the valuation in terms of historic costs. On the other hand, the differences between IAS/IFRS, US GAAP and the Czech Republic accounting legislation is obvious in terms of giving higher priority to the content than the legal form. The Conceptual framework of IAS/IFRS explains that for the valuation and presentation it is necessary to consider the content and economic reality and not the legal form. The Czech Republic legislation on the other hand is based on respecting the legal form of the individual transactions which is also reflected in the financial reporting. This fact is stated in Article 7, paragraph 2: the projection is virtuous if the accounting methods are used in such a way that leads to authenticity, the chosen method should not disguise the real state.

Defining Elements of the Accounting Statements

The IAS/IFRS accounting system (in the Conceptual framework) as well as the US GAAP (in the SFAC 3 concept) contains definitions of the basic elements forming statements of the financial accounting (asset, liability, owned capital, expense, revenue). These elements must be always present in the financial statement. It is the so-called determination of the minimum content of a financial statement resulting from the fact there are no strictly set accounting statements with firmly stated figures. Both the widely recognized accounting systems stress the fact that the statements of financial accounting contain only figures that are significant and relevant for the decisions of the individual users. Other figures may be included in a commentary or in an explanatory annex to the accounting statements. IAS 1 –The presentation of the financial statement states items from which an accounting unit can choose if it shows them directly in the balance or in the profit and loss statement or in a commentary. The financial accounting outputs based on the Czech Republic legislation can be seen as the opposite of such an approach. The Ministry of Finance issues binding forms of the accounting statements where the accounting unit fills in all columns applicable. Neither the Accounting Act in the Czech Republic nor the related regulations contain definitions of the basic elements, which means there are no instructions how to identify them. The Czech accounting standards should contribute to the remedy of the existing situation.

The accounting norms in the Czech Republic only identify one group of costs and revenues and do not differentiate them any further as far as expenses and losses or proceeds and contributions are concerned. It is obvious that there are big differences between the basic elements of the financial statements of the individual accounting systems (Czech Financial and Accounting Magazine, 2007).

Comparing the Aims of the Financial Reporting and Defining its Users

The aim of a financial statement pursuant to the Czech legislation is stated in the Accounting Act and its purpose is providing information on the state and movement of property and other assets, obligations and other liabilities about the economic results and the financial situation of the accounting unit. This information is used especially by the state authorities (financial offices, statistical offices etc.) for which the financial statement plays a role of an inspection mediator. This type of information is also used by investors (even the prospective ones), loan capital providers (banks, leasing companies, employees, suppliers, customers, competitors etc.)

The aim of the financial statement in the IAS/IFRS accounting system is defined similarly (to inform about the financial position, company performance and changes in the financial position) but primarily the loan capital providers (investors, creditors) use the information. Prioritizing this group of user's results from the fact that the reports carried out pursuant to IAS/IIFRS are mainly meant for the purposes of stock exchanges on which companies trade their securities. In general, these financial reports are used by all subjects that need them to implement their economic decisions (i.e. all parties dependent on the accounting unit) – not only investors but also the state authorities, suppliers, customers etc. In the US GAAP accounting, system the aim is defined as providing information useful for the current and potential investors and creditors for implementing their investment and credit decisions when predicting the future economic development of a company. The users of such accounting statements can be identified with the users of the IAS/IFRS accounting system.

The Differences in Understanding the Term “A True View Of The Reality”

In IAS/IFRS and in US GAAP “a true and fair view” is a basic qualitative characteristic that should be a key aspect for any accounting information. This term is not defined precisely in the Conceptual framework but it is such a set-up of a financial statement where the individual transactions are presented from the point of view of prioritizing their economic substance over the legal form. On the contrary, “a true and fair view of the subject of accounting and the financial situation of an accounting unit” is requested pursuant to the Czech Republic Accounting Act Article 7, paragraph 1. Even though these two terms sound similarly, what Article 7 means by a true view is a presentation of information in accordance with the accounting methods pursuant to this Act. The picture is also true if the accounting methods are used in such a way in which a high level of fidelity is reached. A true picture is understood as strict compliance with the accounting legislation.

As we have mentioned in the introductory chapter of this monograph, accounting pursuant to the Czech Republic legislation serves as a base for calculation of taxes and that is why financial reporting is largely influenced by taxes. For this purpose a true picture of the reality is not demanded by the Accounting Act as this accounting system (e.g. in the field of leasing, in the field of the growth of the actual prices of the long-term assets etc.) cannot picture the reality truly enough. A true view is then replaced by a virtuous view which requires the financial reporting to be based on the relevant methods so that a basis for income tax could be (after some adjustments) determined.

This aspect leads to a definition of one of the biggest differences of the accounting system pursuant to the legislation of the Czech Republic from the other widely recognized accounting systems (IAS/IFRS and US GAAP), which boast of the fact that from their very beginning they have been pure accounting systems not distorted by any tax viewpoints, and any accounting unit is to distinguish between the sphere of financial accounting and tax accounting. On the other hand, in the Czech Republic the economic result from financial accounting may be interpreted as a tax basis (after adjustments) stated by the Act on Income Tax valid for the given period of time. In all the comparative analyses of the above stated accounting systems this fact poses a risk factor.

Comparing the Valuation Bases

In the field of the valuation bases for the assets and liabilities there are no significant differences between IAS/IFRS and US GAAP. When comparing the valuation bases in IAS/IFRS with the bases stated in the Czech legislation it is possible to identify the following basic differences:

- The accounting legislation of the Czech Republic does not define the use of the current value of the future cash flow for determining such items whose value changes in time. An example of this is valuation of the long-term liabilities and long-term obligations which are to be valued in an exchangeable value.
- In the accounting legislation of the Czech Republic the possibility of using the fair value is limited. Using this valuation base in the CR as well as in IAS/IFRS or US GAAP is only allowed with financial assets. Pursuant to Article 27 of the Accounting Act securities can be valued by fair value (with the exception of the securities kept until they are due etc.), and the same applies to derivatives, the part of assets and liabilities secured by derivatives etc. and this revaluation is projected into accounting by means of the results (into costs or revenues). Moreover IAS/IFRS as well as US GAAP enable to use fair value for revaluation of land, buildings, equipment and intangibles and the increase in the fair value is accounted into the owned capital (into the fund from revaluation) and decreasing is (under certain conditions) accounted by means of the results. It is the so called revaluation model (see independent chapters).

Within the valuation bases some congruent elements can also be identified:

- The basic and the most frequent valuation basis is formed by historical cost. i.e. within the internal acquisition of an asset component it is the expended working cost and within the external acquisition of an asset component it is the cost price. Within the initial valuation (with some exceptions as for example agricultural production) a transparent valuation by means of historical cost is requested. Moreover the world accounting systems are different in relation to the possibility of revaluation of most of the balance sheet items because they are aware of a big disadvantage of historical prices which consists in conserving the previous market conditions.
- The valuation of inventories based on the LCM method (the lower of two values) or the reduction of the value of inventories in the situation when the market value of the item of inventories falls below its cost of acquisition. In the accounting norms of CR this method is not defined, but Article 26 of the Accounting Act states clearly that if stocktaking shows that the sale price of inventories reduced by the sale costs is lower than the price used for their valuation in accounting, the inventories are to be valued by the lower price in the financial statement, which is to be done by means of adjustments for the inventories.

Comparing Parts of the Financial Statement

The financial statement pursuant to IAS/IFRS contains a balance sheet, profit and loss statement, cash flow statement, statement of changes in the owned capital (either of all changes or only some selected changes) and a commentary to the financial statement with a description of all the important facts explaining the content of the financial statement. The individual standards have a wide set of requirements which must be met by each accounting unit falling into the relevant standard.

The Czech accounting legislation defines the duty of the accounting units to carry out a balance sheet and a profit and loss statement. Furthermore the cash flow statement and the statement of changes in the owned capital may be carried out voluntarily. The latter is usually not an independent statement but only a

part of an enclosure to the financial statement. Both the voluntary accounting statements are carried out by the accounting units which are obliged to have their financial statement verified by an auditor. The enclosure to the financial statement plays similar functions as the commentary in the case of IAS/IFRS, even though the extent of the enclosure is visibly shorter (because of a limited selection of methods).

The financial statement pursuant to US GAAP has the following basic statements of the financial accounting: balance sheet, profit and loss statement and statement of the aggregate economic result, cash flow statement (which came into being just within this accounting system), statement of changes in the owned capital, statement of cumulated earnings and enclosure to the financial statement.

The Formal Aspect of Keeping Accounts

The accounting pursuant to the CR legislation is governed in the opposite direction than the above world accounting systems. The accounting legislation in the CR primarily determines methods, defines correlations and presents the chart of accounts on whose basis the individual transactions are to be accounted. Complying with the methods and procedures leads to the correct financial statement and the correct financial reporting. Until recently the legislation has contained the chart of accounts obligatory for all the defined accounting units in its full version and there were also accounting procedures for people in business which contained some prescribed correlations to be used with a specific transaction. Even though much have been changed (simplified) within the amendments of the legislation – e.g. accounting principles for business people were cancelled, the chart of account was limited only to the obligation to use names and numbers within classes and groups (limitation to target chart of accounts) etc., the direction of changes in accounting is the same for the time being; it begins with accounting the individual transactions which will then influence the form of the accounting statements and these are themselves largely unified.

The accounting systems IAS/IFRS and US GAAP are opposite in this regard. In their provisions they describe what the individual statements should contain so that the aims and qualitative characteristics for carrying out the financial statements could be achieved. They provide some general guidelines concerning the extent of the balance sheet and the profit and loss statement.

Only in some places the authors try to simplify the work with the practical application of standards and they recommend some procedures or methods that can lead to the correct reporting. By no means do they determine any specific procedures and contain charts of accounts (not even the target ones). The names of accounts that a given accounting unit will use for accounting the individual transactions are at discretion of each subject.

Pursuant to Article 4, paragraph 12, the accounting units are obliged to keep accounts in the monetary units of the Czech currency. In case the receivables and liabilities, shares, securities and derivatives are expressed in a foreign currency, with the exception of gold, the accounting units are obliged to use the foreign currency – but the value has to be expressed in Czk too. In case of IAS/IFRS the functional currency is distinguished from the currency of the reporting and procedures to convert currencies are stated. With the US GAAP accounting system the US dollar is the reporting currency.

Distinguishing the Level of the Reported Facts for Companies of Different Sizes

The US GAAP accounting system distinguishes between two groups of businesses. A full version of the system is meant for large businesses and a “light version” or simplified version for small and medium sized enterprises. The purpose for this division is not to strain a small business with too many publishing duties. On the other hand this procedure guarantees a unified “vision” of the financial reporting of businesses of different size.

Within the IAS/IFRS accounting system a full version of these standards has been valid for a long time but it is not suitable for small and medium sized enterprises. The board of IASB has been aware of this problem and that is why it has been working on a project of a special standard for small and medium sized enterprises, the so called IFRS for SMEs. In the year 2007 any problems should be discussed and settled and this standard should come in force at the beginning of 2008. By this act the IAS/IFRS accounting system will be divided into two levels too – one level for large businesses listed on the world markets and the other level for small and medium sized enterprises.

The financial accounting in the Czech Republic has also two versions. All the joint-stock companies and the accounting units which are obliged to have their financial statement verified by auditor must carry out the financial statement in full. Other companies may carry out the financial statement in a simplified extent unless stated otherwise by the Accounting Act (Article 18, paragraph 3). The accounting units which keep accounts in a simplified extent can combine the accounting in the journal with the accounting in the general ledger, they state only the accounting groups in the chart of accounts, they do not need to create accruals and do adjustments, and they carry out the statements in a limited extent only.

The First Application of the Accounting Systems

IAS/IFRS contain an independent standard determined for the accounting units when initially carrying out the accounting statement pursuant to this methodology - IFRS 1. The first adoption of the International Standards of the financial reporting serves as instructions how to transfer the financial reporting presented in accordance with the national legislations to the financial reporting based on the IAS/IFRS principles. Apart from applying IFRS 1 the accounting unit must, from the date of the transfer to the IAS/IFRS, also respect other relevant accounting standards.

The first step in the transfer from the accounting pursuant the CR legislation to the IAS/IFRS system is comparing the individual items of the statements with the definitions of the Conceptual framework. As a consequence of this, some items in the financial accounting would surely have to be discarded or reclassified. The reserves for the long-term property repairs created pursuant to the CR legislation in force call for discarding. Other items to be discarded would be those which are no more compatible with the definition of the Conceptual framework – e.g. property that ceased to be economically profitable and there is no hope for the trend to be reversed, or the receivables that the company is not in full control of, incorporation expenses, research etc.

Reclassification applies e.g. to some important spare parts of a long-term nature which would be transferred from inventories to the long-term property, then there would be a transfer of the social fund from the item of the owned capital to the external resources (to liabilities, e.g. employees). Last but not least an accounting unit would have to cope with the items of accrual and deferral which, pursuant to IAS/IFRS system, are understood as items of (short-term/long-term) receivables or liabilities. In the next step it is necessary to include new items into the statements which have not been part of the reporting pursuant to the Czech legislation or only to a limited extent. An example of this is the property rented by means of financial leasing, the extension of the fund created by revaluation or replenishing the commentary by conditional assets or conditional liabilities.

Apart from the revaluation of the individual items of the statements, accounting methodologies using the IAS/IFRS system should be incorporated, mainly in the field of valuation. The valuation bases should be used as defined by the Conceptual framework or the individual standards IAS/IFRS and this should be followed by using the revaluation models. Long-term assets would be affected by the most dramatic changes and like that they could be revaluated to the fair value. A new valuation of the individual items would then lead to adjustments of the depreciations plans and to the correction of the depreciation

reserves. Within the write-offs it is also necessary to start applying the so called component approach, i.e. to write off the individual components of the property separately according to their estimated life cycle.

The changes would, however, also affect the expenses and revenue items. The reclassification of the shifting stock from the company own activity and from the revenue account to the expense compensation is a typical change. As IAS/AFRS puts much more emphasis on publishing information in the commentary to the financial statement, the accounting units must extend the presented figures within the duties given by the individual standards.

When applying the IAS/IFRS for the first time it is necessary to realize that IFRS 1 requires also publishing of the comparative data for the preceding accounting period, which means transferring the accounting statements pursuant to the IAS/IFRS methodology even for this preceding accounting period. Apart from these comparative statements the first financial statement should also contain the figures of these items presented according to the preceding amendment (in this case pursuant to the CR legislation), while the comparison should also be made out in an independent table and the significant differences should be fully explained and commented. Out of the Czech accounting regulations there is only one provision of the law that contains the transfer to the financial accounting, namely the executive regulation to the Accounting Act. This regulation contains Article 61 b describing the method of transfer from the tax recording to the “double-entry” accounting.

Pursuant to this Article the physical entities that have become an accounting unit are to find out in the files of the tax records the status of the individual files of the assets and liabilities, or possibly the reserves, valuation differences in the onerously acquired assets and with the tangible assets the so called non-applied part of expenditures as of the day preceding the first day of the accounting period in which the duty to keep accounts came into being. The individual files of assets and liabilities must be valued, the existing write-offs are to be presented with the depreciated assets, and the value of those accounts is expressed by the total of the applied write-offs pursuant to the law of income tax.

The state of the individual files of the assets and liabilities is to be transferred as of the first day of the accounting period as the opening balances of the relevant balance sheet accounts, the non-applied part of the financial lease expenditures with the follow up purchase of the rented tangible assets is to be stated as the opening balance of the account meant to capture the expenses of the coming periods. The difference between the total of the opening balances of the newly opened accounts of the assets and the total of the newly opened accounts of the liabilities is to be stated on the account in the account group 49 (account group – Individual entrepreneur) depending on the nature of the found difference as credit or debit balance.

RESULTS

Comparing IAS/IFRS with the Accounting System Pursuant to the CR Legislation

The survey of the most important differences between the above accounting systems is illustrated by the Tables 1 and 2.

Table 1: The Differences between IAS/IFRS and the System Pursuant to the CR Legislation Pertaining to the Balance Sheet

Item of Comparison	The Czech Accounting Legislation	Financial Reporting Pursuant to IAS/IFRS
Format of balance sheet layout	The balance sheet is based on the balance equation: assets = liabilities. There is one sample of the balance sheet. The formal layout of the statement is adjusted legislatively and it can be carried out either in a full or in a simplified extent. The owned capital is not considered a residual part of the assets after deducting the liabilities.	The balance sheet is based on the balance sheet equation: assets = liabilities + residual part forming the owned capital. The formal layout of the balance sheet is not determined in a directive manner, the standards only state an illustrative example and they determine the minimum extent of items that the accounting unit must include.
The enlistment of the item into the company assets	The legislation contains the requirement for the period of usability longer than 1 year and the accounting unit is to introduce the separate financial limits for the long-term tangible assets and the long-term intangible assets, from what date the item is to be considered long-term. The original limits for the long-term tangible assets in the amount of 40 thousand Czk and for the long-term intangible assets in the amount of 60 thousand Czk are no more contained in the Accounting Act, they are, however, commonly used in practice, mainly thanks to the existence of the identical limits for the tax purposes (see law of income tax).	The item of assets must comply unconditionally with the definition stated by the Conceptual framework. The determination of the financial limit for enlisting in the long-term assets is at the discretion of the accounting unit.
Procedure for the depreciation of the long-term assets	The accounting unit applies the accounting write-offs that are to reflect the economic contribution of an asset, either based on time or performance. The write-offs are rounded to whole Czk up. The whole asset file is depreciated for its estimated life cycle.	The accounting write-offs copy the economic contribution of the asset, also either based on time or performance. The accounting unit can use the SYD or DDB method. If the long-term asset consists of more parts of different life cycles, the component approach is applied, i.e. each part is depreciated individually for its estimated life cycle.
Differences in the items of assets and liabilities	The individual items are listed in the official balance sheet form issued by Ministry of Finance of the Czech Republic and briefly characterized in the executive regulation to the Accounting Act.	In the balance sheet there must not be the items which do not comply with the definitions of the Conceptual framework. It is mainly research, incorporation expenses, training, advertising, promotion, common risk reserves and the future operating losses, unsatisfactorily secure liabilities etc. On the contrary, some new items may be listed in the balance sheet, e.g. reserves pursuant to IAS 37 which the company had not created by then, all the financial derivatives, the assets and liabilities from the financial leasing pursuant to IAS 17.
The problems of the conditional assets and liabilities	The legislation neither defines, nor amends the problems of the conditional assets and liabilities, which relates to a wider problem of the missing definitions of the basic elements of the statements.	The IAS/IFRS system strictly requires the separation of the assets and liabilities that are not in full control of the company. These conditional assets or liabilities are defined precisely and they cannot be listed in the balance sheet but must be described in the commentary.

Valuation of the liabilities and obligations	The receivables and liabilities of a short-term character are valued in the same way – in the amount of the nominal value of the transaction.	The short-term receivables and liabilities are valued by nominal value, but under the influence of the change of the nominal value of money in the long-term horizon it is, pursuant to IAS/IFRS, necessary to value the receivables and liabilities of the long-term character by the current value of the future cash flow or outflow when using the current market interest rate.
The differences in the owned capital	There is no possibility of revaluation to the fair value with the long-term assets by means of the revaluation fund. On the other hand there is a possibility of creating profit funds, like a social fund for the purpose of funding a large scale of social benefits. The fund of converting the financial statements to another currency is not defined.	When revaluating the long-term assets to the fair value a revaluation model based on the revaluation fund may be used. IAS/IFRS does not allow to create profit funds, like a social fund or a bonus fund to be used as employees' benefits.
Stocks and significant spare parts	Stocks are valued in historic prices. As of the day of the balance sheet Article 26 of the Accounting Act may be applied, the LIFO method is prohibited, the stocks contain all the spare parts. When consuming the significant spare parts of a long-term character the cost of maintenance is accounted. These are not depreciated independently in the long-term.	Stocks cannot be valued by the fair value (the fair value may be the initial valuation basis in case of, for example, agricultural production). As of the balance sheet day the LCM method is applied, the LIFO method of stock liquidation is also prohibited. The spare parts of a long-term character are not part of stocks, they are depreciated on the long-term basis.
Reporting financial lease by the lessee	The subject of financial lease is reported by the lessor in his assets and the same person depreciates this item. The lessee only accounts the individual lease installments – as expenses on one side and as reduction of obligations on the other side.	The subject of the financial lease is reported by the lessee in his assets and the same person depreciates this item. The sum of the lease installments is divided into the installment of the lease subject and into the rent under lease. The lessor only registers the receivable towards the lessee.
Creation and accounting of reserves	At the moment of drawing reserves its total value is cancelled and then only the actual costs are accounted, for which the reserve had been created. The creation and drawing is accounted through the cost accounts. They cannot be activated. Within the reserves created pursuant to special legal regulations even the reserves for the long-term assets repairs are created.	Before a reserve is created it is necessary to carry out a "reserve test". When drawing the reserve its value is adjusted according to the actual costs for which the reserve had been created. When creating the reserve it is possible to activate it as part of the cost value. The reserve will then appear in the costs in the form of write-offs.

This table shows the differences between accounting systems in accordance to balance sheet.

The process of harmonizing the Czech accounting legislation with the International standards of financial reporting IAS/IFRS was started in the past by means of several updates of the CR Accounting Act and related legal regulations of the executive regulation to the Accounting Act and the Czech accounting standards. The above comparison of both the accounting systems showed that the initiated harmonization process is far from finished and there are still some basic conceptual differences between both the accounting systems.

Judging from the tendencies of the creators of the CR legislation and from the effort of the Board of IASB it is probable to say that this process will continue further not only within the convergency of the Czech accounting regulations with IAS/IFRS but also within the extension of the duties to report pursuant to IAS/IFRS not only in the case of large companies listing their securities on the public markets but the extension of the reporting will also apply to small and medium sized enterprises. It is also possible to predict a strain by the European Union put on the general transfer to IAS/IFRS. All these harmonization trends could lead to the complete integration of the IAS/IFRS system into the Czech accounting regulations to be used widely by various business subjects regardless of their size.

Table 2: The Differences between IAS/IFRS and the System Pursuant to the CR Legislation Pertaining to the Profit And Loss Statement

<i>Item of comparison</i>	<i>The Czech accounting legislation</i>	<i>Financial reporting pursuant to IAS/IFRS</i>
The form of the layout of the profit and loss statement	The profit and loss statement was possible to carry out only within the classification by elements of cost. With foreign holding companies penetrating into the Czech Republic it was allowed to draw up the statement even in the cost by product classification. But most accounting units still use the classification by elements of cost. The formal layout of the statement is determined in a directive manner.	The profit and loss statement is possible to draw up both in the classification by elements of cost and by product classification. The choice is up to the given accounting unit which is to choose such a classification that best reflects the elements of the company performance. In case of the classification by product an additional publication of the information about some cost types is required.
Emphasis on the reported figures	Accounting is tax oriented, that is why the reporting is primarily focused on reporting the costs and the accounting unit distinguishes already in the primary stage of reporting between the tax acceptable and tax non-acceptable costs. The above results from the fact that the economic result serves as a base for the assessment on profits.	High emphasis is put on reporting the earnings so that the company economic situation cannot be creatively improved with the aim to attract a higher number of prospective investors on the basis of misleading information. This results from the fact that accounting pursuant to IAS/IFRS is not a basis for tax calculation but its main task is to inform the existing and prospective investors.
The principles of reporting the revenues	The definition of revenue is not limited by any directive. The revenues are defined together with expenses by the Czech accounting standards No. 019 (Expenses and revenues) and further by the executive regulation to the Accounting Act. All the accounts in the sixth accounting class are labeled by the term revenues. There is no division between revenues and gains.	The Conceptual framework defines revenues. The revenues are further defined individually by the independent standard IAS 18 – Revenues. This standard defines only the revenues meant as sales, charges, rates, dividends and royalties.
The principles of reporting the expenses	The definition of expenses is not limited by any directive either. Reporting expenses is defined in detail from the tax point of view.	The Conceptual framework defines expenses. The problems of expenses are not dealt with by any independent standard, even though some standards refer to the presentation of expenses.
Reporting the variations in stocks of the company own activity and the activation	The accounts of variations in stocks of the company own activity (i.e. variation of product status, work in process) are understood as revenues and in the profit and loss statement these are understood as typical revenues of the financial accounting.	The item of variations in stocks of the company own activity and the activation is considered a correction of expenses in the profit and loss statement, thus this is by no means a revenue account.
The extraordinary field of the profit and loss statement	The extraordinary field is limited within the process of harmonization with the world accounting systems, but it still exists. Disaster losses, expenses or revenues caused by the change of methods are a good example of an extraordinary field.	The extraordinary field of the profit and loss statement was reduced in the past only to the expenses or revenues connected with disaster losses and expropriation. Since 1 May 2005 the extraordinary field was cancelled altogether (the same applies to US GAAP).
Loan expenses	The Czech accounting legislation does not determine directly the way the loan expenses should be reported. In practice the two above mentioned ways have been identified. If interests are activated, it is possible to do so up to the approval of the long-term tangible assets. The loan expenses incurred after the approval are included in the expenses of the current period.	Accounting loan expenses to the expenses of the current period in which they were incurred is a basic solution. It is also possible to activate the loan expenses which are directly assignable to purchasing, construction or production of an asset as part of the cost price.

This table shows the differences between accounting systems in accordance profit and loss statement.

The Accounting of Small and Medium Sized Enterprises

The figures coming from the financial accounting are needed for investors who decide where to place their capital effectively. The fact that the accounting figures contained in the financial statements of various countries are not mutually comparable poses a serious problem which makes it difficult for investors to take economic decisions.

The mutual incomparability of the accounting figures is given by the differences between the individual national versions of accounting caused by their different historic and economic development.

Experts have been trying to remove these serious differences between the national accounting systems by means of harmonization of the accounting principles for a number of years. The process of harmonization is implemented by means of issuing the so called standards or regulations which are not binding, they are meant to be recommendations or inspirations for the individual national versions. These standards become obligatory for large businesses whose shares are listed on the international stock exchanges. The intention of the European Commission to gradually transfer to the International accounting standards will not concern only the listed businesses in the future because the Commission of the European Union recommends all its member and associated states to incorporate in their national accounting systems the solutions that are as much compatible with IAS/IFRS as possible.

For this reason the field of accounting in the Czech Republic has been regulated since the year 2004 not only by the Accounting Act and the updates reflecting the international development and an executive regulation to the Accounting Act but also by the Czech accounting standards which are the means for the implementation of IAS/IFRS. So that we might deal with the various requirements for the financial reporting of businesses in the Czech Republic it is necessary to divide these businesses at least roughly (e.g. according to their size) and further analyze the users of the accounting figures contained in the financial statements of these companies. The following classification is often used as the basic classification of businesses in relation to accounting:

a) Large enterprises

- trading their securities on the registered markets,
- they have public responsibility (they manage assets of a large extent for third parties),
- they draw up the financial statement for external users (stock exchange institutions, investors and other users),

b) Small and medium sized enterprises

- they do not have public responsibility (they do not trade on the public markets, they do not manage assets of a large extent to third parties),
- on the other hand they draw up the financial statement for external users (e.g. banks, leasing companies, state institutions and such like),

c) Micro businesses

- they are excluded from the above two groups,
- They draw up the financial statement for the owners who are managers at the same time (these companies do not draw up the financial statement for the needs of external users but primarily for their own needs).

The above classification may appear as imprecise but the creators of the International standards of the financial reporting (IFRS) introduce this classification deliberately because a more detailed classification could be determined by the individual national legislations in such a way that it might correspond the economic conditions of the given state.

After specifying the groups of businesses it is possible to define requirements for the financial reporting of businesses resulting from the “demand” for the accounting information of the users of the financial statements.

Pursuant to the Accounting Act: *“The accounting units that are business companies and that are issuers of commercial instruments registered on the regulated securities market in the member states of the European Union, use the International Accounting Standards modified by the law of the European Community for accounting and drawing up the financial statements.”*

As is obvious from the above, large businesses, listed on the stock exchange, must base their accounting on the full version of IAS/IFRS. The quoted paragraph of the Accounting Act emphasizes the requirement of using the IAS/IFRS accounting system not only for drawing up the financial statement but also for accounting by which the Ministry of Finance of the Czech Republic prevents companies from the mere converting of the financial statements drawn up on the basis of the Czech accounting regulations to the statements pursuant to IAS/IFRS. Large businesses are to register their transactions in accordance with IAS/IFRS primarily on their accounts. The reason for the wording of Article 19, paragraph 9 is the opinion that the conversion of the financial statement based on the Czech accounting legislation to the accounting information pursuant to IAS/IFRS cannot be executed unless already the primary reports are kept in accordance with IAS/IFRS.

The problem connected with the Czech Republic large businesses reporting pursuant to IAS/IFRS does not consist in applying the regulations of IAS/IFRS themselves, even though (in comparison with the accounting system of CR) it is the financial reporting based on different principles, but it is a problem connected with the implementation of taxes based on IAS/IFRS.

The tax basis for the needs of the income tax is still based on the economic results calculated in accounting pursuant to the CR legislation (pursuant to the Accounting Act, the executive regulation to the Accounting Act and also the Czech accounting standards). The companies listed on the stock exchange then draw up the financial statement pursuant to IAS/IFRS and submit it to the financial office (and the stock exchange) but their income tax return must begin by the result calculated in accordance with the Czech accounting regulation (as if the companies did not account pursuant IAS/IFRS). This solution appears useless and ineffective and that is why every effort has been taken to separate accounting from the tax aspects.

The small and medium sized enterprises (SME) report their accounting figures pursuant to their national accounting legislations but the strain on the process of harmonization of the accounting information (mainly from the financial support providers and large companies, who see a lot of potential in SME) led to the creation of a standardized solution corresponding to the size and the purpose of these businesses. The creators of the only standard meant for the small and medium sized enterprises (labeled as IFRS for SMEs) have already published a proposal of a standard to be commented by the public, as the final version is to be adopted in the second half of 2007 and the above IFRS for SMEs is to come in effect in 2008.

The above standard for SME is to be convergent with the full wording of IAS/IFRS (it is to be based on the same “vision of financial reporting”) even though it should not burden these small businesses with too many publishing duties. As is obvious from the proposal, the standard for SMEs is not to be broken down to the level of detailed directives because according to Kovanicová (2006) this is to be the primary responsibility of national jurisdictions. The last category in the given classification of businesses (the so called micro businesses) is not the subject of harmonization and it is up to the national legislations what form of the reported information they will choose for these businesses – whether the accounting based on the accrual basis or just the tax accounts.

As is obvious from the above facts, the development in accounting is likely to lead to the extension of the financial reporting to small and medium sized enterprises because it is just these businesses that play an

important role in the development of every national economy, and they are vital in creating new job opportunities and they also support the social stability and economic development.

With progressing harmonization some important changes in the accounting legislation of the Czech Republic will have to be implemented. From the outlined development it is possible to assume that the role of the Accounting Act will be “only” the determination pursuant to which accounting system the given unit (the given business) is to report its financial figures. The so called listed enterprises will have to do so pursuant to the full version of IAS/IFRS, the small and medium enterprises pursuant to a special standard for SME (or pursuant to the light version of IAS/IFRS for SME) and this Act will also have to take decision about the micro businesses. The executive regulation to the Accounting Act will probably serve to help finish the preparation of the accounting solutions for SME or probably the micro businesses.

The law of income tax will also have to be changed in such a way that the methodology of the calculation of this tax will be no more dependent on the economic results based on the accounting regulations of the CR. Even though this concept is still far away, it will bring the necessity to take over or adopt the principles of the International standards of financial reporting whether in full version or in the only standard resulting from these principles.

A GENERAL COMPARISON OF THE WORLD ACCOUNTING PRINCIPLES

When comparing the tools of harmonization it is possible to state that the US GAAP is much more detailed and does not contain so many possibilities of solving the accounting problems as IAS/IFRS and the Balance Directives of the EU. It was because of this variation that the Board for creation of IAS/IFRS was criticized by the creators of US GAAP and in 2004 it also led to the updates of 14 standards.

On the other hand both IAS/IFRS and US GAAP do not confine themselves to certain types of companies while the Balance Directives of the EU do. The experts dealing with the comparison of IAS/IFRS and US GAAP state that there are no significant differences between these systems with the exception of reporting the revenues where the US GAAP defines stricter conditions for reporting them.

In the Balance Directives (as well as in the accounting system of CR) there is no conceptual framework that would define a general “vision” of the accounting system, determine the goal of the financial accounting and define the basic elements of the financial reports. The fact that the directives define a binding form of the outputs of the financial accounting while US GAAP and IAS/IFRS focus on their content remains the main difference.

It is obvious that the global harmonization shows tendency towards a constant growth of the influence of IAS/IFRS both within the national versions and within the capital markets. For the latest information on the IAS/IFRS accounting system see the IASB web pages <http://www.iasb.org>. The development of accounting is a never-ending process because accounting must always respond to the changing economic environs of the individual states and at the same time enable mutual comparability of the reported figures.

CONCLUSION

The international standards of financial reporting repeatedly show the trend of responding to the market demand for the development and quick improvement of the existing standards. That is why the standards are constantly updated and new standards are issued containing the solutions of various problems. The latest updates of IAS were carried out on 17 December 2003, 18 December 2003 and 31 March 2004. In the years 2003 and 2004 there were big changes within which 17 IAS standards were amended (to the existing IFRS 1) and five more IFRS 2 – 6 standards were issued. The subsequent activity of the IASB Board led to the issuance of IFRS 7 and IFRS 8.

The creation of IAS/IFRS as well as teaching and studying IAS/IFRS is not only a one-shot affair but a “long distance run”.

The analysis of the given problems is contained for example in the publications of the below stated authors: Hinke 2006; Krupová-Vašek-Černý, 2005; Kovanicová et al., 2003; Kovanicová, 2006; Kynclová, 2003; Müllerová – Roubíčková, 2004.

BIBLIOGRAPHY

Hinke, J. (2006): Accounting pursuant to IAS/IFRS – Examples and Case Studies. Prague, Alfa Publishing, 2006.

Müllerová, L. – Roubíčková, J. et al. (2004): Accounting II. Prague, Institute of Association of Accountants, 2004.

IASB (2007): International Financial Reporting Standards 2007 including International Accounting Standards and Interpretation as of 1 January 2007. London, IASB, 2007.

IASB (2005): International Financial Reporting Standards (IFRS) 2007 including International Accounting Standards and Interpretation as of 1 January 2005. Prague, IASB, 2005.

Kovanicová, D. (2006): International Financial Reporting Standard of Small and Medium Sized Enterprises is almost born. Will we be ready? In: Zelenková, M. (ed.): Changes in Accounting and Tax Legislation in the year 2007 – Pedagogical Conference Proceedings. Prague, Oeconomica, 2006, pp. 55–64.

Kovanicová, D. et al. (2003): Financial Accounting – World Concept. Prague, Polygon, 2003.

Krupová, L. – Vašek, L. – Černý, M. (2005): IAS/IFRS – Principles, Methodology, Interpretations. Prague, VOX, 2005.

[Kynclová, D. (2003): Accounting pursuant to International Accounting Standards. Prague, Credit, 2003.

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DATA MINING AND CRISIS FORECASTING OPPORTUNITIES

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ABSTRACT

In this extended abstract we visualize some results of global markets analysis done in the spirit of [1-4]. We present the shortlist of the Data-Mining ideas collected in the form of Notes concerning the forecasting opportunities.

INTRODUCTION

A lot of portfolio and investments decisions at the financial markets are making after the short visual analysis of the trading charts provided by some information vendor. Two of such popular visual methods are known as the “Elliott Waves Theory” and so-called “Support-Resistance lines” [5]. The elementary logical error in the mainstream for these methods is as follows.

THE ELLIOTT-WAVES AND SUPPORT-RESISTANCE MYTHS- NOTE 1

If the “Waves Theory” were correct then we have to be able to apply it as the correct theory independent from the trading assets for arbitrary two assets at the market and, in particular, for both the direct and the inverse one, for example, to the USDEUR and EURUSD simultaneously.

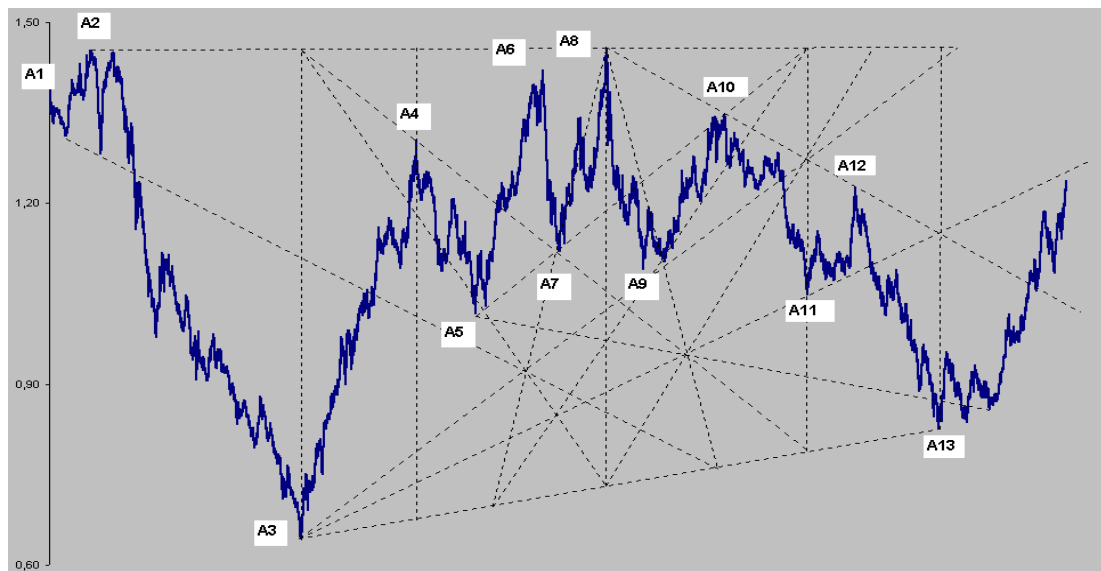
Let $[P0;P1]$ be the random trading range of the USDEUR. Let $PF=P0+Fibo*|P0-P1|$ be the Fibonacci target point within the range given. It means that we get the price of $1/PF$ as Fibonacci target point for EURUSD trading range of $[1/P1;1/P0]$. Simple arithmetic gives that multiplier $P1/P0$ has to be the Fibonacci one for arbitrary $P0, P1$ in the equation $1/PF=1/P1+Fibo*|1/P1-1/P0|$ and we have immediately a contradiction with arbitrariness of $P0$ and $P1$.

Another words, we have to state the Theory is valid iff $P0/P1$ ratio is the Fibonacci one only. Analogously, it is obvious that for the direct, X , and the inverse, $1/X$, assets we can not obtain so-called “support” for X and the “resistance” for $1/X$ line pair simultaneously. The direct combinatorial Data Mining done to test the waves idea using the details of the EURUSD (plus former ECU) 30-year’s dynamics outlined the Fibonacci problem in the time domain but not in the prices one (Figure 1 and 2) as well as in the Efficiency value hypothesis ([1] and Table.1 in Appendix).

Figure 1. Time domain and Fibonacci-like reverse points for EURUSD for the 1972-2002 period.

A2=03.01.1980	
A3=25.02.1985	$(A3-A2)/(A9-A2)=0,379262$
A4=04.01.1988	$(A6-A3)/(A13-A3)=0,380528$
A5=15.06.1989	$(A4-A3)/(A8-A3)=0,378997$
A6=11.02.1991	$(A8-A7)/(A6-A4)=0,382716$
A7=02.07.1991	$(A4-A2)/(A13-A2)=0,384555$
A8=08.09.1992	$(A5-A3)/(A13-A5)=0,378554$
A9=30.07.1993	$(A6-A5)/(A5-A3)=0,385742$
A10=28.07.1995	$(A10-A9)/(A12-A9)=0,383966$
A11=06.08.1997	$(A11-A10)/(A13-A10)=0,386221$
A12=08.10.1998	$(A8-A6)/(A9-A5)=0,381806$
A13=25.10.2000	

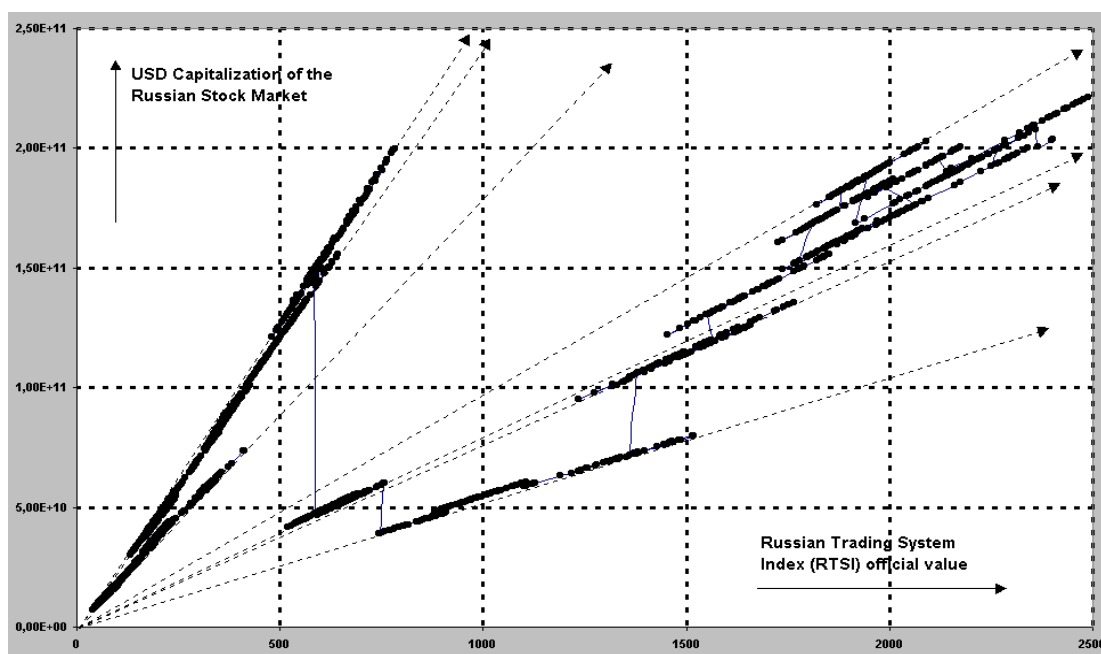
Figure 2: Illustration



THE CAPITALIZATION FORECASTING METHOD-NOTE 2

The method we recommend for at-the-moment forecasting uses the uncertainty of the Index mathematics (Figure.3). We provide the combinatorial OLAP view at the problem and the hypothesis that the market capitalization value has to be repeated at least once more with new distribution of the stocks listed.

Figure 3. Forecasting Uses the Uncertainty of the Index Mathematics



COMBINATORICS AND THE ATTRACTORS-NOTE 3

The combinatorial Data Mining and OLAP effect of testing the “Support-Resistance lines” mentioned above for EURUSD shows the easy way to visualize the “invisible hand of the market” in the form of the attractor set. In the paper we present the results of the likelihood method applied for all over the global currency pairs. For example, it is easy to see that our EURUSD long-term target forecast of 2.3996 done in 2004 [4] (Figure 4) is valid up to now. Finally, it is of interest to visualize the universality data-mined for the Efficiency distributions at the Russian and Global blue-chips for 1999-2009 period (Figure 5).

Figure 4: EURUSD Long-Term Target Forecast

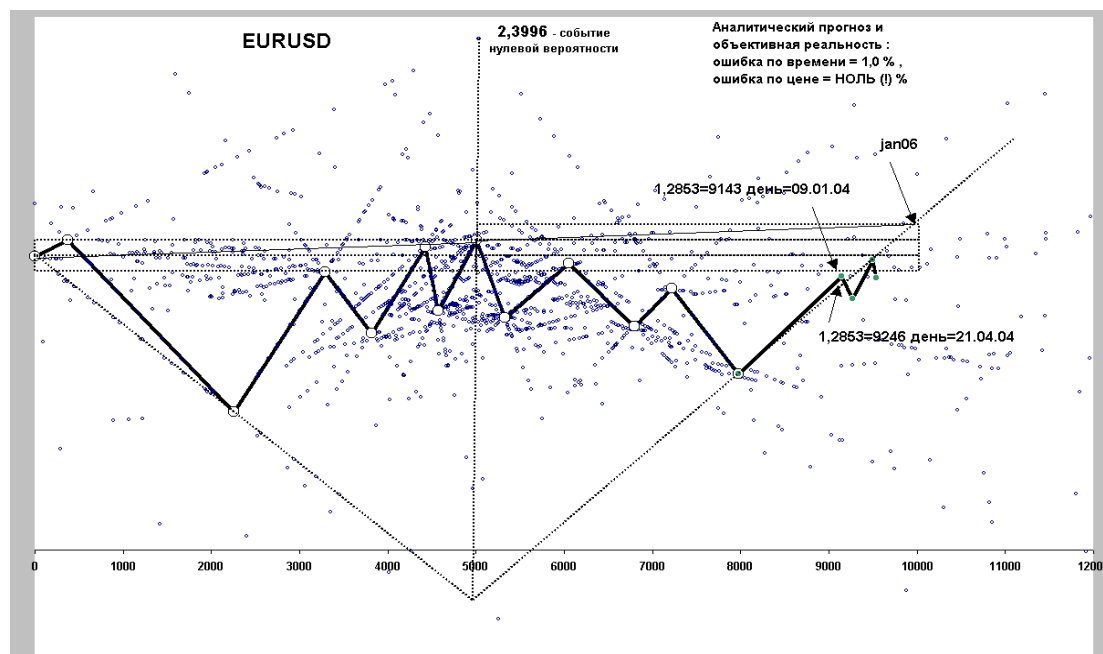
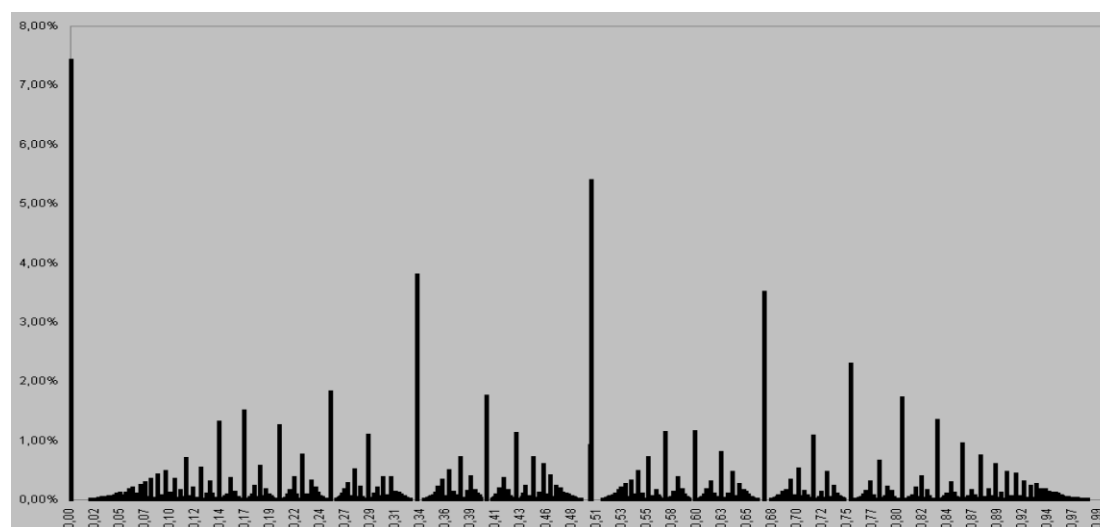


Figure 5: Universality Data-Mined for The Efficiency Distributions The Russian And Global Blue-Chips



APPENDIX

Table 1: The Efficiency E for Daily Transactions on the High Liquid Assets (Global and Russian Markets)

DATE	USDRUB	Gold	Brent	Light	GAZP	Daily mean
20080501		40,3978	40,5595	36,1028		39,0200
20080502		30,4222	43,1941	49,8186		41,1450
20080503	6,2987	48,1548	19,2887	52,4488	44,5358	34,1454
20080505	42,8380	30,3410	48,2204	46,7488	42,2662	42,0829
20080506	48,3308	40,4948	49,4678	47,2268	40,2770	45,1594
20080507	44,7634	33,9958	25,6400	30,3856	49,9389	36,9447
20080508	27,7139	47,6572	20,1851	28,4830	47,9319	34,3942
20080509		33,5186	39,0734	38,0685		36,8868
20080510		45,6512	19,4139	37,1804		34,0818
20080512	43,0939	36,4624	36,3811	35,8482	43,8744	39,1320
20080513	45,9668	36,1945	36,4621	45,6142	34,9122	39,8300
20080514	34,1075	34,4339	30,1630	38,6893	47,8648	37,0517
20080515	5,6077	43,1760	31,2526	48,3342	32,9450	32,2631
20080516	28,9283	43,8759	41,5863	33,6089	36,0707	36,8140
20080517		48,1661	29,5064	49,1183		42,2636
20080519	19,8492	34,3867	43,7187	32,7682	45,4945	35,2435
20080520	35,6667	48,2973	64,8147	41,6998	31,5641	44,4085
20080521	47,8694	37,7704	35,1786	47,7768	24,3233	38,5837
20080522	27,4850	42,1482	36,9693	44,7888	41,7618	38,6306
20080523	35,0542	35,7143	30,6759	35,2837	39,0304	35,1517
20080524		52,6133	10,9660	39,2941		34,2911
20080526	31,2883	33,1509	25,5709	21,3145	34,1471	29,0943
20080527	21,4064	47,2345	48,3681	34,7648	52,6741	40,8896
20080528	46,0972	41,8084	46,0152	51,4185	36,3794	44,3437
20080529	36,5666	45,9293	30,5696	36,4788	45,2961	38,9681
20080530	17,5978	44,7457	49,0342	34,9738	37,5007	36,7704
20080531		8,2710	63,9769	38,6111		36,9530
Total E	32,3265	39,4449	36,8982	39,8833	40,4394	

The mean over all total E is 37,79846 and over all non-bold cells is 37,96225. E -Theorem see in [1].

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BIOGRAPHY

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REFERENCES

[1] Prelov V.V. – The New Financial Theorem: Russian Blue Chips and Global Commodities Evidence. Global Conference on Business and Finance Proceedings, Costa Rica: San Jose, 2 (3), 2008, pp. 39-43.

- [2] Prelov V.V., Makhutov N.A. – Descriptorial Analysis of the Crisis Syndromes.// Safety and Emergencies Problems, 2004, v. 4, p. 11-17 (in Russian).
- [3] Prelov V.V. – On the interesting property of Maxwell-Boltzmann distribution got with data mining. Some cross-disciplinary applications. Proceedings WSC-6, Kazan, 2008.
- [4] Prelov V.V., Makhutov N.A. – Analysis and Forecasting of the Financial Turmoils.// Safety and Emergencies Problems, 2004, v. 2, p. 47-57 (in Russian).
- [5] Murphy J. – Technical Analysis of the Financial Markets. Prentice Hall Press, 1999.

ENTERPRISE DECISION SUPPORT SYSTEMS INTEGRATION: A CORBA BASED APPROACH

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ABSTRACT

Modern enterprises face a highly dynamic environment that requires management to integrate distributed and disparate knowledge for effective decision-making. The advent of the Internet has resulted in a trend toward network centric computing. As a result, more of the computing work is delegated to the computer and the underlying systems. In the mid-twentieth century, departments in an organization were able to function as close-knit units. But with the technological explosion of the Internet, organizations became more high tech, efficient, and more complex as technology hid most day-to-day operations from human users. Late in the twentieth century, organizations were so large and complex that often one department did not know what the other related departments were doing. Currently, organizations operate in a highly dynamic environment, requiring management to respond speedily and flexibly to external changes (Turban, et al, 2007; Morton, 1991). Organizations now must compensate for the loss of visibility of overall organizational functions due to the increased complexity and advancement in technology if they are to remain competitive (Applegate, et al, 2005; Eom, 2002; Eirich, 1993).

For many years, researchers have been working towards the development of shareable and re-usable problem-solving components to support decision-making. Internetworking technologies provide a new means of sharing decision support functionalities and delivering decision support capabilities. Industrial researchers, from the mid-1990s to late 2000s (Vinoski, 2003; Whitehead, 2002; Vinoski, 2002; Hummingbird Whitepaper, 2001; Firestone, 1999; Dabke, 1999; Clarke, Stikeleather & Fingar, 1996; Vinoski, 1997; Firestone, 1997), had consistently been expounding the need to integrate these distributed and disparate knowledge systems as a possible solution to support a quick response mechanism in an organization. The aim is to build flexible component-based systems that are adaptable. But this concept has not been implemented successfully on a large-scale in cross-platform components due to a lack of standards and the enormous costs involved with the implementation. This paper offers a systems concept that can help deliver an integrated system. The Common Object Request Broker Architecture (CORBA) is one such integration approach. This paper describes how this approach can improve the enterprise decision support systems.

References are available from the 1st author.

TWO HEADS ARE BETTER THAN ONE: EVALUATING ALTERNATIVE WEIGHTING SCHEMES FOR FUNDS OF FUNDS

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ABSTRACT

As institutional investors have become more aggressive in deploying their capital, fund managers have become more creative with their product offerings. In this paper, we consider a new institutional fund-of-funds, a “best ideas” portfolio that combines the holdings from two primary funds. At issue is the weighting scheme: should stocks held by both funds be “double counted” in the portfolio, or just treated as a single choice? We find that, contrary to the actual weighting scheme used, investors would probably be better off if stocks shared by the underlying funds were overweighted in the combined portfolio.

INTRODUCTION

As the interest rate environment has become more challenging and investment products have become more sophisticated, institutional portfolio managers have become increasingly aggressive in their search for superior returns. Many have turned to funds of funds, since these embody the conventional institutional wisdom that active risk should be diversified to improve portfolio performance.

In this paper, we consider a new fund-of-funds product that combines two underlying funds: an active fundamental fund (itself composed of several large-cap portfolios) and a quantitative fund (a large-cap enhanced index fund, again composed of several underlying portfolios). The new product is a “best ideas” portfolio, selecting the twenty-five most overweighted and widely held stocks from each of the component funds. The idea is to skim the cream from each fund, combining the results to diversify active risk. The resulting portfolio is expected to generate a superior risk-return profile.

In this paper, we evaluate the proposed weighting scheme for this new fund-of-funds. As proposed, the institutional investor is free to choose the relative weighting for each of the underlying funds (e.g., 50%/50%; 60%/40%). However, the underlying stocks will not be double-counted: any stock occurring in both the fundamental fund and the quantitative fund will be counted only once. Thus, if one stock is held in common, there will be only 49 unique stocks, each equally weighted at $1/49^{\text{th}}$ of the portfolio.

Such a weighting scheme discounts the extra vote of confidence that a shared stock receives. If our managers are skilled, is it not more likely that a stock is “good” if they both choose it? Would we not be better off by weighting such “confirmed” stocks more heavily than those that received only one vote?

In this paper, we consider such an alternative weighting system, and compare it to the proposed scheme. We find that, given simple assumptions, the proposed portfolio is likely to underperform our alternative. Two heads are better than one: stocks chosen by both managers are more likely to perform well, and should be overweighted in the overall portfolio.

WEIGHTING SCHEMES

In this section, we clarify the distinctions between the proposed weighting scheme (the “adjusted” portfolio) and our alternative (the “full” portfolio). We will create portfolios of two funds, fund 1 and fund 2. Assume that there are n_1 and n_2 stocks chosen from each fund, respectively, so that the maximum number of stocks held in each of our portfolios is $(n_1 + n_2) \equiv N$. However, of these N stocks, s are chosen

from both funds. (We will call these the “shared” stocks.) Thus, there are $(N - s)$ different stocks chosen from both funds, but only $(N - 2*s) \equiv u$ “unique” stocks chosen from only one fund. For example, if $n_1 = n_2 = 25$, and one stock is chosen from both funds, then $N = 50$, $s = 1$, and $u = 48$. Twenty-four unique stocks are chosen from each underlying fund. The total number of different stocks held in our portfolio, $(N - s)$, is 49.

We will create two portfolios of these funds, using two different weighting schemes. For the “full” portfolio (F), we will weight each stock in each fund by $[1/N]$. This means that the s stocks held in both funds will be treated as separate assets, and therefore will be weighted twice, giving each a total portfolio weight of $[2/N]$. In the “adjusted” portfolio (A), we will count each stock only once, even if it is held in both funds. We will therefore have $(N-s)$ different stocks, each weighted by $1/(N-s)$. For $0 < s < N$, the adjusted portfolio will overweight the unique stocks and underweight the shared stocks, relative to the full portfolio.

We want to determine the conditions under which the adjusted portfolio will outperform the full portfolio. To do this, we must first characterize the returns of the portfolios. For the full portfolio, return can be written as:

$$R_F = \frac{1}{N} \left[\sum_{i=1}^u R_i + 2 * \sum_{k=1}^s R_k \right], \quad (1)$$

where the R_i are the returns for the $(N-2*s)$ unique stocks, and the R_k are the returns for the s shared stocks. For the adjusted portfolio, return is:

$$R_A = \frac{1}{(N - s)} \left[\sum_{i=1}^u R_i + \sum_{k=1}^s R_k \right]. \quad (2)$$

We can use these characterizations to describe the situations in which the adjusted portfolio will outperform the full portfolio. This will happen when R_A is greater than R_F , so that:

$$(R_A - R_F) > 0, \quad (3)$$

which implies (after rearranging):

$$s * \left[\sum_{i=1}^u R_i \right] > (N - 2*s) * \left[\sum_{k=1}^s R_k \right]. \quad (4)$$

Using our example values for s and N , this gives us the straightforward implication that the adjusted portfolio will outperform the full portfolio if the sum of returns on 48 unique stocks is greater than $48 * (\text{return on stock held by both funds})$. Thus, if the average return for the 48 unique stocks is greater than the return for the one shared stock, we are better off with the adjusted portfolio. But is it likely that the stock chosen by both fund managers is no better than the ones that were chosen only once? We consider this question in the next section.

PROBABILITIES

We now consider a possible “confirmation effect” from having both managers choose the same stock. Let us assume that there are n_T different stocks in the relevant universe, from which both managers will pick. These stocks, S_i , are either “good” (G) or “bad” (B): $S_i \in (G, B)$; $i=(1 \dots n_T)$. There are n_G “good” stocks and $(n_T - n_G) \equiv n_B$ “bad” ones, so that the relative proportions of good and bad stocks are $(n_G/n_T) \equiv p_G$ and $(1 - p_G) \equiv p_B$, respectively. The unconditional probability that a stock chosen at random will be good is therefore p_G , and the probability that a *specific* good stock, say stock Q, is chosen, is $\text{prob}(S_i=Q)$

$= \text{prob}(S_i=Q \cap S_i \in G) = \text{prob}(S_i=Q|S_i \in G) * \text{prob}(S_i \in G) = (1/n_G) * p_G = 1/n_T$. This is the same as the unconditional probability that a specific bad stock will be chosen.

However, let us also assume that our managers are better stock pickers than average. The probability that one of them will choose a good stock is greater than p_G , say $(p_G + \varepsilon)$ (where $[1-p_G] > \varepsilon > 0$). Now, the probability that one of our managers will choose a specific good stock is $(p_G + \varepsilon) * (1/n_G)$, which is greater than the probability that a given bad stock is chosen, $(1-p_G - \varepsilon) * (1/n_B)$.

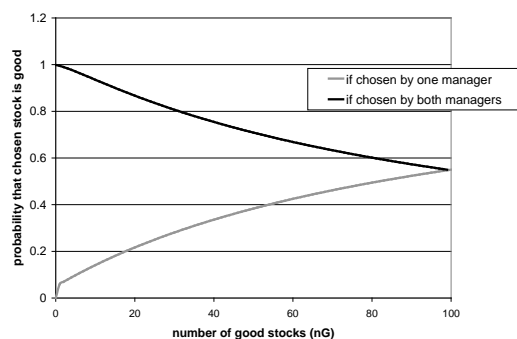
We will define $\text{prob}[ch(x, S_i)]$ as the probability that x of our managers (where $x \in [0, 1, 2]$) have chosen a specific stock, S_i . (For notational simplicity, we will abbreviate this to simply $ch(x)$.) Thus, $\text{prob}(ch(1)|S_i \in G) \approx 2/n_G$ (since a given stock could be chosen by either of our two managers), and $\text{prob}(S_i \in G|ch(1)) = (p_G + \varepsilon)$. Assuming that the choices by the two managers are independent (so that the probability that a given stock is chosen by both managers is simply $(1/n_G)^2$), we can then determine that the probability that a stock is good, given that it is chosen by both managers, is:

$$\text{prob}(S_i \in G|ch(2)) = \frac{(p_G + \varepsilon) * n_B^2}{(p_G + \varepsilon) * n_B^2 + (1 - p_G - \varepsilon) * n_G^2} \equiv p_{G2}. \quad (5)$$

To evaluate the relative value of the two portfolio weighting schemes, we need to determine whether this probability is greater than the probability that a stock is good, given that it is only chosen by one manager. That is, does having both managers choose a specific stock provide some additional confirmation that the stock is good?

Comparing p_{G2} to $(p_G + \varepsilon)$, we find that confirmation is indeed valuable: as long as $n_B > n_G$, $\text{prob}(S_i \in G|ch(2)) > \text{prob}(S_i \in G|ch(1))$. We can see this in Figure 1.

Figure 1: Relative Probabilities That a Chosen Stock is Good, Given That n_B is Fixed



In this figure, we assume that ε is .05 and that the number of bad stocks is fixed at 100. As the number of good stocks added to the universe increases, the probability that a chosen stock is good changes, rising if the stock is chosen by one manager, and falling if chosen by both.

In this figure, we have assumed that the number of bad stocks stays constant at 100, and have plotted the relative probabilities that a stock is good—given that it is chosen by one or both managers—against a changing number of good stocks. (Note that this implies that p_G rises as we move to the right across the graph, so that the unconditional probability that a stock is good is increasing—this is what is driving the bottom curve.) As long as $n_G < n_B$, the confirmation effect holds: two heads are better than one. This effect is particularly pronounced when the difference in the numbers of the two types of stocks is great (as we might expect it to be in the real world).

PUTTING IT ALL TOGETHER: EXPECTED EXCESS RETURNS

Now that we have characterized both the two weighting schemes and the probabilities that a chosen stock is good, we can compare the expected returns from the two portfolio types. To simplify the discussion, we will evaluate expected *excess* returns to the portfolios, α . This is consistent with the stated goal of the strategy, which is “designed for alpha generation in domestic equity portfolios.” Our focus on α requires an assumption: since we are considering adding a “satellite” to a diversified core portfolio, theory and practice assert that we should be comparing portfolios based on their information ratios, the ratios of alpha—active return—to active risk. We will therefore assume that the active risks in the full and adjusted portfolios are comparable, allowing us to concentrate only on return. This is roughly consistent with the actual risks of the two funds, each of which has “12-month excess rolling risk” of approximately 2.8%.

Since the average excess return in the market is zero, the unconditional expected excess return for a stock, $E(\alpha_i)$, in equilibrium, is zero. However, we can now define a “good” stock as one with a positive α_i for a given period, and a good manager—like ours—as someone who has above-average skill at identifying such stocks. Defining the average excess return for good stocks as $\bar{\alpha}_G$ and the average excess return for bad stocks as $\bar{\alpha}_B$, it must be that:

$$0 = p_G * \bar{\alpha}_G + (1-p_G) * \bar{\alpha}_B, \quad (6)$$

so that:

$$\bar{\alpha}_B = -p_G * \bar{\alpha}_G / (1-p_G) < 0. \quad (7)$$

Now, we can define the expected return on a stock, given that it is chosen by one of our managers, as $(p_G + \varepsilon) * \bar{\alpha}_G + (1-p_G - \varepsilon) * \bar{\alpha}_B$; this will be the expected return for the u unique stocks. If the stock is chosen by both managers, its expected return is $p_{G2} * \bar{\alpha}_G + (1-p_{G2}) * \bar{\alpha}_B$; this is the expected return for the s stocks chosen by both managers. Substituting these expected stock returns into equations (1) and (2), we find the following expressions for expected portfolio returns for the full and adjusted weighting strategies, respectively:

$$\frac{1}{N} \left\{ \sum_{i=1}^u [\bar{\alpha}_G * (p_G + \varepsilon) + \bar{\alpha}_B * (1-p_G - \varepsilon)] + 2 * \sum_{k=1}^s [\bar{\alpha}_G * (p_{G2}) + \bar{\alpha}_B * (1-p_{G2})] \right\}. \quad (8)$$

$$\frac{1}{(N-s)} \left[\sum_{i=1}^u [\bar{\alpha}_G * (p_G + \varepsilon) + \bar{\alpha}_B * (1-p_G - \varepsilon)] + \sum_{k=1}^s [\bar{\alpha}_G * (p_{G2}) + \bar{\alpha}_B * (1-p_{G2})] \right]. \quad (9)$$

The expected return for the full portfolio is higher unless the two portfolios are either identical or completely distinct. As long as there is only partial overlap, taking advantage of the confirmation effect—weighting stocks that get two votes more heavily, since they are more likely to be good—results in higher expected excess returns. The full portfolio is preferable to the adjusted one.

This result is robust. For example, the confirmation effect holds for all possible combinations of the two underlying funds, since the contributions of shared stocks are not affected by different weighting

schemes. In addition, the effect persists even when the two managers' choices are correlated (positive correlation—which is likely—mutes, but does not eliminate, the confirmation effect; negative correlation strengthens it). Finally, reevaluating our probabilities to explicitly recognize that managers have multiple chances to match (since each chooses 25 times) again supports the confirmation effect—unless we are willing to assume that our managers have no stock picking skill. But if they have no skill, why are we using them?

CONCLUSIONS

Successful active management is hard, especially in the large-cap space. However, in a low interest rate environment, the search for yield leads many pension fund managers toward active strategies and their promise of alpha. As demand increases, fund managers design new products in response. In this paper, we consider one of these new products: a fund-of-funds combining 25 stocks from an active fundamental fund and 25 stocks from an enhanced index fund. Our goal was to assess the proposed “adjusted” weighting scheme—in which stocks held in both subfunds would be counted only once—against an alternative “full” weighting scheme. We found that stocks chosen by both managers were usually more likely to be good stocks than bad, justifying extra weight. Unless we expect our managers to have no skill in choosing stocks—in which case, why would we pay the higher fees for them?—we should capitalize on the stronger signal we get when both identify the same stock as desirable. Portfolio returns should be higher when we recognize that two heads really are better than one.

REFERENCES

- Bodie, Zvi, Alex Kane, and Alan J. Marcus, *Investments*, 7th ed., McGraw-Hill/Irwin, Boston, 2008.
- Bonafede, Julia K., Steven J. Foresti, and Thomas E. Toth, “Alpha: A Right or a Privilege? An Examination of the Challenges and Risks of Hedge Fund Investing,” Wilshire Associates Incorporated, 10/14/04.
- Foresti, Steven J. and Thomas E. Toth, “Incorporating Active Management... Over Active Imagination,” Wilshire Associates Incorporated, 6/28/06.
- Junkin, Andrew, presentations to public retirement fund board: proposed fund-of-funds strategy, 5/24/07 and 11/28/07.
- Khandani, Amir E. and Andrew W. Lo, “What Happened to the Quants in August 2007?”, working paper, MIT Sloan School of Management, 9/20/07.
- Kosowski, Robert, Narayan Y. Naik, and Melvyn Teo, “Do Hedge Funds Deliver Alpha? A Bayesian and Bootstrap Analysis,” *Journal of Financial Economics*, Vol. 84, 2007, p. 229-264.
- Ross, Sheldon, *A First Course in Probability*, 3rd ed., Macmillan, New York, 1988.

ASSESSMENT OF ALTERNATIVE ENERGY SOURCES EFFICIENCY – ECONOMIC MODEL OF A PROJECT USING REED CANARY GRASS

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ABSTRACT

The aim of all EU countries is to gradually increase the ratio of renewable resources of energy production. Currently, the main focus in the area of renewable resources is on biomass; various energetic plants can be used for energy purposes. One of these alternative crops which has been considered to be widely grown for industrial purposes especially in Germany but also in Scandinavian European countries is reed canary grass. Quite newly, it is being introduced also in the Baltic countries where it is preferred to fast growing woods. Gradual introducing and intentional growing of this plant is being considered also in the Czech Republic. The main goal of the article is to introduce the economic model of a biomass project that was developed within the project of Technical University of Liberec „Advanced Remediation Technologies and Processes Center“. The aim of this model is to provide a practical decision-making tool that reduces total costs of projects using biomass; to help financial managers make better, comparable and quicker decisions by a user-friendly tool which takes into account so far just Czech conditions; and to enable its users to make and see all cash flows associated with projects using biomass more transparent.

INTRODUCTION

The aim of all EU countries, thus of the Czech Republic as well, is to gradually increase the ratio of renewable resources of energy production. Currently, the main focus in the area of renewable resources is on biomass, which is to constitute more than 80 per cent ratio of the total planned increase of renewable resources. Various energetic plants can be used for energy purposes. One of these alternative crops which has been considered to be widely grown for industrial purposes especially in Germany, Denmark but also in Scandinavian European countries such as Finland, Sweden, is reed canary grass. Quite newly, it is being introduced also in the Baltic countries where it is preferred to fast growing woods. Gradual introducing and intentional growing of this plant is being considered also in the Czech Republic; this fact is reflected by Výzkumné centrum ARTEC (ARTEC Research Centre).

One of the goals of the economic division of the ARTEC Research Centre in 2007 was to continue with the results from past years, i. e. go on developing economic tools serving to evaluate economical efficiency of alternative sources of energy, in particular on developing an economic model of a biomass project. That is why the Výzkumný ústav anorganické chemie, a.s. (Inorganic chemistry research institute) which is the co-participant of the ARTEC project and which provided foundations for growing technology and basic economic characterisation of energetic plants of Uteusa sorrel and reed canary grass was addressed in 2007. The author of these materials is Ing. Sergej Usťak, CSc.

In order to assess the financial merit of an investment in a biomass project, it is necessary to analyse many technological, technical, natural and economic parameters valid in the environment of the Czech Republic. To evaluate and summarise these viewpoints, the biomass project model which was developed in co-operation with the above stated Výzkumný ústav anorganické chemie (VÚAnCh) can be used.

The economic model of a biomass project producing heat energy is based on a general case study of a project where an agricultural enterprise focuses on growing energetic plants in order to sell part of the

production on the market of energetic biomass and to burn part of the production in order to produce heat which supplies both its own premises and also surrounding customers for market (or regulated) price of heat energy. At first it was necessary to assess all costs and expenditures connected with the project, that is the costs connected with biomass growing process (at the moment the process of growing reed canary grass is being elaborated) and also costs connected with the biomass heating plant that produces heat. Further, it was necessary to assess all benefits resulting from this project. For this reason cash flow analysis which calculates particular incomes and expenditures connected with the project was made. The criteria of payback period, net present value and internal rate of return were chosen to summarise this information and also to assess the biomass project investment efficiency. The model was processed in Microsoft Excel software in Czech language. Its individual parts are described bellow. However, sooner than we advance to description of the economic tool for biomass project investment efficiency evaluation, it is necessary to mention the most important characterisation of the chosen energetic plant.

REED CANARY GRASS

Reed canary grass (*Phalaris arundinacea* L.) can be generally characterised as grass which is quite demanding as for water and nutrients, undemanding as for agricultural equipment and giving relatively great harvest in convenient conditions. It is a steady, heterogamous, stolonate grass from the [poaceous](#) (*Poaceae*) family. It belongs to autochthonous species. It is naturally spread all over the territory of the Czech Republic in places with sufficient soil humidity. Reed canary grass grows wildly almost in all over Europe, Asia (except the southern parts) and in Northern America. Its presence high in the mountains proves its great resistance to tough climatic conditions. It is best off on heavier soils with rich supply of nutrients. It is especially suitable for wet lands which could otherwise be used with difficulties; it can even bear long-term flooding. It is not particularly sensitive to soil acidity. It can adjust to the soil acidity from pH 4.0 to pH 7.5; pH around 5.0 being the optimal value. After it strikes roots it can bear short-term drought. It does not suffer from hard frosts or late spring frosts. Also, it can bear shadow areas or short-term flooding well. Reed canary grass belongs to our highest grasses. The stem height can often exceed 2 m. Bulky straight stems are tipped with long single sided panicle. Sterile sprouts are stem-like, densely foliated. Leaves are long and wide. Reed canary grass creates long underground rootstalks which are spread just under the ground surface. The root system is huge, going very deep. It can also be grown for hay production purposes (see Figure 1).

Figure 1: Reed Canary Grass



Source: VUAnCh, a.s. This figure shows how the Reed Canary Grass looks like in the open air.

It is a very perspective energetic plant whose use is quite specific, different from growing grass species which are designed for other purposes (fodder, seed production). Reed canary grass vegetation designed for energetic use is set up similarly to fodder with seeding of 20-25 kg per hectare (the price of seed approximately 150 Czech crowns per kg), lane width of 25-30 cm, early in the spring (even with protecting crop), perhaps even in the autumn. It is recommended to be harvested after winter early in the

spring, when the plants contain less water (12-20%). Another reason for harvesting after winter is the fact that the plants contain half the amount of nutrients compared to plants harvested in August for instance. It is also possible to harvest in the summer or in the autumn of the current season but the cut mass must undergo finishing drying on the field. Neither diseases nor pests cause notable problems to reed canary grass.

No form of reed canary grass is registered in the Czech Republic at the moment. Growing it is, however, allowed because this crop is not classified in the list of economically important crops whose growing requires certified registered forms. There are about 25 forms known in the world. New forms, which should differ from fodder by having a high ratio of stems as opposed to leaves, contain less weeds and less elements such as silicon, potassium and chlorine, are cultivated for industrial purposes. It is chlorine which causes rust in boilers when being burnt and the ashes melt and sinter when there is high contents of the mentioned elements and low temperature. Otherwise, the ashes from reed canary grass make a good mineral fertiliser (P, K, Ca, Mg and microelements). If the material contains high percentage of silicon, it can cause low melting temperature of the ashes which could cause operational problems if the incinerating apparatus construction was unsuitable (Ust'ak, 2004).

THE STRUCTURE OF THE ECONOMIC TOOL FOR EVALUATING BIOMASS PROJECT INVESTMENT EFFICIENCY

The biomass project model aimed at heating energy production (we do not consider production of electricity) which could be applied in the conditions of the Czech Republic contains these main parts: the biomass growing planning process, cost analysis of the biomass growing process, summary of costs (expenditures) for biomass growing in single years, summary of investments into machinery, buildings and land needed for biomass growing, cost model of a biomass incineration plant, model of agricultural machinery and buildings depreciation calculation and also biomass incineration plant depreciation, cash flow calculation model along with calculations of main indicators of biomass project investment efficiency and finally graphical outputs of the model. The tool is generated in a way to make planning of the whole biomass growing process easier for the users and help them with their decision making as for the choosing the investment into suggested projects. By consecutive filling in of single sheets—only the yellow cells though—where each sheet corresponds to one of the above mentioned parts of the model, the user finishes the overall efficiency analysis.

Planning the Biomass Growing Process

The first part of the economic tool will guide the user through the overall technology process of reed canary grass growing. The technology of growing this energetic plant is outlined to the period of 10 years. By entering “1” (meaning that the process is in progress) into the yellow cells, the user plans the overall process which includes these stages:

1. preparing the land which also involves these component activities:
 - weed cutting;
 - liming;
 - stubble breaking,
 - fertilising P;
 - fertilising K;
 - fertilising using sludge from waste-water treatment plants;
 - tillage and arrangements;
 - weed destruction;
 - harrowing and liming.
2. seeding, which also involves these component activities:

- rolling;
 - weed cutting;
 - dicotyledonous weeds destruction.
3. vegetation maintaining, which also involves these component activities:
- fertilising P;
 - fertilising K;
 - fertilising N;
 - fertilising with organic fertilisers;
 - fertilising using sludge from waste-water treatment plants.
4. harvesting, which also involves these component activities:
- summer cutting;
 - autumn cutting;
 - spring cutting;
 - flipping;
 - dry mass pressing;
 - transport and storage in the warehouse;
 - transport and storage of bales in the field;
 - biomass storage control.
5. after-harvesting arrangements, which involves these component activities:
- fertilising N;
 - fertilising with organic fertilisers;
 - fertilising using sludge from waste-water treatment plants;
 - raking and after-harvesting leftover cleaning;
 - mulching.

Each of the component activities induces consumption of different cost types (wages, fuel, fertilisers and the like) which are adduced within each activity in the model including the consumption unit of measure. The consumption of these costs is always in respect to one hectare of cultivated land. In this part of the economic tool, used and recommended agriculture machinery is adduced for each stage and component activity (Ust'ak, 2004), (Strouhal, 2006), (see Figure 2).

Cost Analysis of the Biomass Growing Process

The first part of the model, where the user planned consecutive activities of the total technology process of growing reed canary grass, is followed by cost analysis of the technology process of growing this energetic plant. The user enters the price of the measure unit within the scope of each cost type filling in the total process into the yellow cells. Thus, all direct costs of the technology process relating to one cost unit, which is one hectare, are gradually being calculated. Direct costs entering the technology process of biomass growing are the following: direct work, technology fuel – diesel, seeds, pesticides, industrial fertilisers, organic fertilisers, sludge, i.e. variable costs and also direct fixed costs incurred mainly by usage of agriculture machinery and buildings. The cost analysis also calculates the amount of subsidies per hectare, which constitutes an income of the biomass project and which can be earned from the state as a result of disposing liquid sludge as fertilisers when growing reed canary grass (according to the decree of Ministry of the Environment of the Czech Republic No. 382/2001 Coll. – conditions of using modified sludge on agricultural land). (Ust'ak, 2004), (Král, 2006), (Strouhal, 2006). (see Figure 3)

Figure 2: Planning the Biomass Growing Process – Reed Canary Grass

Ekonomický model projektu využívajícího biomasu - Plánování dílčích činností v jednotlivých obdobích procesu							
Chrastice rákosovitá / model STANDARD							
1=zařazení do provozu, prázdné pole = proces neprobíhá							
Příprava pozemku	měrná jednotka spotřeby	charakteristiky procesu	OBDOBÍ (ROKY)				
			1	2	3	4	5 etc. ...
Sečení plevelů			1				
práce	h/ha	0.33	1				
nafta	l/ha	6	1				
PM (pomocný materiál)	Kč/ha	85	1				
strojní vybavení	popis	mulčovač nebo žací stroj					
Vápnění			1				
práce	h/ha	0.05	1				
nafta	l/ha	12	1				
dolomitický vápenec	kg/ha	2250	1				
pálené vápno	kg/ha						
PM (pomocný materiál)	Kč/ha	0					
strojní vybavení	popis	rozmetač					
Podmítka			1				
práce	h/ha	0.38	1				
nafta	l/ha	7.2	1				
etc.							

Source: own elaboration of the technology process. This extract shows the planning of biomass growing process, i. e. raw materials vital to land preparation, their units of measure, process characteristics, etc.

Figure 3: Cost Analysis of the Biomass Growing Process (Reed Canary Grass)

Letní sečení			0	0	0	0	0
práce	Kč/hod	75	0	0	0	0	0
nafta	Kč/l	25	0	0	0	0	0
PM	Kč/ha		0	0	0	0	0
fixní náklady	Kč/rok	130	0	0	0	0	0
Podzimní sečení			0	411.25	411.25	411.25	411.25
práce	Kč/hod	75	0	57.75	57.75	57.75	57.75
nafta	Kč/l	25	0	137.5	137.5	137.5	137.5
PM	Kč/ha		0	86	86	86	86
fixní náklady	Kč/rok	130	0	130	130	130	130
Jarní sečení			0	0	0	0	0
práce	Kč/hod	75	0	0	0	0	0
nafta	Kč/l	25	0	0	0	0	0
PM	Kč/ha		0	0	0	0	0
fixní náklady	Kč/rok	130	0	0	0	0	0
Obracení			0	210	210	210	210
práce	Kč/hod	75	0	30	30	30	30
nafta	Kč/l	25	0	80	80	80	80
PM	Kč/ha		0	41	41	41	41
fixní náklady	Kč/rok	59	0	59	59	59	59
Lisování suché hmoty			0	691.25	691.25	691.25	691.25
práce	Kč/hod	75	0	83.25	83.25	83.25	83.25
nafta	Kč/l	25	0	255	255	255	255
PM	Kč/ha		0	90	90	90	90
fixní náklady	Kč/rok	263	0	263	263	263	263
Odvoz a uložení do skladu			0	822	822	822	822
práce	Kč/hod	75	0	69	69	69	69
nafta	Kč/l	25	0	265	265	265	265
PM	Kč/ha		0	30	30	30	30
fixní náklady	Kč/rok	458	0	458	458	458	458
Odvoz a uložení balíků na poli			0	0	0	0	0

Source: own elaboration of the cost analysis. This extract shows the cost analysis of the biomass growing process, i. e. fixed costs in the first year.

Summary of Costs (Expenditures) of Biomass Growing in Single Years

The part named “Summary of costs of biomass growing” recapitulates the consumption of particular cost types in single years of biomass growing per hectare of grown energetic plant. The user does not fill in any cells in this part. On the contrary, this part of the model provides the user with an overall review of

cost consumption expressed absolutely; also, the user can find here data on consumption expressed cumulatively for previous periods. Further, the model informs of the amount of possible incomes for biomass sold, should the user decide to sell the entire yield on the market of energetic biomass. All costs and possible benefits from growing and selling biomass are also expressed graphically in this part. (Strouhal, 2006). (see Figure 4)

Figure 4: Summary of Costs (Expenditures) of Biomass Growing in Single Years – Reed Canary Grass

Ekonomický model projektu využívajícího biomasu - Souhrn nákladů na pěstování biomasy						
Chrastice rákosovitá / model STANDARD						
Souhrn - výdaje	měrná jednotka	OBDOBÍ (ROKY)				
		1	2	3	4	etc. ...
práce	Kč/ha	524.25	388.25	446	446	
nafta	Kč/ha	2912.5	1263	1845.5	1845.5	
osivo	Kč/ha	3750	0	0	0	
pesticidy	Kč/ha	1531.75	0	0	0	
průmyslová hnojiva	Kč/ha	4381.5	3141	0	0	
organická hnojiva	Kč/ha	0	0	1905	1905	
kaly	Kč/ha	0	0	0	0	
PM	Kč/ha	1092	430	623	623	
Fixní náklady	Kč/ha	2,124	1,470	1,632	1,462	
Pojištění proti živelním pohromám	Kč/ha	0	0	0	0	
CELKEM	Kč/ha	16,316	6,692	6,452	6,282	
Vývoj nákladů -kumulativně	měrná jednotka	OBDOBÍ (ROKY)				
		1	2	3	4	etc. ...
práce	Kč/ha	524.25	912.5	1358.5	1804.5	
nafta	Kč/ha	2912.5	4175.5	6021	7866.5	
osivo	Kč/ha	3750	3750	3750	3750	
pesticidy	Kč/ha	1531.75	1531.75	1531.75	1531.75	
průmyslová hnojiva	Kč/ha	4381.5	7522.5	7522.5	7522.5	
organická hnojiva	Kč/ha	0	0	1905	3810	
kaly	Kč/ha	0	0	0	0	
PM	Kč/ha	1092	1522	2145	2768	
Fixní náklady	Kč/ha	2124	3594	5226	6688	
Pojištění proti živelním pohromám	Kč/ha	0	0	0	0	
etc. ...						

Source: own elaboration of the summary. This extract shows all types of costs within individual years of the biomass growing process.

Summary of Investment in Machinery, Buildings and Land Necessary for Growing Biomass

To assess efficiency of the biomass project, it is necessary to know total expenditures for equipment, machinery, buildings and land which are essential for growing biomass. It is the part of the model named “Investment necessary for growing biomass” which serves to enumerate the total investment. Here, the user enters the initial price of equipment, machinery and land into the yellow cells and also the ratio of using each of them for the biomass project. The total initial price of investment is enumerated by multiplication of these items and their subsequent summary which serves as an initial value for computing the depreciation in the next part of the model (of course, the land price is excluded as it is not an asset that could be depreciated). (Strouhal, 2006). (see Figure 5)

Figure 5: Summary of Investment in Machinery, Buildings and Land Necessary for Growing Biomass

Ekonomický model projektu využívajícího biomasu - Investice nutné na pěstování biomasy			
Chrastice rákosovitá / model STANDARD			
Seznam investic v zemědělské výrobě energetických rostlin - vstupy:			
Zařízení	Vstupní cena Kč	Podíl využití pro daný projekt %	Příslušný podíl vstupní ceny pro daný projekt v Kč
SEKAČKA - CRONE	600,000.00 Kč	100.00%	600,000.00 Kč
TALÍŘOVÝ PODMÍTAČ	550,000.00 Kč	100.00%	550,000.00 Kč
RADLIČKOVÝ KYPŘIČ	250,000.00 Kč	100.00%	250,000.00 Kč
PLUH - OVERUM 5R	700,000.00 Kč	100.00%	700,000.00 Kč
SMYK	90,000.00 Kč	100.00%	90,000.00 Kč
OZUBENÝ VÁLEC	150,000.00 Kč	100.00%	150,000.00 Kč
POSTRIKOVAC	300,000.00 Kč	100.00%	300,000.00 Kč
CISTERNA NA VODU	50,000.00 Kč	100.00%	50,000.00 Kč
VÁLEC	60,000.00 Kč	100.00%	60,000.00 Kč
BRÁNY	50,000.00 Kč	100.00%	50,000.00 Kč
KOMBINÁTOR	150,000.00 Kč	100.00%	150,000.00 Kč
SECÍ STROJ	500,000.00 Kč	100.00%	500,000.00 Kč
ADAPTER NA JETEL	50,000.00 Kč	100.00%	50,000.00 Kč
TĚŽKÉ HLADKÉ VÁLCE	50,000.00 Kč	100.00%	50,000.00 Kč
MULČOVAČ	500,000.00 Kč	100.00%	500,000.00 Kč
ŽACÍ STROJ	4,500,000.00 Kč	100.00%	4,500,000.00 Kč
ROZMETADLO PRŮMYSLOVÝCH HNOJIV	250,000.00 Kč	100.00%	250,000.00 Kč
NAKLADAČ	200,000.00 Kč	100.00%	200,000.00 Kč
TLAKOVÉ RADLIČKOVÉ APLIKÁTORY	250,000.00 Kč	100.00%	250,000.00 Kč
CISTERNA NA KALY	7,200,000.00 Kč	100.00%	7,200,000.00 Kč
OBRACEČ	180,000.00 Kč	100.00%	180,000.00 Kč
etc. ...			

Source: own elaboration of the investment. This extract shows the summary of investments in machinery, buildings and land necessary for growing biomass process, i. e. their purchase prices and shares of their utilization within the project.

Cost Model of a Biomass Incineration Plant (Heating Plant)

The cost model (see Figure 6) provides the user with a detailed cost (expenditure) analysis for a biomass incineration plant. It is important to mention here, that when preparing it, the authors took advantage of the RETScreen International model; at first the cost analysis included in the software manual which is available on the web pages of the Canadian centre RETScreen International was translated. The structure, however, was adjusted to the Czech conditions. The important cost categories make up two main groups: A) initial costs and expenditures spent before opening the incineration plant operation where capital expenditures (investment) constituting the main item for further depreciation charges are marked by letter “i” in the fourth column; and B) operational costs for one year of the incineration plant operation.

Figure 6: Cost Model of a Biomass Incineration Plant

2	Výstavba				900,000.00					
2.1	Energetické zařízení	[Kč]			300,000.00					
2.1.1.	Systém rekuperace odpadního tepla	[Kč]	i		100,000.00					
2.1.2.	Biomasový topný systém	[Kč]	i		100,000.00					
2.1.3.	Instalace zařízení na biomasu	[Kč]	i							
2.1.4.	Přeprava zařízení	[Kč]	i		100,000.00					
2.1.5.	Nákup pozemku	[Kč]	0							
2.1.6.	Další výdaje	[Kč]	i							
2.2	Výstavba teplárny	[Kč]			200,000.00					
2.2.1.	Topný systém na biomasu	[Kč]	i		100,000.00					
2.2.2.	Záložní topná soustava	[Kč]	i		100,000.00					
2.2.3.	Stanice pro přenos energie	[Kč]	i							
2.2.4.	Vedlejší rozvodné potrubí	[Kč]	i							
2.2.5.	Hlavní rozvodné potrubí	[Kč]	i							
2.2.6.	Výstavba budovy teplárny, přístupové cesty a dvora	[Kč]	i							
2.3	Ostatní náklady spojené s výstavbou	[Kč]			200,000.00					
2.3.1.	Instalace zařízení	[Kč]	i		100,000.00					
2.3.2.	Přeprava	[Kč]	i		100,000.00					
2.3.3.	Další náklady	[Kč]	i							
2.4	Rozmanité náklady	[Kč]			200,000.00					
2.4.1.	Režie	[Kč]	i		100,000.00					
2.4.2.	Zaškolení	[Kč]	i		100,000.00					
2.4.3.	Nepředvídané výdaje	[Kč]	i							
B	Provozní náklady (výdaje) na spalovnu v jednom roce provozu projektu biomasy					X	0	0	0	0
1	Provoz a údržba	[Kč]			800,000.00	X	0	0	0	0
1.1.	Majetkové daně	[Kč]			400,000.00					
1.2.	Pojištění	[Kč]			200,000.00					
1.3.	Náhradní díly	[Kč]			100,000.00					
1.4.	Provozní a údržbové práce	[Kč]			100,000.00					
1.5.	Cestovné a ubytování	[Kč]								

Source: own elaboration. This extract shows the cost model of a biomass incineration plant.

Initial costs and expenditures spent before opening the incineration (heating) plant operation include both costs of designing works and costs of incineration (heating) plant construction. The designing work costs include the costs (expenditures) of:

1. pre-feasibility study;
2. feasibility study;
3. development works and;
4. construction project documentation.

The construction costs include the costs (expenditures) of:

- a. energy equipment;
- b. building the heating plant;
- c. other costs connected with the heating plant;
- d. various costs.

All above stated cost items are further divided into more detailed cost types in the model.

The other category, i.e. operational costs for one year of the heating plant operation include costs of operation and maintenance, costs of property taxes, costs of insurance, costs of spare parts, costs of operational and maintenance work, travel expenses and accommodation, administrative costs, costs of land rents, other costs, unexpected expenditures. Apart from operational costs and costs of maintenance, the heating plant obviously consumes money on fuel and electricity, i.e. costs of waste heat, costs of biomass both own and procured from suppliers when grown biomass does not satisfy common operation of the incineration plant, costs of parasitic electricity. These cost items are expected to be spent uniformly every year. The operational costs, however, also include items which are not spent annually, only in certain periodic cycles, which the user can individually select in the model based on particular conditions

of the heating plant. These periodic costs include costs of cleaning and also costs of regular technical audit of plant operation.

In the incineration cost model, the user enters data on spent resources (also other necessary data such as period or number of units of measurement for instance) always into the dark yellow cells. The data is then automatically cumulated with the help of pre-entered sum formulas and they make up partial summaries of costs adduced in grey cells. The summary of summaries that constitutes data which is further entering into economic calculations of the biomass project model is adduced in the top part of the table of incineration plant cost analysis. It is the total purchasing cost of investment in the incineration plant (pink cell), which constitutes an initial entry for depreciation calculation model, then it is the summary entry on total initial costs before starting the incineration plant's operation (red cell) and total annual operational costs (or expenditures, violet cell). (RETScreen International – Clean Energy Decision Support Centre, 2004), (Strouhal, 2006).

Depreciation Model

Generally, depreciation financially expresses gradual physical and moral wear and tear of long term tangible and non-tangible assets for given periods. Its main function lies in the process of gradual transfer of the value of the assets to costs of the company (enterprise, investor) and gradually decreases the value of assets which is shown in its assets.

Further, it is important to mention the fact that in business practice one has to calculate accounting and tax depreciation. The way of calculating accounting depreciation is determined by the company itself so that the depreciation reflected real wear and tear of the assets. As for the tax depreciation, the depreciation rates for particular methods are adduced in the Income Tax Act. For the model, tax depreciation was chosen because it is generally applicable for all companies in the Czech Republic.

Depreciation represents one of the important items of operational costs and thus also initial information for the cash flow model. In reality, however, depreciation is not a financial expenditure in the given period. It represents non-financial costs recorded in bookkeeping in cost accounts of class 5 which decrease total earnings of the company (enterprise). In order to attain cash flow that is really at disposal of the company for financing its investment activities of renewable energy biomass projects, it is necessary to add the depreciation charges to calculated earnings from the investment in the biomass project.

Determining the amount of depreciation charges from investment in the biomass project in single years depends on chosen method of depreciation (straight-line or degressive); on total purchase cost of the heating plant; on relevant depreciation rate and depreciation category in which the asset is classified according to the Income Tax Act (detailed classification of assets into depreciation categories is adduced in the appendix of the Act).

Depreciation of the heating plant and depreciation of agriculture machinery and buildings is calculated according to the formulas which are stipulated by the Income Tax Act.

Particular agricultural machinery and buildings (or other equipment such as computers and automobiles) can be classified into as much as 4 depreciation categories, it is to the first, second, third and fifth depreciation category. The user enters the percentage portion into the dark yellow cells of the depreciation model and chooses what portion of investment into agricultural equipment is classified into one of the above mentioned depreciation categories. The model then automatically calculates depreciation charges and so called residual values for all the years of the agricultural equipment and buildings useful life. Here, it is important to mention that the provision of section 31 of the Income Tax Act No. 586/1992 Coll. was implemented into the calculation (annual depreciation rate can be increased by 20% in the first year of

depreciating): *“This annual depreciation rate can be used by a taxpayer who runs mainly agricultural or forestry production and who is the first owner of agriculture and forestry machines identified under code 29.3 of the Standard Classification of Production. Such taxpayer whose incomes from running agricultural or forestry production made up more than 50% of total incomes in the previous taxing period is considered one with mainly agricultural or forestry production for the purposes of this Act; for taxpayers whose tax liability arises in the current taxing period, the ratio of real incomes is crucial.”*

Bellow in this part of the model, the calculation of depreciation charges of the biomass incineration (heating) plant is added. Particular components of the heating plant can be classified into as much as 3 depreciation categories, it is to the third, fourth and fifth depreciation category. Again, the user enters the percentage portion into the dark yellow cells of the depreciation model and chooses what portion of investment into heating plant is classified into one of the above mentioned depreciation categories. The model then automatically calculates depreciation charges and so called residual values for all the years of the heating plant useful life. (Valach, et al., 1999), (Income Tax Act No. 586/1992 Coll.).

Cash Flow Model

The main part of the expected business tool is the part which can be depicted as the cash flow model. As the investment decision making is one of the most important activities of financial management of every company (it influences the financial situation of the enterprise far into the future), thus also of all entrepreneurs investing their resources or resources obtained from banks for biomass projects, this part was elaborated in a way to take into account as many factors, which influence cash flow connected with biomass projects in the time horizon of 23 years (3 years construction plus 20 years of expected heating plant's useful life), as possible. These factors are especially: development on the energetic biomass market, development of price of heating, time value of money and development of capital structure of the investor, anticipated development of inflation, development of the tax politics in the Czech Republic, subsidy politics of the state and also the situation on the capital market.

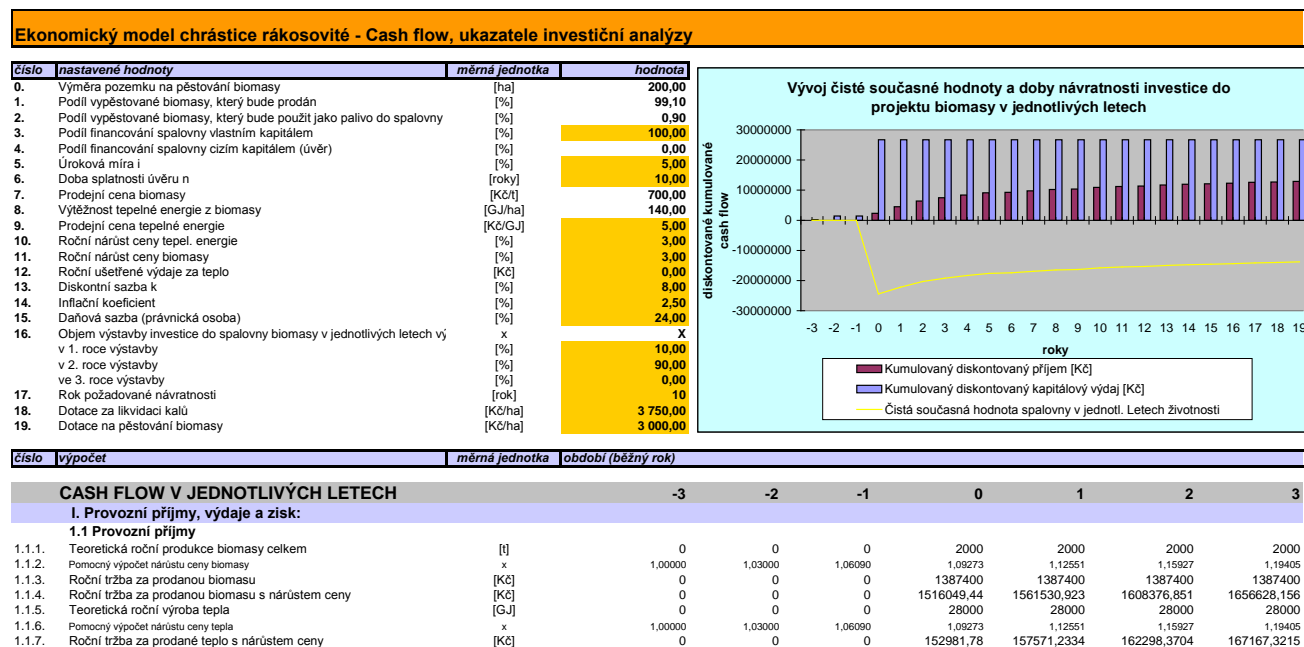
These factors, (see Figure 7) which are represented by energetic biomass market price, heat energy market price, expected increase of energy prices, expected increase of biomass price, discount rate (which is also known from financial management theory as Weighted Average Cost of Capital – WACC and also means desired rate of project efficiency), inflation coefficient and tax rate for juridical persons (for the year 2007, the tax rate is 24%) according to the Income Tax Act No. 586/1992 Coll., can be entered into the model in alternatives in the top part of this model again to the dark yellow cells. Also in this top part, it is possible to alternatively enter the amount of investment in incineration plant in single years of its construction in per cent and also required biomass project investment payback period. The users can also consider in this top part of the model how much resources they would save for heating expenditures owing to the planned investment in the heating plant and also it enumerates how much the Czech state would contribute in form of subsidies for deciding to realise a biomass project. The users can choose whether the planned project be financed only from own capital or also from external resources – loan. In that case the users use the cell “ratio of financing the incineration plant by own capital” where they enter the percentage expressing such ratio. The model then automatically calculates what ratio will be paid from loaned resources. Then they enter the discount rate and loan maturity according to the expected loan contract.

After this information is entered, automatic calculation of cash flow in single years of constructing and operating the heating plant follows. For cash flow “transparency” purposes, the model shows all steps of cash flow calculation. For lucidity reasons, each line of calculation is marked with corresponding number according to hierarchy.

While computing the incomes, the model first computes operational incomes, i.e. revenues from selling energetic biomass by multiplying theoretical annual biomass production by its market price which is entered into the model in different alternatives by the user. The revenues from biomass sales are further adjusted by the model with the coefficient of expected growth of biomass market price. Also, the revenues from heat sales are computed, adjusted with the coefficient of expected growth of heat market price. Furthermore, the model calculates incomes from subsidies in single years. If users do not want to include the subsidies to their calculations, they can choose in the relevant yellow cell number 0, which makes the model automatically eliminate further calculations with subsidies. All the incomes are then summed up in line 1.1.11.

The next step is the calculation of operational expenditures on growing biomass which are adjusted with the influence of expected inflation. In this part investors consider whether they want to use rented land for growing biomass or whether they want to buy one; they can do that by choosing 1 (renting land) or 0 (buying land) in relevant yellow cell in line 1.2.2.

Figure 7: Cash Flow Model of a Biomass Project



Source: own elaboration. This extract shows the cash flow model of a biomass project, i. e. indicators of investment analysis – accrued discounted incomes and expenditures.

In part 1.3 the calculation of total operational expenditures on operating the incineration plant is performed with considered price increase. The calculation of financial expenditures on operating the incineration plant follows, i.e. interest calculation. The model counts on regular loan instalments of the same amount only when the plant is in operation. These regular instalments are called annuity instalments. An annuity instalment A consists of the amount which constitutes debt (loan) amortisation and also of the interest which must be paid from remaining debt. Since the debt is gradually amortised, with the annuity the interest decreases and amortisation increases. The model calculates the annuity according to the formula:

$$A = U \cdot \frac{i \cdot (1+i)^n}{(1+i)^n - 1} \quad (1)$$

where

A is annuity, so called annual debt instalment consisting of amortisation and interest,

U loan rendered,

$\frac{i \cdot (1+i)^n}{(1+i)^n - 1}$ amortization coefficient.

To calculate the cost interest I from the loan, the following formula was used in the model:

$$I = A \cdot \left[1 - \frac{1}{(1+i)^{n-t}} \right] \quad (2)$$

where

I is the interest of the annuity instalment,

A regular annuity instalment,

n total term of instalments,

t single years of paid instalments.

The cost interests from the loan represent costs for the debtor that is why they are further deducted from incomes in the model.

The next step in part 1.5 is the automatic calculation of earnings before taxation. It is important to mention here that the model counts on the alternative of earnings before depreciation and taxation, i.e. EBDT. The model also calculates tax by multiplying earnings before taxation by the tax rate divided by 100. According to the Income Tax Act the tax rate for juridical persons for the year 2007 is 24%; yet, as the model allows the user to enter the rate in alternatives, it enables to capture the development of the tax politics of the Czech Republic. The earnings after taxation, or the net income is then calculated as a difference of earnings before taxation and tax calculated. Next important element which is accounted for is the tax holidays defined in section 19, paragraph 1, letter d of the Income Tax Act which adduces that: income from operation of small water power plants of an output of up to 1 MW, of wind power plants, heat pumps, solar facilities, facilities for production and energetic use of bio-gas and wood-gas, *facilities for other ways of production of electricity or heat from biological matter*, facilities for production of biologically degradable matters provided by a special regulation, facilities for use of geothermal energy (hereinafter the "facility"); *the exemption shall apply to the first calendar year when they were set in order and to five years immediately following this year...*

Adjusting the earnings after taxation by calculated depreciation follows. As the model counts on the alternative of earnings before taxation and depreciation, only the tax shield—not the total value of tax depreciation of investment—is added to calculate total earnings from investment (depreciation multiplied by the tax rate divided by 100). In order to account for the problem of depreciation policy of the company, the user may select degressive or straight-line depreciation method in the model by choosing 0 ("no") or 1 ("yes") in dark yellow cells. Total incomes from investment are then calculated as a sum of earnings after taxation (net income) and depreciation tax shield.

In further lines the model calculates the absolute value of capital expenditures in single years of biomass project realisation. As mentioned before this variability is enabled by entering percentage portions of volumes of capital construction in single years in the top part of the cash flow model calculation.

After necessary calculations of incomes and capital expenditures in single years, model calculations of criteria which constitute the basis for efficiency or inefficiency of given investment decision making follow. The main criteria for investment alternatives entered by the user are the net present value, the payback period accounting for time value of money, the internal rate of return. All these methods account for the time value of money, therefore these are mostly so called dynamic methods. They are based on discounting future cash flow which gives their present value and mutual comparison can thus be made.

Net present value can be defined as a difference between discounted cash incomes from investment and discounted capital expenditures in single years:

$$NPV = \sum_{n=1}^N P_n \frac{1}{(1+k)^{n+T}} - \sum_{t=1}^T K_t \frac{1}{(1+k)^t}$$

(3)

where

NPV is net present value

T total number of years of the capital project construction,

t single years of capital project construction,

P_n earnings from the investment in single years of useful life of the investment,

n single years of the useful life of the investment,

K capital outlays into the investment,

k discount rate $= \frac{k \text{ in } \%}{100}$

N total useful life of the investment,

The results gained by using the net present value method when evaluating the efficiency of particular investment biomass projects can be interpreted in the following way:

- *Net present value of the biomass project investment is greater than 0.* Based on such result, we can conclude that intended project is acceptable for the investor—it guarantees present requested rate of return expressed by interest rate. Such investment project can be considered one which increases market value of the investor (company, firm) and therefore should be realised.
- *Net present value of the investment is less than 0.* This project is then evaluated as unacceptable for the investor. Its acceptance would lead to decrease in market value.
- *Net present value of the investment equals 0.* Net present value of an investment equals 0 in case that discounted cash flows equal the capital outlay. Considered investment project neither decreases nor increases the market value of the company. In this case, other non-financial criteria can decide whether to accept the project.

The model calculates both the net present value in the supposed end of the project's useful life (the model estimates the average useful life of a biomass project for 20 years) and also it derives the net value for the year of required return rate which the user may enter in the top part of the cash flow model.

The internal rate of return is another dynamic method of biomass project investment efficiency evaluation. Internal rate of return can be defined as such discount rate k at which the net present value equals present capital expenditures. It can also be defined as such discount rate at which the net present value equals zero. The internal rate of return can thus be mathematically expressed in the following way:

$$\sum_{n=1}^N P_n \frac{1}{(1+k)^{n+T}} = \sum_{t=1}^T K \frac{1}{(1+k)^t} \quad (4)$$

The model calculates this value with the help of so called linear interpolation method according to the formula:

$$IRR = k_l + \frac{NPV_l}{|NPV_l| + |NPV_h|} \cdot (k_h - k_l) \quad (5)$$

where

NPV_l is NPV calculated for the lower selected interest rate (always in absolute value),

NPV_h NPV calculated for the higher selected interest rate (in absolute value),

k_l the lower selected discount rate,

k_h the higher selected discount rate.

In the part of the model which calculates the internal rate of return, the user firstly enters arbitrarily selected interest rate k_1 (discount factor) in percentage which is used by the model for computing incomes and expenditures in single years to their net present value for the selected discount factor k_1 which enables computing net present value NPV_1 (marked by the model in red writing). User then selects second discount factor k_2 when he has to satisfy the red marked condition: if NPV_1 is >0 , then k_2 is $> k_1$; if NPV_1 is < 0 , then k_2 is $< k_1$. After the correct selection of k_2 , the model automatically derives internal rate of return value. If the user does not satisfy the condition prescribed, the model automatically alerts and shows the word “NEPRAVDA” in the cell designed for the result of the internal rate of return, so it prevents from the incorrect results of IRR.

The results gained by using the method of internal rate of return when evaluating particular biomass projects investment efficiency are compared by the user with the entered discount rate k . If the calculated internal rate of return is greater than the entered discount rate k it means that the project is financially acceptable for the investor. If the calculated IRR is less, the investor should decide to reject evaluated alternative of the biomass project from financial viewpoint. If the values equal, other non-financial criterion can decide whether to accept the project.

The investment payback period which takes into consideration the time value of money is another method used in the model for biomass project investment efficiency evaluation. Generally, the payback period indicates the number of years required for recovering the initial capital outlay by all incomes after taxation and depreciation where cumulative discounted incomes and cumulative discounted expenditures are calculated. The effect of investment thus does not account only for earnings after taxation but also depreciation. The shorter the payback period the better evaluation of the investment. (Brealey and Myers, 1996), (Kislingerová et al., 2004), (Máče, 2006), (Petřík, 2005), (Vosoba, 1998), (Dubová, 2007).

Sensitivity Analysis

The criteria of capital project analysis mentioned in the previous chapter of this article give a static picture of the likely future out-turn of an investment into the biomass project. In many business situations it is desirable to generate a more complete and realistic impression of what may happen to for instance NPV in conditions of uncertainty. Net present value calculations rely on the appraiser making assumptions about some crucial variables. Answering these questions can help the sensitivity analysis which is an integrant of this model. The sensitivity analysis examines the degree to which the viability of the project changes, as measured by NPV, as the assumed values of the key variables are altered. In this part of the model, the user can ask for instance: if the purchase price of heating energy was raised by 10 percent, by what percent would NPV increase? By carrying out a series of calculations the model helps to build up a picture of the nature of the risks facing the biomass project and their impact on project profitability. Through the sensitivity analysis the model can identify the extent to which variables may change before a negative NPV is produced.

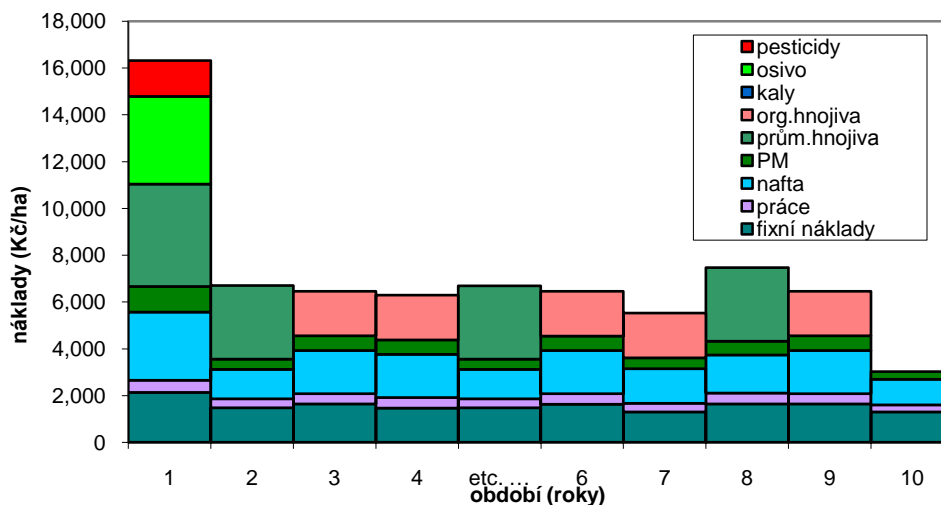
The sensitivity analysis examines the degree to which NPV changes if some crucial variables are altered as for example the market price of heating energy, annual energy production etc. The user has to always enter the percentage of variables' variances into the yellow cells in the top part of worksheet. There are predetermined 30%, 20%, 10%, 0%, -10%, -20% and -30% variances. It is at the discretion of each user. Sensitivity analysis has the following advantages:

- *Information for decision-making:* At the very least it allows the decision-makers to be more informed about project sensitivities, to know the room they have for judgmental error and to decide whether they are prepared to accept the risks.
- *To direct search:* It may lead to an indication of where further investigation might be worth while. The collection of data can be time consuming and expensive. If sensitivity analysis points to some variables being more crucial than others, then search time and money can be concentrated.
- *To make contingency plans:* During the implementation phase of the investment process the original sensitivity analysis can be used to highlight those factors which have the greatest impact on NPV. Then these parameters can be monitored for deviation from projected values. The management team can draw on contingency plans if the key parameters differ significantly from the estimates. For example, a project may be highly sensitive to the price of heating energy. The management team after recognizing this from the sensitivity analysis prepares contingency plans. (Arnold, 2005), (Jáč, Stuchlík, 2005).

Graphical Outputs

Because of clearness of results and outputs of the economical tool serving the evaluating of biomass projects efficiency, parts where lucid charts depict particular cost items were added to the model (see Figure 8). These summarising outputs should make decision making easier for the user when deciding among several investment alternatives.

Figure 8: Costs of Reed Canary Grass Growing in Single Years



Source: own elaboration of the data provided by VÚAnCH, a.s. This figure shows how the costs of reed canary grass growing within 10 individual years, i. e. costs on pesticides, seed, organic fertilizers, petroleum, fixed costs, labour, etc.

CONCLUSION

The above described economical tool which is generally applicable to the conditions of the Czech Republic and which is to serve the evaluation of investment in biomass projects efficiency and also to analyse and consolidate relevant economic information is not a closed system but its authors count on its further modifications and upgrades which will be in accordance with its applicability in business practice. The tool could be further upgraded with further visual outputs, such as charts of relative costs etc. Currently, negotiations about further co-operation with VÚAnCH, a.s. take place to develop a model which would evaluate various investment alternatives of some other projects of renewable resources from biomass.

RESOURCES AND REFERENCES

Arnold, G. *Corporate Financial Management*. 3rd. ed. UK: Pearson Education Limited, 2005. ISBN 0-273-68726-3.

Brealey, R. A., Myers, S. C. *Principles of Corporate Finance*. 15th ed. USA: McGraw-Hill, 1996. 998 s. ISBN 0-07-007417-8.

Dubová, M. Wind Energy Economic Model – Capital Project Analysis Tool. *E+M Ekonomie a management*, 2007, roč. 10, č. 3, s. 52 – 65. ISSN 1212-3609.
Income Tax Act No. 586/1992 Coll., Czech Republic.

Jáč, I., Stuchlík, M. Vyhodnocení inovačního projektu firmy. *E+M Ekonomie a management*, 2005, roč. 8, č. 4, s. 52 – 65. ISSN 1212-3609.

Kislingarová, E. *Manažerské finance*. 1. vyd. Praha: C.H. Beck, 2004. 714 s. ISBN 80-7179-802-9.

Král, B. a kol. *Manažerské účetnictví*. 2. vyd. Praha: Management Press, 2006. ISBN 80-7261-141-0.
Máče, M. *Finanční analýza investičních projektů*. 1. vyd. Praha: GRADA Publishing, a.s., 2006. ISBN 80-247-1557-0.

Petřík, T. *Ekonomické a finanční řízení firmy*. 1. vyd. Praha: Grada. 372 s. 2005. ISBN 8024710463.

RETScreen Software Online User Manual – Biomass Heating Project Model [online]. RETScreen

International – Clean Energy Decision Support Centre, 2004. ISBN 0-662-40451-3, updated April 1, 2004 by webmaster [cit. 2007-06-01]. Available from
<http://www.etscreen.net/ang/pop_prod.php?idTableau=453&h=1>.

Stražil, Z., Hutla, P. Chrastice rákosovitá - pěstování a možnosti využití. *Biom.cz* [online]. 2004-03-10 [cit. 2007-11-15]. Dostupné z WWW: <<http://biom.cz/index.shtml?x=168155>>. ISSN: 1801-2655.

Strouhal, J. *Finanční řízení firmy v příkladech*. 1. vyd. Brno: Computer Press, a. s. 2006. ISBN 80-251-0913-5.

Ust'ak, S., 2004. Reed Canary Grass – Research report. Unpublished internal material of VÚAnCH, a.s.

Valach, J. a kol. *Finanční řízení podniku*. 2. vyd. Praha: Ekopress, s.r.o. , 1999. ISBN 80-86119-21-1.

Vosoba, P. a kol. *Řízení firemních financí*. Praha: Ekopress, 1998. ISBN 80-86119-05-X.

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ON THE EFFICIENCY THEOREM

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ABSTRACT

In this extended abstract we present some remarks concerning the result of the global markets analysis done recently in [1, 4-6]. The interdisciplinary approaches we applied to study the open market transactions efficiency have outlined a shortlist of restrictions in interpretations of the results. We continue to test the exchange results reported for some popular and high liquid assets for to update the frames of the Efficiency, or E-, Theorem.

JEL: C02, D53, F47, G1, G24, G32.

INTRODUCTION

It was shown that to find the key parameter of the Efficiency, E [1], we have to obtain the volume distribution of the maximal probability, i.e. to solve the Boltzmann's problem and to minimize

$\sum_i V_i \ln V_i$ under the conditions $\sum_i p_i V_i = T$, $\sum_i V_i = V$ with known result

$$V_i = \alpha e^{-\beta p_i}, i=0...N, \alpha, \beta - \text{const}, \beta \in [0;1].$$

Under given in [1]

Definition 1. Turnover V^{S_k} and T^{S_k} for S_k are $V^{S_k} = \sum V_{t_j}^k$, $T^{S_k} = \sum p_{t_j}^k V_{t_j}^k$, where p_{t_j} , V_{t_j} – tick price and volume respectively,

Definition 2. Nominal rate of at-the-moment return $R_k = N_k / p_0^k$,

Definition 3. Profitability at-the-moment

$r_k = \sum_{bid} p_i^k V_i^k / \sum_{offer} p_i^k V_i^k - 1$, where $\sum p_i^k V_i^k$ is taken over all the transactions marked with trading system as “sold” and “bought” respectively,

Definition 4. Operational Efficiency at the financial market $E = \lim_{k \rightarrow \infty} \overline{\sum_k E_k}$, where $E_k = r_k / R_k$, –

Efficiency Theorem stated that the profitability of the trading operations at the global financial markets does not exceed the value of $E \approx 37.82\%$.

REMARK 1: We update [1] and state that we can estimate E with formula

$$\int \frac{[\beta N - \ln \frac{e^{\beta N} + 1}{2} - e^{-\beta N} \ln \frac{e^{\beta N} + 1}{2}]}{(\beta(p - N) + \ln \frac{e^{\beta N} + 1}{2} + 1) - e^{-\beta N} (\beta(p + N) + 1 - \ln \frac{e^{\beta N} + 1}{2})} d\Omega \quad (1)$$

Remark 2: As was data-mined while studying the global assets and blue chips trading reports, we can apply this approach and the final integral only for a long-term analysis to fulfil the Boltzmann's condition [2] $N > T/V \cdot p$ at the real financial market transactions flow.

Some numeric results are shown in Tab.1 in Appendix. We have E -Theorem is valid over all 5,261,033 transactions in question. If we take into account the ergodicity of the market we can easily obtain the efficiency 37.3951 as of Q1-2009.

Remark 3: As for a short-term analysis, we have to apply another interdisciplinary method [3]. To find the Efficiency under the trading rules restrictions in basis points quotation steps, we estimate the mean profitability over all volume distributions (see, for example, COMEX Gold March 2009 in Appendix, Fig.1) as

$$\frac{d}{dq} \left\{ q^{s_1} \prod_{j=1}^{s_2} \frac{1 - q^{s_3+j}}{1 - q^j} \right\} \cdot \int \left\{ q^{b_1} \prod_{j=1}^{b_2} \frac{1 - q^{b_3+j}}{1 - q^j} \right\} dq \quad (2)$$

Fortunately, it was established that first orders approximations for (1) (continuous form) and (2) (discrete form of the Efficiency Theorem) coincide. Finally, we continue to discuss the Hypothesis that

$$E \text{ satisfies the equation } \frac{E - 1/e}{\varphi - E} = e, \text{ i.e. } E = \frac{1 + e^2 \varphi}{e(e+1)} \approx 0.37817755.$$

It is easy to see that we have just only 10-points deviation of theoretic value obtained before. This phenomenon is under the consideration at-the-moment.

APPENDIX

Figure 1: Transactions and Volumes Distribution Reported in COMEX Gold, March 2009

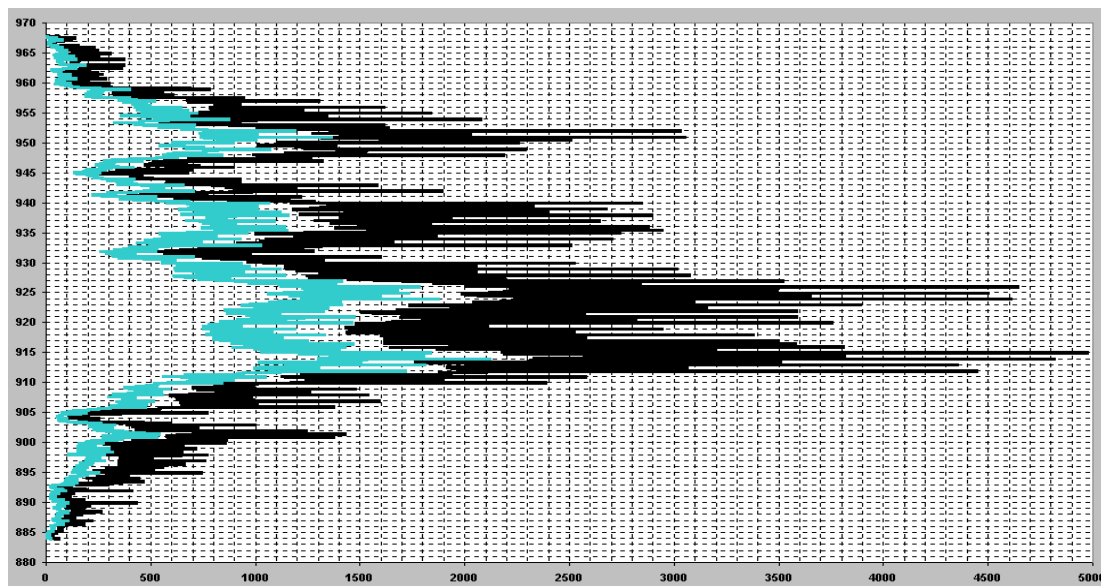


Table 1: Efficiency of Transactions Reported at Global and Russian Markets as of Q1-2009

2009 daily transactions	COMEX Gold	COMEX Silver	ICE Brent	NYMEX Light	NYMEX Platinum	MICEX Russia
20090101	37.4136	47.69257				
20090102	26.5904	50.53509	58.68556	N/A	N/A	N/A
20090103	43.3311	29.93545	65.37532			
20090105	35.3491	33.56415	36.05998		51.91307	
20090106	37.2365	37.15281	31.78478		46.52435	
20090107	55.2070	45.93518	50.49965		37.28270	
20090108	45.3781	35.10586	42.61702		46.91427	N/A
20090109	29.1647	31.44383	39.52626		39.74088	
20090110	37.7617	30.40855	33.33333		34.63151	41.31152
20090112	53.4151	36.74832	26.94253		27.07513	33.65615
20090113	31.6219	38.85095	44.0573		33.33333	39.69973
20090114	45.0612	42.47367	44.02588		51.24769	43.73924
20090115	31.6209	34.75706	40.51484		33.68027	42.31388
20090116	37.7669	40.76305	29.48172	N/A	50.95624	34.91125
20090117	48.2739	34.53089	62.5		24.70272	
20090119	32.7902	35.0069	49.81629		32.22178	61.78511
20090120	39.0087	34.61553	38.42303		49.34871	34.56380
20090121	31.8707	33.69626	24.61812		26.15815	45.57361
20090122	32.3412	44.634	38.96454		35.15178	49.92358
20090123	38.7613	36.48794	28.01938		35.21466	40.92494
20090124	31.2452	46.90051	63.06948		43.23981	
20090126	26.2512	32.96344	36.62182		73.80183	37.24112
20090127	32.2483	32.3882	43.6442		37.25525	41.31733
20090128	40.5034	28.59552	20.69179		25.62958	38.46768
20090129	51.6723	37.36925	36.31395		34.33081	44.09241
20090130	31.4455	27.17444	34.40369	N/A	44.02949	34.74194
20090131	47.7553	50.56518	45.58291		38.21907	
20090202	28.3084	30.2869	29.27997	36.42443	9.97889	39.19090
20090203	45.0791	35.74116	30.42306	32.48505	23.07299	40.27646
20090204	36.2565	38.5293	37.11956	35.73054	29.65005	41.06828
20090205	39.2503	29.75576	28.20479	29.45696	22.71416	39.97882
20090206	31.9836	34.29574	31.49388	37.92871	38.00922	38.53553
20090207	24.3733	61.50854	55.45956	29.93281	30.65452	
20090209	39.3379	30.92031	36.92409	32.76706	30.19393	39.43657
20090210	44.0437	44.09289	35.73624	19.40753	38.40562	45.25394
20090211	45.2220	39.27612	25.53785	37.96944	32.37832	38.91637
20090212	36.7664	40.06244	34.52062	30.27027	40.33485	39.62286
20090213	29.7493	41.44495	34.81534	34.41395	29.23297	24.80853
20090214	42.5957	38.41773	65.69418	51.75916	30.03946	
20090216	31.8334	34.22052	38.59713	36.30301		44.97884
20090217	29.7837	27.5727	51.77856	33.78775	43.89883	42.02662
20090218	30.5112	41.56898	39.92046	42.41019	36.43209	41.83867
20090219	34.1204	38.41314	28.97262	34.73965	36.26830	31.61748
20090220	37.8289	46.35615	40.15479	37.89663	27.35009	33.95853
20090221	34.7171	27.06373	37.12254	35.15664	32.15593	
20090223	30.8051	36.36167	28.94077	39.0107	26.42643	
20090224	49.8341	49.8099	30.80677	32.40749	35.93165	46.78663
20090225	31.0642	39.29072	35.19939	46.63396	43.40966	38.87327
20090226	33.3637	37.59879	24.89414	41.95264	38.70411	32.48363
20090227	37.1201	33.6864	34.70893	42.74543	40.72359	39.37189
20090228	43.2868	41.30852	58.11342	37.34021	34.45099	
20090302	33.6528	36.99926	44.34163	40.34787	22.20227	26.38713
20090303	39.8492	27.86877	26.74755	38.89286	46.30324	37.56755
20090304	33.2170	39.36449	39.72128	29.96934	40.72266	30.48979
20090305	24.5725	29.02107	19.34971	23.60575	41.39226	38.62922
20090306	33.2052	35.80718	29.8205	32.63926	34.07541	35.22086
20090307	34.5016	35.424	51.3767	51.23959	23.71050	
20090309	38.6585	35.48275	38.734	37.28648	16.66537	
20090310	32.5883	28.02011	38.38405	32.63421	38.95370	37.23645
20090311	31.7113	34.75527	21.51453	35.20733	33.00647	41.17677
20090312	34.8647	33.74365	24.17789	48.22148	30.66264	43.00102
20090313	49.7837	41.73858	37.28203	42.57534	24.94523	34.06711
20090314	61.5794	66.65824		75.39945	37.04497	
20090316	36.1700	30.62334	35.12384	53.11134	37.49007	35.89364
20090317	37.6703	34.62393	35.72746	45.67377	37.16375	34.38953
20090318	29.7687	32.37548	23.94689	32.91496	41.41598	52.97440
20090319	44.5619	40.72886	44.25013	34.75256	37.37233	34.12424

20090320	37.7763	34.61142	29.8427	36.6611	35.79644	28.16861
20090321	57.9398	33.98762	66.62778	49.60477		
20090323	25.7432	47.78482	33.07108	47.81547	50.73848	24.72676
20090324	43.9851	31.32681	29.69396	27.32065	29.99428	29.74897
20090325	32.3288	32.64441	22.5134	29.03997	34.63806	35.42959
20090326	48.3434	33.84511	23.98912	34.71213	40.37414	37.20071
20090327	41.6266	35.41426	39.01681	38.50057	25.35110	54.17231
20090328	44.5577	35.27072		32.63847		
20090330	41.9545	40.96391	25.59009	37.76446	42.88900	26.03655
20090331	33.3408	36.49303	38.74133	44.95493	27.33372	34.11230
Total deals	1 452 481	306 709	1 106 502	1 179 812	22 931	1 192 598
Total E	37.6918	37.3176	37.5618	38.0483	35.6797	38.4650

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REFERENCES

- [1] Prelov V.V. – The New Financial Theorem: Russian Blue Chips and Global Commodities Evidence. *Global Conference on Business and Finance Proceedings*, 2008, v. 3, No. 2, pp. 39-43.
- [2] Boltzmann L. – Wien. Ber., 1877, Bd. 76, s. 373–435.
- [3] Andrews G.E. – The Theory of Partitions. Addison Wesley Publ. Comp., 1976.
- [4] Prelov V.V., Makhutov N.A. – Descriptorial Analysis of the Crisis Syndromes.// *Safety and Emergencies Problems*, 2004, v. 4, p. 11-17 (in Russian).
- [5] Prelov V.V. – On the interesting property of Maxwell-Boltzmann distribution got with data mining. Some cross-disciplinary applications. *Proceedings WSC-6*, Kazan, 2008.
- [6] Prelov V.V., Makhutov N.A. – Analysis and Forecasting of the Financial Turmoils.// *Safety and Emergencies Problems*, 2004, v. 2, p. 47-57 (in Russian).

BIOGRAPHY

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CURRENT PROBLEMS OF THE FINANCIAL MANAGEMENT OF THE SMALL AND MEDIUM ENTERPRISES IN THE CZECH REPUBLIC WITHIN THE COMMON MARKET OF THE EUROPEAN UNION

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ABSTRACT

The financial management plays a very important part in a company management. Its goal is to manage the company cash flow to maximize the market value of the company with regard to the existing conditions. Insufficient attention to the financial management may lead to stringencies or even to bankruptcies. For that reason, a questionnaire research was prepared and sent to 338 small and medium enterprises in the regions of Karlovy Vary and Pilsen and out of these 295 questionnaires were returned. The questionnaires were then analyzed from three viewpoints, the long-term financial management, the short-term financial management and the financial management in connection with the EU. While in the sphere of the short financial management, the results are very good, in the sphere of the long-term financial management, they are questionable and in the sphere of the financial management in connection with the EU, the results are not good at all. Organizing training courses for the representatives of the small and medium enterprises from the analyzed regions seems to be one of the possible solutions.

INTRODUCTION

The financial management of a company forms a very important part of the strategic management. Its goal is to regulate the company cash flow and to maximize the company market value with regard to the existing conditions. The financial management is aimed especially at the following fields:

1. Raising the company capital from various financial sources.
2. Allocating the company capital to various forms of the company assets
3. Financial management of investments
4. Management of the individual components of the circulating assets
5. Division of the achieved economic results
6. Financial management when companies merge, wind up or find themselves in critical situations

The individual fields of the financial management are described and analyzed relatively well in the professional literature (1, 2). In case of large, especially multinational corporations, the individual fields of the financial management are relatively well secured and the company managers are familiar with the individual fields of the financial management and they are able to apply them in terms of a particular company. The situation can, however, be very different in the sphere of the medium and small enterprises (SMEs). This sphere is among other things characteristic by the fact that the managers are also quite often company owners and they solve a lot of problems ad hoc and the field of planning and unambiguous identification of the company future goals is somewhat neglected. This is quite often followed by a lack of theoretic knowledge and of the methods recommended by theories. All this often leads to financial problems of the SMEs and their bankruptcies. As the Faculty of Economics of University of West Bohemia in Pilsen has a long and significant tradition in the field of the SMEs, both in teaching and research, it was decided that a limited research should be carried out concerning the problems of the

financial management in the Czech Republic small and medium enterprises. The aim of this short research was to analyze the knowledge of the individual fields of the financial management of the SMEs and to arrive at some conclusions that could be used as recommendations for the SME's managers. A questionnaire research was used as the basic research method. A short questionnaire was devised that analyzed the following three fields of the SME's financial management.

1. The company long-term financial decision-making
2. The company short-term financial management
3. The financial management and the EU

The issues connected with the EU were chosen because the Czech membership in the EU and the existing possibility of drawing financial means from the European funds can influence the financial management and the overall situation in the SMEs significantly. The questionnaires were distributed by means of the contacts that had been set up previously in connection with an already existing faculty research and with the help of students and their company contacts. 338 questionnaires were distributed in the Karlovy Vary and Pilsen regions out of which 295 completed questionnaires were returned, which represents approximately 87 percent. This relatively high percentage was achieved thanks to the fact that the questionnaires were mostly distributed in person.

THE QUESTIONNAIRE FOR THE SMALL AND MEDIUM ENTERPRISES IN THE CZECH REPUBLIC AIMED AT THE COMPANY FINANCIAL MANAGEMENT IN THE CONDITIONS OF THE EUROPEAN UNION

The Field of the Company Long-Term Financial Decision-Making

1. Do you carry out any assessment of the economic effectiveness of the investment projects or do you only consider the aspect of their necessity?
 - a) Yes,
 - b) No,
 - c) It depends on the situation.
2. What assessment criteria do you use?
 - a) NPV (Net Present value),
 - b) IRR (Internal Rate of Return),
 - c) PI (Profitability Index),
 - d) PBP (Paybackperiod),
 - e) AP (Accounting Profitability),
 - f) Cost criteria,
 - g) None of the above.
3. Do you monitor the feedback and do you consider the real consequences of the investment decisions?
 - a) Yes,
 - b) No,
 - c) It depends on the situation.
4. Do you project any risk into the assessment of the economic effectiveness of the investment projects?
 - a) Yes,
 - b) No,
 - c) It depends on the situation.
5. What method do you use for the risk projection into the investment projects assessment?

- a) Certainty coefficient method,
 - b) Discount rate adjustment,
 - c) Sensitivity analysis,
 - d) Other methods.
6. Do you carry out any optimization of the financial structure (of the fund sources)?
- a) Yes,
 - b) No – the funds accessibility is the most decisive factor.
7. Are you familiar with any of the below stated methods of the optimization of the capital structure?
- a) Average cost of capital,
 - b) Brealy-Myers' theory of the four-dimensional capital structure,
 - c) Theory of the hierarchic order,
 - d) Departmental standards,
 - e) We don't know any of the above methods.
8. Are you involved in the company strategic management?
- a) Yes,
 - b) No.
9. What source of funds do you use most for your investment?
- a) Financial leasing,
 - b) Retained undistributed profit,
 - c) Supplier credit,
 - d) Long-term bank credit,
 - e) Equity external capital (investments by owners).

The Field of the Company Short-Term Financial Management

1. Do you carry out any active management of your receivables and liabilities by means of a bill book?
- a) Yes,
 - b) No.
2. Do you keep any active records of your debtors and pending liabilities?
- a) Yes,
 - b) No.
3. Do you ever have any problems with your liquidity (payment solvency)?
- a) Yes, often,
 - b) Only exceptionally,
 - c) Never.
4. Which of the below stated credit short-term sources of funds do you use most frequently?
- a) Short-term bank loan,
 - b) Flexible leasing,
 - c) Business credit,
 - d) Other sources.

The Financial Management and the EU

1. Do you use any programme of the EU structural funds?

- a) Yes,
- b) No.

2. Was there any increase in your sales after entering the EU?

- a) Yes,
- b) No.

3. Do you think there was an improvement in the attitude of companies towards the credit sources after entering the EU?

- a) Yes,
- b) No.

4. Please, state the biggest change that was reflected in the financial management of your company after entering the EU.

5. When funding your activities do you use either any programmes for the assistance of the SMEs, from the EU structural funds or the national programmes?

- a) No,
- b) Yes – please state specific examples.

THE EVALUATION OF THE QUESTIONNAIRE INQUIRY

The Field of the Company Long-Term Financial Decision-Making

1. Do you carry out any assessment of the economic effectiveness of the investment projects or do you only consider the aspect of their necessity?

- a) Yes – 42%
- b) No – 13%
- c) It depends on the situation – 44.4%
- the question was left unanswered: - 0.6%

2. What assessment criteria do you use?

- a) NPV (Net Present value) – 14.2%
- b) IRR (Internal Rate of Return) – 15.4%
- c) PI (Profitability Index) – 26%
- c) PBP (Paybackperiod) – 52%
- e) AP (Accounting Profitability) – 20.7%
- F) Cost Criteria – 34.9%
- G) None of the Above – 14.8%

3. Do you monitor the feedback and do you consider the real consequences of the investment decisions?

- A) Yes – 68.6%
- B) No – 5.9%
- C) It depends on the situation – 23.7%
- The question was left unanswered: - 1.8%

4. Do you project any risk into the assessment of the economic effectiveness of the investment projects?

- a) Yes – 50.9%
- b) No – 21.9%
- c) It depends on the situation – 26.6%

the question was left unanswered: - 0.6%

5. What method do you use for the risk projection into the investment projects assessment?

- a) Certainty coefficients method – 8.3%
- b) Discount rate adjustment – 7.7%
- c) Sensitivity analysis – 20.7%
- d) Other methods – 50.9% (mostly none given)

6. Do you carry out the optimization of the financial structure (of the fund sources)?

- A) Yes – 43.8%
- B) No – 55.6%

The question was left unanswered: - 0.6%

7. Are you familiar with any of the below stated methods of the optimization of the capital structure?

- a) Average cost of capital – 40.8%
- b) really-Myers' theory of the four dimensional capital structure – 5.3%
- c) Theory of the hierarchic order – 5.3%
- d) Departmental standards – 12.4%
- e) We don't know any of the above methods – 45.6%

8. Are you involved in the company strategic management?

- a) yes – 56.8%
- b) No – 42%

The question was left unanswered: - 1.2%

9. What source of funds do you use most for your investment?

- a) Financial leasing – 43.8%
- b) Retained undistributed profit – 30.2%
- c) Supplier credit – 16.6%
- d) Long-term bank credit – 39%
- e) Equity external capital (investments by owners) – 23.1%

The Field of the Company Short-Term Financial Management

1. Do you carry out any active management of your receivables and liabilities by means of a bill book?

- A) YES – 76.9%
- B) NO – 22.5%

THE QUESTION WAS LEFT UNANSWERED: - 0.6%

2. Do you keep any active records of your debtors and pending liabilities?

- A) YES – 97%
- B) NO – 3%

3. Do you ever have any problems with your liquidity (payment solvency)?

- A) YES, OFTEN – 9.5%
- B) ONLY EXCEPTIONALLY – 64.5%
- C) NEVER – 26%

4. Which of the below stated credit short-term sources of funds do you use most frequently?

- A) SHORT-TERM BANK LOAN – 27.2%
- B) FLEXIBLE LEASING – 21.9%

- C) BUSINESS CREDIT – 45%
 D) OTHER SOURCES – 18.3%

The Financial Management and the EU

1. Do you use any programme of the EU structural funds?

- a) Yes – 9.5%
 b) No – 90.5%

2. Was there any increase in your sales after entering the EU?

- a) Yes,
 b) no.

3. Do you think there was an improvement in the attitude of companies towards the credit sources after entering the EU?

- a) Yes – 36.7%
 b) No – 60.4%

The question was left unanswered: - 2.9%

4. Please, state the biggest change that was reflected in the financial management of your company after entering the EU.

We experienced no change – 31.4%

Simplification of the credit accessibility, gaining sources – 7.7%

Stronger competition – 2.9%

Providing subsidies from the eu sources – 2.4%

EUR exchange rate – 1.8%

The necessity to know IAS – IFRS standards – 1.8%

Duty-free trading – 1.8%

Easier access to the eu markets – 1.2%

Introducing the Quality Management System – 1.2%

Better trading with the EU states, easier import of goods – 1.2%

Necessity of keeping larger records, paperwork increase – 1.2%

Higher percentage of the revenue and expense items – 0.6%

Sales decrease, gross yield – 0.6%

Payment morale improvement – 0.6%

VAT from international business – 0.6%

5. When funding your activities do you use either any programmes for the assistance of the SMEs, from the EU structural funds or the national programmes?

- a) No – 89.9%
 b) Yes – 10.1%

CONCLUSION

The aim of this short research was to analyze the knowledge of the individual fields of the financial management of the SMEs and to arrive at some conclusions that could be used as recommendations for the SME's managers. The overall evaluation will be carried out for each of the three fields separately.

As far as the long-term financial management in a company is concerned, it turned out that about one half of the analyzed SMEs are significantly involved in assessing the economic effectiveness of the investment projects and they also calculate the effectiveness of an investment by means of the criteria

based on the recommended theories, they consider the element of risk and they analyze the specific consequences of their investment decisions and to measure the impact of risk on the investment projects they apply the methods recommended by theories. The situation in the field of the optimization of the capital structure is similar as even there about one-half of the questioned SMEs optimize their financial and capital structure while using mainly the average cost of capital. Surprisingly enough, more than a half of the respondents are engaged in the overall strategic company financial management. The structure of the sources of investment funding fully corresponds to the structure published in the professional literature, with a relatively big proportion of leasing and undistributed profit. At the end of the evaluation of the first part of the questionnaire, it is appropriate to ask a question: Is the approximate number of 50% positive answers a successful result and is it possible to label the long-term financial management of the SMEs as satisfying? There is no unambiguous answer. On one hand it is true that about one half of the SMEs are exposed to a big risk factor connected to the absence of any long-term financial management, which may have fatal consequences leading to stringencies and later to bankruptcies. On the other hand, it is necessary to appreciate the fact that about one-half of the questioned SMEs are familiar with the basic principles of the long-term financial management and is able to put them in practice.

In the field of the short-term financial management, the situation is much more favourable as more than two thirds of the SMEs manage their receivables and liabilities actively, almost all the respondents keep records of their debtors and nearly two thirds of the respondents become financially insolvent only exceptionally. In addition, the structure of the sources of the short-term funding fully corresponds to the standards recommended in the professional literature.

The third part of the questionnaire concerning the financial management in connection with the EU shows relatively the worst results. More than 90% of the SMEs do not use any programme of structural assistance of the EU and almost 90% do not use any other forms of assistance aimed at the SMEs. This fact is alarming if not tragic if we realize how big the attention paid to the support of the SMEs is from the point of view of the structural assistance and governmental assistance. It shows that the SME's managers are informed insufficiently or inadequately about the possibilities of using these funds for financing their activities. What is not positive either is the fact that only about one third of the respondents claim their sales improved and other effects and positive aspects are perceived only marginally. It is necessary to ask oneself a question where the mistake is and how to retrieve it. It is possible to assume that the mistake is caused both by the state and private institutions offering assistance and by the SMEs themselves, as they are probably not much interested in the offered help.

What conclusion can be drawn from the above results then? The most positive situation can be seen in the field of the short-term financial management where almost all the questioned SMEs are involved in the matters of the short-term financial management of their cash flow and the company liquidity. In the field of the long-term financial management, there is much to improve, mainly in the field of the overall company financial strategy. The field of the financial management in connection with the EU can be seen as a big challenge as the situation there is not good at all. One way to treat the problem may be organizing training courses for the SMEs in which, within the structural funds, even the Faculty of Economics of the University of West Bohemia will participate.

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REFERENCES

Hrdý, M. 2006. An Assessment of the Economic Effectiveness of the EU Investment Projects. Prague: ASPI, 2006. ISBN 80-7357-137-4

Valach, J. et al. 2001. Financial Management of a Company. Prague: Ekopress, 2001. ISBN 80-86119-21-1

Valach, J. et al. 2005. Investment Decision Making and Long-term Funding. Prague: Ekopress, 2005. ISBN 80-86929-01-9

Werner, R. et al. 2000. Small and Medium Enterprises Economics. Pilsen: University of West Bohemia, 2000. ISBN 80-7082-729-7

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OPTIMAL IMPLEMENTATION TIMING FOR SUSTAINABLE TECHNOLOGIES

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ABSTRACT

Current and imminent regulations along with increasing awareness and demand from markets to be sustainable are driving firms to implement new green technologies. Over a finite implementation horizon, with a target improvement level, the question is when to apply resources to the project. We develop an optimal control model to specify when to apply resources under different operating cost differentials taking into account resource cost. We find that technologies that are more efficient are optimally implemented with a front loaded schedule to achieve cost savings quickly. Conversely, technologies that are more expensive, but mandated, are ideally implemented on a back loaded schedule.

INTRODUCTION

Due to imminent regulation, a market mandate, or a desire to increase market share, a company wants to improve its sustainability levels. Sustainability improvements, once implemented, provide cost savings per time as they reduce waste, rework, and potential liabilities. However, implementation of these improvements has a cost. We use dynamic optimal control to determine the optimal implementation effort and optimal technological capacity per period. We will demonstrate that the expense of implementation resources has an effect on the optimal resource loading. In addition, we investigate the following scenarios: (a) The new technology has a lower operating cost than the legacy technology; (b) The new technology and old technology have equivalent operating costs, and (c) The new technology is more expensive to use, but is mandated by market forces or government regulation.

LITERATURE REVIEW

Implementation of environmental management technologies has become an increasingly important topic due to new regulations. For example, the REACH regulation enacted in June 2007 requires businesses that produce, use, and sell significant quantities of chemicals in the European Union to show that those chemicals are safe for both humans and the environment (Lockwood, 2008). One way of categorizing environmental technology includes two categories: End-of-pipe technology or cleaner production (Frondel, Horbach, & Rennings, 2007). End-of-pipe technology is added on to existing technology to reduce pollution. Cleaner production decreases pollution at the source. Klassen and Whybark (1999) included a third category—management systems (training, modified procedures, and environmental management systems) along with pollution control (end-of-pipe) and pollution prevention (cleaner production). Frondel et al. (2007) found that companies implemented end-of-pipe technology more frequently as a response to environmental regulations and cleaner production technology more frequently to reduce costs. Bansal and Gangopadhyay (2005) studied investment in cleaner production technology and determined that when a regulator makes a commitment to an environmental regulation (a standard and a penalty) and then sticks with it regardless of the existing technology at companies, this commitment will motivate companies to invest in R&D and to make environmental investments to attract environmentally aware customers from whom companies can extract greater profits. In addition to the reasons for investing in environmental technology, another issue important to companies is the timing of those investments.

The timing of an environmental investment is critical to both controlling costs and increasing profits. Fischer, Withagen and Toman (2004) argued that the timing of this investment depends on factors such as the marginal damages of pollution decay rate, the capacity depreciation rate, and the initial state of a company's production environment (clean or dirty). In their paper, they considered only technologies that are more costly to operate and to create than existing technologies. They concluded that in a clean initial environment, clean capacity would be built up gradually; if depreciation rates were low, environmental technology capacity would be added; and if the marginal damages of pollution were to decrease, then clean capacity would be built up gradually. In a dirty initial environment, clean capacity would be added aggressively. Higher marginal damages of pollution would also lead to a quicker increase in investment in capacity. Another study by van Soest and Bulte (2001) recommended that companies postpone investments in energy saving because technological advances are uncertain and somewhat irreversible, i.e., a company would be better off by waiting for even better technology. Conversely, Cora (2008) suggested that additional short-term expenditures would lead to more long-term corporate value and that waiting to invest in clean technology (thereby missing regulatory deadlines) would lead to higher long-term compliance costs. Lopez-Gamero, Claver-Cortes, and Molina-Azorin (2008) suggested that proactive managers would want to be the first to adopt environmental practices to create barriers to entry, to attract ethical customers, and to take advantage of subsidies or low-interest financing. Primary options for accelerating the investment and implementation of environmental technology are discussed next.

Two options for accelerating a project's implementation are fast-tracking and crashing. As described by Sommerhoff (2000, p. 51), "In its most literal sense, fast-tracking means delivering a project from design to completion, with a compressed time frame." Sommerhoff (2000) also suggested that fast-tracking is no longer the exception. Some authors, (e.g., Cupryk, Takahata, & Morusca, 2007) have argued that crashing a project—decreasing the project's duration by adding more resources—should only be considered after fast-tracking or overlapping all tasks as much as possible. A project manager needs to be careful when crashing by adding more resources or by working overtime. Singh (2003) described how overmanning leads to a reduction in work efficiency due to a decrease in workspace for workers and poor communication, and overtime leads to losses in efficiency along with increased costs.

In the next section of this paper, we present a model illustrating a closed-form solution to the timing of investment in resources for three different types of sustainable technology scenarios: (1) The new technology reduces operating costs, (2) The new technology has operating costs equal to those of the legacy technology, and (3) The new technology increases operating costs. After that, we provide three numerical examples. Then we discuss managerial implications.

MODEL

Variables

- $x(t)$ The level of sustainability capability in place at time t . A state variable.
- $u(t)$ The improvement effort at time period t . A control variable.
- $x'(t)$ The rate of change of the level of improvement. A state equation.
- $x'(t) = u(t)$. The level of improvement effort $u(t)$ is the rate at which our level of capability increases at time t .
- $\lambda(t)$ The adjoint variable. Similar to the Lagrange multiplier in calculus. The adjoint variable is interpreted as the marginal value to the objective of an additional unit of the state variable (sustainability capability at time t).
- c_1 Cost to implement sustainability improvements per unit ($c_1 > 0$).
- c_2 Cost savings per period for a given amount of sustainability capability in place (negative means operating cost savings; positive means increased operating costs).
- $x(0)$ The sustainability capability at time 0 (the beginning of the horizon).
- $x(T)$ The sustainability capability at the end of the horizon (T).

We want to minimize costs in achieving the required sustainability capability by the end of the desired time horizon (T). The objective function and constraints are as shown below:

$$\min \int_0^T [c_1 u(t)^2 + c_2 x(t)] dt \quad (1)$$

s.t.

$$x'(t) = u(t) \quad (2)$$

with $x(0) = 0$ and $x(T) = B$. $u(t) \geq 0$ for $t \in [0, T]$. T is known.

The quadratic term means that larger concurrent implementation efforts (resources) are much more disruptive than smaller efforts during any period.

Solution

The problem is presented as an optimal control problem. The dynamic change in the state variable is expressed as a differential equation. The Hamiltonian is similar to the Lagrangian in calculus.

The Hamiltonian for our problem is given as:

$$H = -c_1 u(t)^2 - c_2 x(t) + \lambda(t) u(t) \quad (3)$$

The necessary conditions for optimality with optimal control theory are stated below:

$$1) \quad \frac{\partial H}{\partial u} = 0 \quad (4)$$

$$-2c_1 u(t) + \lambda(t) = 0 \quad (5)$$

$$u(t) = \frac{\lambda(t)}{2c_1} \quad (6)$$

$$2) \quad -\frac{\partial H}{\partial x} = \lambda'(t) \quad (7)$$

$$\lambda'(t) = c_2 \quad (8)$$

$$\lambda(t) = c_2 t + k_1 \quad (9)$$

$$3) \quad \frac{\partial H}{\partial \lambda} = x'(t) \quad (10)$$

$$x'(t) = u(t) \quad (11)$$

Combining equations 6 and 9 provides:

$$u(t) = \frac{c_2 t + k_1}{2c_1} = x'(t) \quad (12)$$

Integrating x' gives us the expression for x .

$$x(t) = \frac{c_2}{4c_1} t^2 + \frac{k_1}{2c_1} t \quad (13)$$

It is given that the company needs to reach capability threshold B by time T , $x(T) = B$, which leads to the following:

$$\frac{c_2}{4c_1}t^2 + \frac{k_1}{2c_1}t = B \quad (14)$$

$$k_1 = -2c_2T + 2c_1 \frac{B}{T} \quad (15)$$

Therefore,

$$x(t) = \frac{c_2}{4c_1}t(t-T) + t \frac{B}{T} \quad (16)$$

$$\lambda(t) = c_2t - \frac{c_2}{2}T + 2c_1 \frac{B}{T} \quad (17)$$

$$u(t) = \frac{c_2}{2c_1} \left(t - \frac{T}{2} \right) + \frac{B}{T} \quad (18)$$

$u(t)$ is only valid for non-negative values. We can apply only zero or some positive effort towards implementing new technologies. We cannot have negative work effort. Increasing u at any particular time t is analogous to crashing the project.

We have examined the necessary conditions for optimality in optimal control. We now explore the sufficiency conditions for optimal control. The necessary conditions above for a minimum cost solution are sufficient if any of the following hold:

$$(i) \quad -c_1u(t)^2 - c_2x(t), \lambda(t)u(t) \text{ are both concave in } x \text{ and } u; \quad (19)$$

$$\lambda(t) \geq 0 \text{ for } t \in [0, T].$$

$$(ii) \quad \lambda(t)u(t) \text{ is linear in } x \text{ and } u; \quad (20)$$

$$\lambda(t) \text{ is unrestricted;}$$

$$-c_1u(t)^2 - c_2x(t) \text{ is concave in } x \text{ and } u \text{ for } t \in [0, T].$$

$$(iii) \quad -c_1u(t)^2 - c_2x(t) \text{ is concave in } x \text{ and } u; \quad (21)$$

$$\lambda(t)u(t) \text{ is concave in } x \text{ and } u;$$

$$\lambda(t) \leq 0 \text{ for } t \in [0, T].$$

The switching time, denoted by t^* , is defined as the time that $u(t)$ switches from a positive to a zero value, or vice versa. Therefore, we solve for t^* such that $u(t^*) = 0$ holds.

$$u(t^*) = 0 = \frac{\lambda(t^*)}{2c_1} \rightarrow \lambda(t^*) = 0 \quad (22)$$

$$\lambda(t^*) = 0 = c_2t^* + k_1 \rightarrow k_1 = -c_2t^* \quad (23)$$

We have introduced another decision variable, t^* , and another condition: $u(t^*)=0$. This new condition permits us to obtain a solution for k_1 . Substituting for k_1 into the expression for $\lambda(t)$, we have:

$$\lambda(t) = c_2t - c_2t^* \quad (24)$$

This can be rewritten as:

$$\lambda(t) = c_2(t - t^*) \quad (25)$$

From Equation (25), we know the following about the optimal solution for $u(t)$:

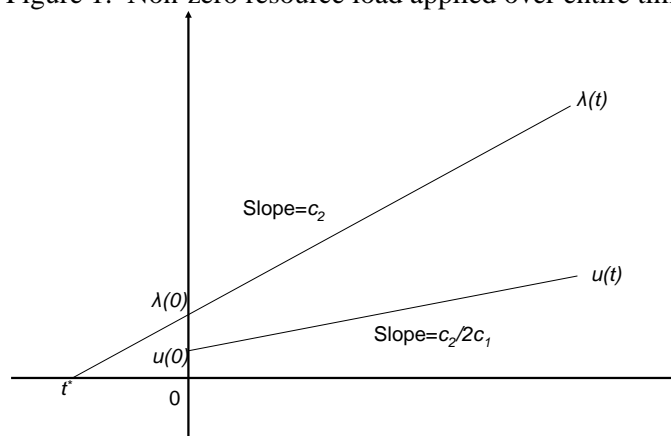
$\lambda(t) > 0$ and $u(t) > 0$ for $t > t^*$, and $\lambda(t) \leq 0$ and $u(t) = 0$ for $t \leq t^*$.

We know that $\lambda(t) = c_2 > 0$ so that $\lambda(t)$ increases at a constant rate over time. Therefore, if a switch occurs, the direction of the switch for $u(t)$ is from zero to a positive value.

For $u(t) > 0$, we know $u'(t) = c_2 / 2c_1 > 0$. Therefore, the rate of increase in $u(t)$ over time is less than the rate of increase in $\lambda(t)$, if $c_1 > 1/2$ holds. We have two possible solutions for t^* : 1) $t^* \in [0, T]$ or 2) $t^* < 0$ holds. We do not need to consider $t > T$. If that were the case, then $u(t) = 0$ over the entire horizon and $x(T) = 0$, violating $x(T) = B$. In other words, we know that $t^* \leq T$ holds. This tells us that $\lambda(T) = c_2(T - t^*) \geq 0$. The two possible cases to consider are shown below.

Case 1: $t^* < 0$ holds so that $u(t) > 0$ over the entire planning horizon.

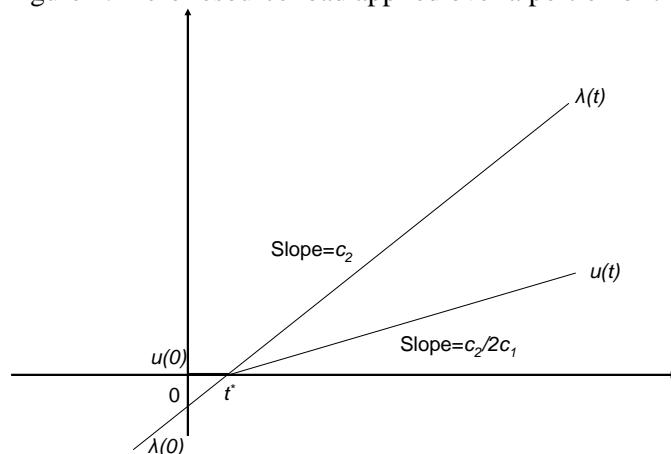
Figure 1: Non-zero resource load applied over entire time horizon



This figure shows the case where the optimal start time of the implementation effort (t^*) is before time 0. This indicates that at all times during the project time horizon, a positive level of resources (u) should be applied.

Case 2: $t^* \geq 0$ holds so that $u(t) = 0$ for $t \in [0, t^*]$ and $u(t) > 0$ for $t \in [t^*, T]$.

Figure 2: Zero resource load applied over a portion of the time horizon



This figure shows the case where the optimal start time of the implementation effort (t^*) is beyond the current date ($t=0$). This indicates that at some portion of the time horizon, no resources will be utilized.

We will use both cases in examples in the following section. Which case applies depends on the sign of $\lambda(0)$. If $\lambda(0)$ is negative, we are in Case 2; otherwise, we are in Case 1. We will first solve the problem assuming we are in Case 2, so that $t^* \geq 0$ holds. We obtain the control variable solution:

$$u(t) = \begin{cases} 0, & \text{for } t \in [0, t^*] \\ \frac{c_2(1-t)}{2c_1} & \text{for } t \in [t^*, T] \end{cases} \quad (26)$$

From the above and given $x'(t) = u(t)$, we obtain the solution for the state variable $x(t)$, the level of capability implemented at time t .

$$x(t) = x(0) + \int_0^t x'(\tau) d\tau = 0 + \int_0^t u(\tau) d\tau \quad (27)$$

Over the time interval $t \in [0, t^*]$, we know $u(t)=0$ thus $x(t)=0$ for $t \in [0, t^*]$.

Next, over the time interval $t \in [t^*, T]$, we have

$$x(t) = x(t^*) + \int_{t^*}^t u(\tau) d\tau = 0 + \int_{t^*}^t \left\{ \frac{c_2(\tau - t^*)}{2c_1} \right\} d\tau \quad (28)$$

$$= \frac{c_2}{4c_1} [t^2 - 2t \cdot t^* + t^{*2}] \quad (29)$$

$$x(t) = \frac{c_2}{4c_1} (t - t^*)^2, \text{ for } t \in [t^*, T] \text{ and } x(t)=0 \text{ for } t \in [0, t^*].$$

To find the optimal switching time t^* for the control solution, we use the terminal condition $x(T)=B$.

$$x(T) = \frac{c_2}{4c_1} (T - t^*)^2 = B \quad (30)$$

$$t^* = T - 2\sqrt{\frac{c_1 B}{c_2}} \quad (31)$$

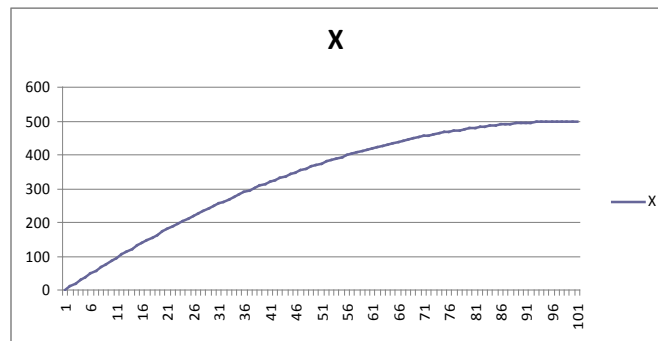
If (31) ≥ 0 then Case 2 holds. Alternatively, if (31) is violated (including where t^* is an imaginary number), we know that $u(t)$ is positive over the entire planning horizon and, therefore, Case 1 holds.

NUMERICAL EXAMPLES

New Sustainable Technology Reduces Operating Costs

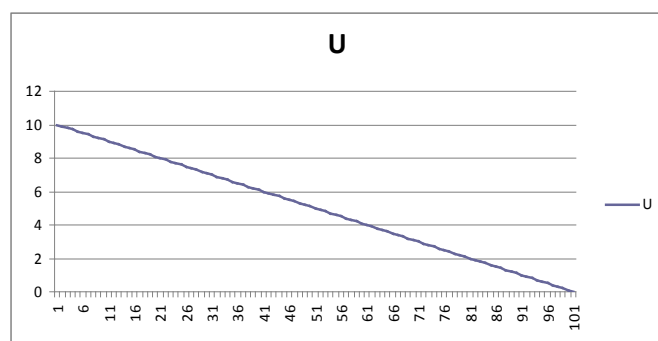
For illustration, assume B is a level of 500 and T is 100 periods away. Assume that $x(0) = 0$ and we start at level 0. In essence, B is the goal so $x(0)=100$ and a B of 600 is then equivalent to $x(0) = 0$ and $B = 500$. We can set $x(0)=0$ without loss of generality. If the cost to implement improvements (c_1) is \$5 per period and the benefit per unit of improvement is \$1 per period ($c_2 = -1$), then we get the following curves:

Figure 3: Level of Technical Capability by Time



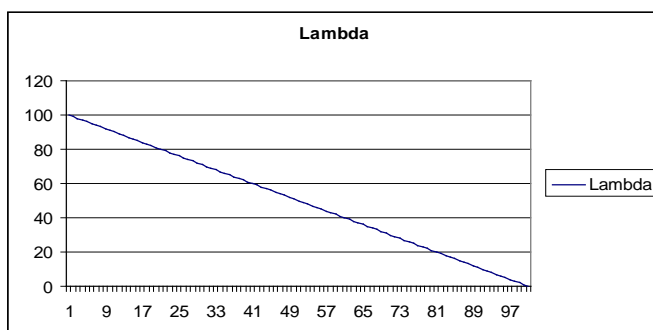
This figure shows an increase in sustainable capability over the entire time horizon. However, because the technology is expensive to operate, it makes sense to implement quickly early in the horizon to reap the cost savings early on.

Figure 4: Implementation Resources Utilized by Time



The figure shows that the project is front-loaded. As mentioned in Figure 3, it is cost beneficial to implement quickly. Therefore, we see that the resources (u) are utilized earlier in the time horizon, diminishing in time.

Figure 5: Marginal Value of Capability Improvement by Time



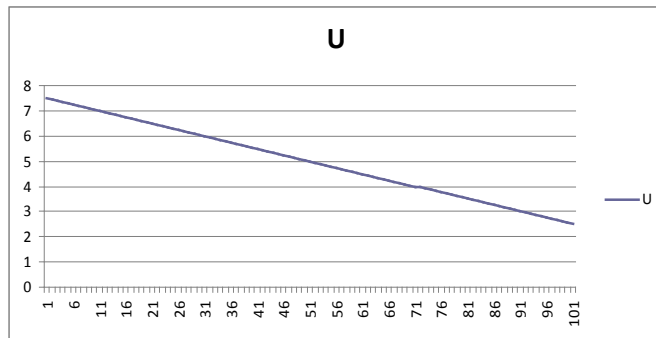
The figure shows that it is worth more to implement the technology improvement early on compared to later in the horizon. Because we can use the less expensive technology as implemented, it follows that it is worth more to begin using the cheaper technology sooner.

We reach our capability goal B at time T , doing more work up front. This allows us to get the new technologies in place and to reap the cost savings throughout the horizon. We linearly decrease our resources applied to the implementation effort. The λ graph shows the marginal value of an additional unit of improvement to the state variable $x(t)$. Notice that it is more cost beneficial to implement the improvement earlier on in the horizon so that the cost savings in operations can be utilized throughout the remainder of the horizon.

New Sustainable Technology Reduces Operating Costs (but project resources are very expensive)

If the implementation cost c_1 is significantly increased over the first example ($c_1 = 10$, $c_2 = -1$), the implementation curve (x) is similar in shape to Figure 3, but flatter. This would be a project with a positive net present value, but with a longer payback than the prior scenario. The resource load in the u graph shown in Figure 6 shows that fewer resources are applied during the early part of the project, but more resources are utilized in the latter part of the project compared to Figure 4.

Figure 6: Implementation Resources Utilized by Time on an Expensive Effort



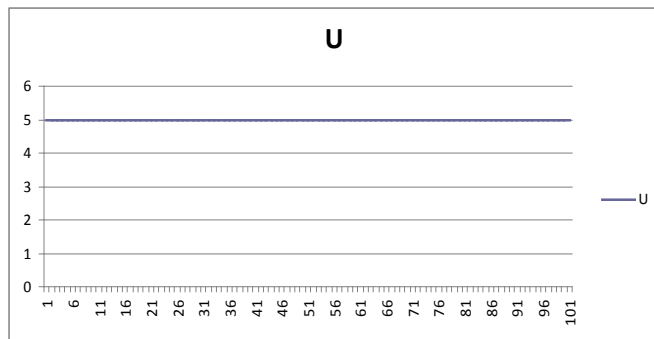
This figure shows that resources are front-loaded as in Figure 4, but the differential between the resources utilized at the beginning of the project and the end is less.

Notice that we still achieve our goal of B at time T , but do so with the effort spread more smoothly over the time horizon. The curve in the x graph is flatter and indicates that we do not front load the schedule to reap operating improvements early on. The cost of disruption from doing too much improvement work per time period offsets any benefits in operating savings due to the new technology. The adjoint variable $\lambda(t)$ is linearly decreasing over time as in our first case. It is more beneficial to implement the new technology earlier in the horizon.

New Sustainable Technology Has Same Operating Costs as Legacy Technology

If we had to implement the technology to meet a regulation or to placate a customer, but there was no internal payback (reduction in cost due to capability), then we would observe the situation shown below where $c_2 = 0$. The new technology is equally efficient to operate compared to the current technology. Notice that the implementation effort is applied evenly across the horizon to minimize disruption. Recall that the implementation effort cost (c_1) is squared ($c_1 u(t)^2$) to account for the dramatically increasing cost due to disruption from doing too much implementation in a single time period. The lowest cost implementation in this scenario is one that smooths the effort over the entire time horizon. In this case, λ is constant for the entire horizon.

Figure 7: Implementation Resources Utilized by Time on a Parity Implementation

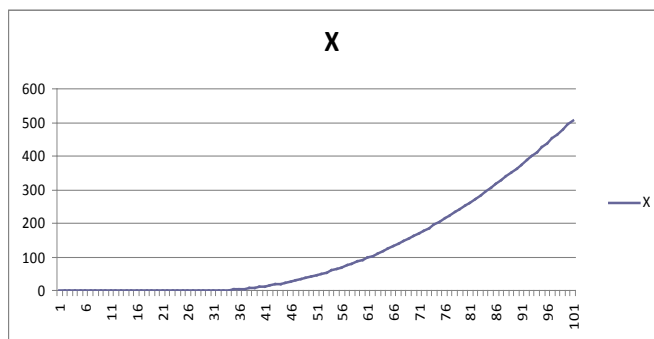


This figure shows the case where the optimal start time of the implementation effort (t^*) is beyond the current date ($t=0$). This indicates that at some portion of the time horizon, no resources will be utilized.

New Technology is More Expensive to Operate than the Legacy Technology

What if the new technology was actually more costly to use than the legacy technology? If c_2 is now 2 (positive indicating that the new technology adds cost – more expensive to operate) and c_1 is at 5, we get the graphs below. We are in Case 2 from section 4 above. An example of this would be a retrofit of a HEPA filter on an existing HVAC system. The air quality would improve after the implementation, but the air resistance would increase, consequently the power required to run the system would increase.

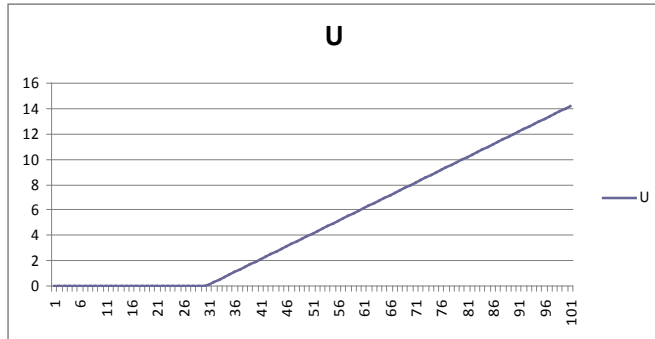
Figure 8: Level of Technical Capability by Time to Replace Low Cost Technology



This figure shows that the optimal strategy is to implement the technology in a just-in-time fashion. The new technology will be more expensive to operate, so we postpone implementation as much as possible to continue using our legacy, less expensive, technology.

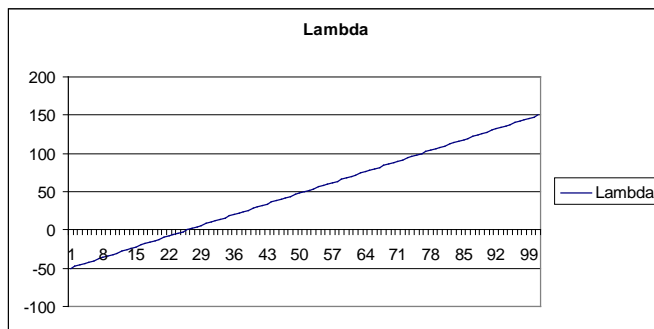
Notice that we increase our capability at an increasing rate once we switch from not implementing at all to beginning the implementation at t^* (at time $t = 29.3$ in this example). Because the new technology is more expensive to operate than the legacy technology, we delay implementation towards the end of the horizon – a more just-in-time approach. The graph of implementation effort $u(t)$ shows linearly increasing implementation effort towards the end of the horizon. The λ graph shows that it becomes increasingly more beneficial to implement the new technology later in the time horizon.

Figure 9: Implementation Resources Utilized by Time to Replace Low Cost Technology



The figure demonstrates that we back load the resources to meet our just-in-time implementation schedule shown in Figure 8.

Figure 10: Marginal Value of Capability Improvement by Time to Replace Low Cost Technology



This figure shows that there is no benefit (≤ 0) to implement the new technology before a certain point in the project time horizon.

Interpretation of Equations

From Equation (16), we know that $x(t) = \frac{c_2}{4c_1}t(t-T) + t \frac{B}{T}$.

The final term, $t(B/T)$, is 0 at $t = 0$ and increases linearly until the term equals B at time $t = T$. The first term, when c_2 is negative (operating cost improvements from new technology), is a concave parabola. When c_2 is positive, the first term is a convex parabola with all points on the line non-positive.

From Equation (17), we know $\lambda(t) = c_2t - \frac{c_2}{2}T + 2c_1 \frac{B}{T}$.

The first two terms can be combined to $c_2(t - T/2)$.

If $c_2 > 0$ (the new technology is more expensive to operate), the term above will be negative for the first half of the horizon ($0, T/2$) and positive for the second half of the horizon ($T/2, T$). This term is a line that crosses the x-axis at $T/2$. Otherwise, when the new technology is less expensive to operate, the above term will be positive for the first half of the horizon and negative for the second half of the horizon.

B/T is positive, as is c_1 . Clearly, as the goal B increases, the marginal value at any time t increases. Because the final term does not vary with t , if $c_2 = 0$, λ does not change over the time horizon. Given the first term includes t , if c_2 is > 0 , then λ is increasing in time. Conversely, if $c_2 < 0$, then λ is decreasing in time.

From Equation (18), we know that $u(t) = \frac{c_2}{2c_1} \left(t - \frac{T}{2} \right) + \frac{B}{T}$.

If c_2 / c_1 is negative (given that c_2 is negative), then $u(t)$ is decreasing over time. Conversely, if this ratio is positive (given c_2 is positive), then $u(t)$ is increasing over time.

MANGIERIAL IMPLICATIONS

If the implementation of new, green technologies and capabilities improves operating efficiencies (lowers cost) then implementation front-loaded in the horizon makes sense. The closer the ratio c_2/c_1 is to zero, the flatter the state variable curve $x(t)$ is. This means that as this ratio gets farther from zero, the curve becomes more concave indicating that the implementation effort should be frontloaded in the horizon. The improvement gap is modeled via the B parameter and is taken into account in our resource allocation per time in Equation (17), directly leading to the capability implemented at time t in Equation (16).

CONCLUSION AND DISCUSSION

Whether implementing new sustainable technology to lower operating costs, to meet market or regulatory requirements, or due to a mandate from the executive level, there is an optimal way to time the application of resources towards the implementation of the new technology. We have shown the closed form analytical solution to the timing of the implementation given the cost parameters for implementation resources and operating cost differential between legacy and new technologies.

REFERENCES

- Bansal, S. & Gangopadhyay, S. (2005) "Incentives for Technological Development: BAT is Bad," *Environmental and Resource Economics*, vol. 30(3), March, p. 345-367.
- Cora, M. (2008) "Increasing Business Value through Proactive Environmental Management and Compliance," *Environmental Quality Management*, vol. 17(3), Spring, p. 45-54.
- Cupryk, M., Takahata, D. & Morusca, D. (2007) "Crashing the Schedule in DCS Validation Pharmaceutical Projects with Lean Six Sigma and Project Management Techniques: Case Study and Discussion," *Journal of Validation Technology*, vol. 13(3), May, p. 222-233.
- Fischer, C., Withagen, C. & Toman, M. (2004) "Optimal Investment in Clean Production Capacity," *Environmental and Resource Economics*, vol. 28(3), July, p. 325-345.
- Fronzel, M., Horbach, J. & Rennings, K. (2007) "End-of-Pipe or Cleaner Production? An Empirical Comparison of Environmental Innovation Decisions Across OECD Countries," *Business Strategy and the Environment*, vol. 16(8), December, p. 571-584.
- Klassen, R. & Whybark, D. (1999) "Environmental Management in Operations: The Selection of Environmental Technologies," *Decision Sciences*, vol. 30(3), Summer, p. 601-631.
- Lockwood, D. (2008) "The REACH Regulation: Challenges Ahead for Manufacturers of Articles," *Environmental Quality Management*, vol. 18(1), Autumn, p. 15-22.

Lopez-Gamero, M., Claver-Cortes, E. & Molina-Azorin, J. (2008) “Complementary Resources and Capabilities for an Ethical and Environmental Management: A Qual/Quan Study,” *Journal of Business Ethics*, vol. 82(3), October, p. 701-732.

Singh, A. (2003) “Accelerated Work-Schedule Design Considering Efficiency Losses for Overtime and Overmanning,” *Engineering, Construction and Architectural Management*, vol. 10(5), p. 312-321.

Sommerhoff, E. (2000) “Design & Construction: Project Delivery in the Fast Lane,” *Facilities Design & Management*, vol. 19(10), October, p. 50-53.

van Soest, D. & Bulte, E. (2001) “Does the Energy-Efficiency Paradox Exist? Technological Progress and Uncertainty,” *Environmental and Resource Economics*, vol. 18(1), January, p. 101-112.

THE JT INDEX AS A PREDICTOR OF THE ECONOMY'S FINANCIAL STABILITY

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ABSTRACT

This article presents a financial scoring model estimated on Czech corporate accounting data, i.e. it is based on an empirical experience of an emerging market. Seven financial indicators capable of explaining business failure at a 1-year prediction horizon are identified through a logit analysis. Using the model estimated in this way, an aggregate indicator of the creditworthiness of the Czech corporate sector (named as JT index) is then constructed and its evolution over time is shown. This indicator aids the estimation of the risks of this sector going forward and broadens the existing analytical set-up used by the Czech National Bank for its financial stability analyses. The results suggest that the creditworthiness of the Czech corporate sector steadily improved between 2004 and 2006, but slightly deteriorated in 2007 what could be explained through global market turbulences. The used methodology might be suitable for decision makers in emerging markets when evaluating the economy's financial stability.

INTRODUCTION

Credit scoring methods are a standard part of financial institutions' risk management processes. They allow lenders to rate the creditworthiness of their potential debtors by estimating the probability of default, (default is generally defined as the failure of an obligor to meet its obligations arising under a loan agreement), with the aim of maintaining a high-quality loan portfolio. The most common type of credit scoring used in banks for the legal entities segment is financial scoring. In this case, companies are rated using financial parameters derived from their accounting statements. The financial scoring process generates a score expressing the company's creditworthiness. This type of model can be applied analogously to aggregate economic data to construct a financial stability indicator based on the creditworthiness of the non-financial sector. From the credit risk assessment perspective, the indicator can be used to complement the sectoral macroeconomic models that have been estimated for the Czech economy and incorporated into the banking sector stress tests (Jakubik, 2007).

The first authors who used logit methodology for bankruptcy prediction were Santomero and Vinso (1977) and Martin (1977), who examined failures in the US banking sector. Ohlson (1980) applied logit methodology more generally to non-banking firms or, for example, Wiginton (1980) used logit regression in his research. Zmijewski (1984) applied probit regression when predicting bankruptcy. The latest progress in credit risk management originates from the Basel II framework, concluded in 2006, which encourages banks to develop their own models in order to decrease their capital requirement while maintaining their solvency Mejstrik et al. (2008). In addition, Jorion (2007), Sironi and Resti (2008) or Sorge and Virolainen (2006) provide a recent review of various credit risk modelling methods.

This article begins with an introduction into credit scoring and bankruptcy prediction models. Section 2 looks briefly at the definition and estimation of scoring models with a primary focus on logit methodology. Section 3 discusses the corporate financial indicators that can be used as explanatory variables for business failure. Section 4 contains a description of the data used to estimate the model and the resulting estimated model is presented. Section 5 then applies the model to data for the entire sector to estimate a creditworthiness indicator for the non-financial corporations sector. The final section summarizes the results.

LOGIT METHODOLOGY

Logistic regression is one of the most commonly used credit scoring methods Hand and Henley (1997) and Rosenberg and Gleit (1994). In this case, it is assumed that the explanatory variables multiplied by the relevant coefficients are linearly related to the natural logarithm of the default rate (referred to as the logit (Mays, 2001) as shown in (1):

$$\ln \frac{s}{1-s} = b_0 + \sum_{i=1}^N b_i x_i, \quad (1)$$

where

s denotes the probability of default of the firm at the one-year forecast horizon,

x_i denotes the financial indicators of the firm,

b_i denotes the coefficients of the relevant scoring function indicators.

This equation can then be used to derive the relationship for the probability of default. This relationship can be expressed using a logit curve.

$$s = \frac{1}{1 + e^{-b_0 - \sum_{i=1}^N b_i x_i}} \quad (2)$$

In the case of financial scoring, financial indicators based on accounting data are considered as the explanatory variables. The coefficients of the function can be estimated using the maximum likelihood method (Baltagi, 2002). Owing to the large number of indicators that can be included in the model, stepwise regression is used to select the variables. This method involves testing various combinations of variables maximising the quality of the model. The model works with a binary dependent variable (0/1) and can be constructed for computation of either the probability of default or the probability of non-default, depending on the definition of the independent variable in the regression. If we denote a “bad firm” with the value 1, the resulting score obtained from the model corresponds to the probability that the firm will default.

THE MODEL OF BANKRUPTCY PREDICTION

In this section we present the financial indicators used as the explanatory variables in model (2), describe data used and finally discuss results of the model.

Financial Indicators

The financial indicators used as the explanatory variables in model (2) can be broken down according to several perspectives – for example the perspectives of lenders, shareholders or state authorities. It is important to emphasize that there is no clear consensus either in theory or in practice on the ideal method for analyzing the financial indicators. In the literature, various authors present various breakdowns of relative indicators – see, for example, Damodaran (2002), Easton et al. (2007) or McKinsey et al. (2005).

Given the primary aim of our research, namely to construct a financial stability indicator based on the prediction of business failure, we chose 22 indicators and divided them into four main groups: liquidity indicators, solvency indicators, profitability indicators and activity indicators (Appendix 1). For each indicator we also indicate its theoretical influence on business failure (positive or negative). To estimate model (1), the financial indicators obtained using the relationships given in Table 1 were further

transformed into their relative order vis-à-vis the data sample used. In this way, each indicator value was transformed into a number lying in the interval (0,1). This simple transformation makes the model estimate more robust to outlying values of the indicators considered.

Data Used

For our research we used the large database of the Czech Capital Information Agency (CEKIA), which contains the accounting statements (balance sheets and profit-and-loss accounts) of selected Czech firms for the period 1993–2005. Of the total of 31,612 firms in the database, 932 went bankrupt. Since some of the accounting statements were sparse, we focused on the records of firms whose main economic activity (NACE) was filled in, because for these firms most of the accounting items were filled in as well. In order to estimate the scoring function, from the firms that went bankrupt we initially selected only those for which there was accounting data one year prior to the declaration of bankruptcy. There were 151 such firms. We excluded from our analyses those firms which underwent composition. There were only nine such cases in the database. Unlike bankruptcy, composition is not associated with the dissolution of the legal entity. Then, for the sample of firms that did not fail in the period under review we selected only those for which we had accounting statements for at least two consecutive years. The data sample for the estimation of the model was constructed so as to best capture the true data structure.

In all, 606 good firms were ultimately selected using this procedure. The data sample thus contained a total of 757 firms, which were divided into two categories according to whether they went bankrupt in the period following the period for which the accounting data were selected for the company in question. According to the econometric literature, when the event of interest is rare, logistic regression underestimates the influence of the characteristics on the event, so an artificial sample is generated and the estimated values are further transformed so that they match the incidence in the population.

RESULTS OF THE MODEL

The resulting model (3) confirmed the relationships between the liquidity, solvency, profitability and activity indicators and business failure. The best statistical properties were shown by the model containing seven statistically significant indicators (of the 22 considered in all). These included three solvency indicators (*financial leverage I and II and interest coverage*), two profitability indicators (*return on equity and gross profit margin*), one liquidity indicator (*cash ratio*) and one activity indicator (*inventory ratio*). The resulting model takes the following form:

$$\text{score} = \frac{1}{1 + e^{-(b_0 + b_1 r_3^* + b_2 r_4^* + b_3 r_5^* + b_4 r_7^* + b_5 r_{12}^* + b_6 r_{19}^* + b_7 r_{20}^*)}} \quad (3)$$

where

score expresses the risk of the firm, which is linked to the probability that the firm will go bankrupt at the one-year horizon,

r_i denotes the individual financial indicators of the firm,

b_i denotes the coefficients of the relevant scoring function indicators,

* denotes the relative order operator in per cent, which returns the relative order of the value of a given indicator for a given firm vis-à-vis the full data sample used to estimate the model.

As the model is based on the relative order of the indicators in the sample, the estimated coefficients of the function express their relative importance. The larger is the indicator's coefficient (in absolute terms), the larger is its weight in the scoring function. From this perspective, interest coverage, cash ratio and financial leverage I appear to be the most important indicators (Table 1).

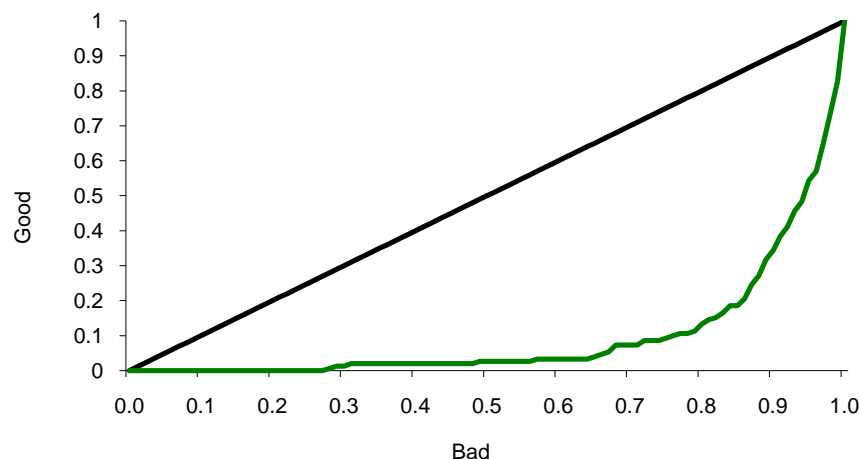
Table 1: Estimated Scoring Model

Variable	Type	Notation of Ratio	Notation of Coefficient	Coefficient	Standard Error	Significance
Constant	-	-	b_0	1.4838	0.8766	0.090526
Leverage I	Solvency	r3	b_1	1.1205	0.3399	0.000977
Leverage II	Solvency	r4	b_2	3.4580	0.7218	0.000002
Interest coverage	Solvency	r5	b_3	-3.1748	0.6627	0.000002
Gross profit margin	Profitability	r7	b_4	1.2181	0.3321	0.000245
Inventory ratio	Activity	r12	b_5	-2.3915	0.9363	0.010643
Cash ratio	Liquidity	r19	b_6	-3.3022	0.3960	0.000000
Return on equity	Profitability	r20	b_7	-2.8304	0.5573	0.000000

The table presents key variables for the Estimated scoring model. The numbers come from authors' calculations.

The aim of the scoring model is to correctly separate good and bad firms. This property expresses the quality of the estimated function. To measure it, one can use the Gini coefficient, for example. The value of this coefficient should be as close as possible to 1, which would mean a 100% ability to separate firms in terms of their quality using the scoring function. The quality of the model can be demonstrated graphically by means of a histogram or a Lorenz curve (Figure 1).

Figure 1: Lorenz Curve of Estimated Scoring Function



The figure shows the cumulative distribution of the scores of good and bad firms and is based on authors' calculations.

Figure 1 depicts the cumulative distribution of the scores of good and bad firms of the model. In the ideal case, guaranteeing a 100% rate of separation, this curve would take the form of a right angle. From the Lorenz curve one can compute the "Gini coefficient" as the ratio of the area enclosed by the green curve and the black diagonal and the total area below that diagonal. The generally accepted Gini coefficient for this type of model fluctuates above 60% depending on the data used and the purpose of the scoring (Mays, 2001). With a Gini coefficient of 80.41%, our estimated model satisfies the requirement of a sufficient rate of separation of the firms on the data sample used. This result is comparable to Zmijewski (1984), who recorded 76% accuracy of classification when employing probit regression.

Use of the Model to Assess the Financial Stability of the Economy

Financial scoring is routinely used to assess the creditworthiness of individual firms. If we have aggregated data for the whole non-financial sector, we can imagine this sector as one large hypothetical firm with an aggregated balance sheet. Alternatively, given the use of relative indicators only, we can

view the aggregated indicators as characteristics of the average firm in the sector. Assuming a degree of homogeneity, the estimated model can be applied to the aggregated indicators of non-financial corporations. If the situation in the sector takes a turn for the worse, the financial indicators of firms will deteriorate on average. This will be reflected in a falling score of the average representative firm. However, the scope and inhomogeneity of the sample of firms on which the model was estimated place some limitations on the model. We could get better results by decomposing the sample into several more homogeneous segments and then estimating the model for these groups of firms separately. In the ideal scenario, we would segregate the firms by size and area of economic activity. Owing to the small number of bad firms in the data source used, however, this is not possible.

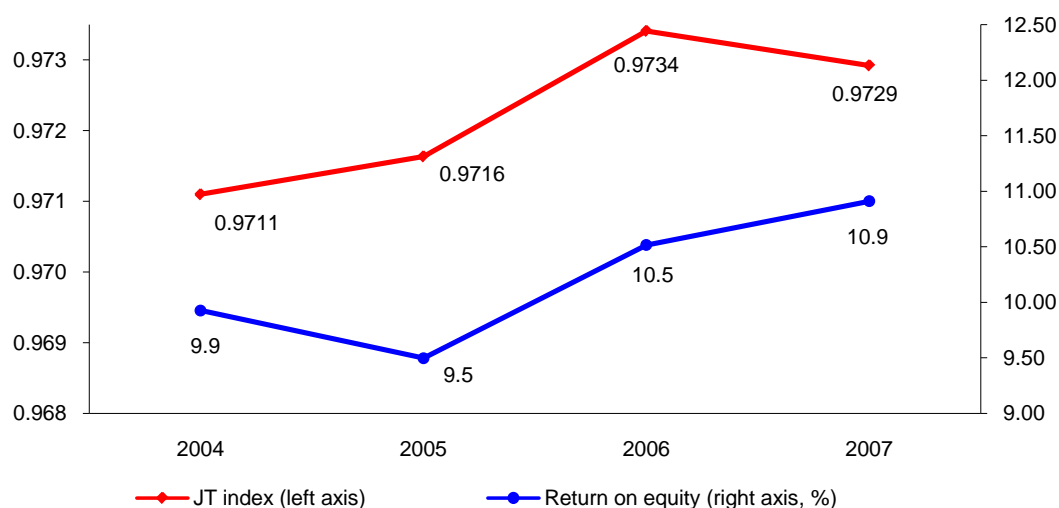
An aggregated balance sheet can be obtained for Czech firms from the publicly available data of the Czech Statistical Office, which has data containing the economic results of non-financial corporations. This data is published in a sufficiently detailed structure (to enable the construction of the seven aforementioned indicators included in the model) only for corporations with 100 employees or more. The seven indicators obtained in this way (r_3 , r_4 , r_5 , r_7 , r_{12} , r_{19} and r_{20}) are substituted into (3) to give an aggregated score representing the level of risk of the entire sector.

The resulting score was computed for 2004–2007. The value of the creditworthiness indicator (the 1-score) or JT index, named after the authors of this study, for 2004–2007 (Figure 3) can be interpreted as the creditworthiness of the non-financial sector for the one-year prediction horizon. This indicator is related directly to the probability of default of the corporate sector. By contrast with the original data sample, the model is only applied to data on firms with 100 employees or more, but one can get some idea of the evolution of the corporate sector over time. Given the aforementioned limitation, the resulting score is probably underestimated and thus the creditworthiness is overestimated, owing to the higher level of risk of the small enterprises excluded from the aggregate data.

For financial stability purposes, however, the dynamics of this indicator over time are more important than its absolute level. The results suggest a steady improvement in the creditworthiness of the non-financial sector between 2004 and 2006 in line with the positive macroeconomic trend. The results of the model are consistent with the conclusions contained in the 2006 Financial Stability Report, according to which 2006 was an extraordinarily successful year for the large corporations sector and the outlook for 2007 was favorable (CNB, 2007). The constructed indicator offers a more comprehensive aggregate view of the riskiness of the sector as a whole going forward.

However, the JT index for 2007 is somewhat lower than that for 2006, but is still higher than that for 2005 (Figure 3). This slight deterioration can be explained through global market turbulences in the year 2007. According to these results, the Czech corporate sector risk should show a modest increase in 2008 (i.e. the JT index should decline).

Figure 2: JT Index for the Czech Non-Financial Corporate Sector in The 2004-2007 Period



The figure presents JT index development for the Czech non-financial corporate sector in 2004-2007 is based on data provided by the Czech Statistical Office and authors' calculations..

CONCLUSION

Financial scoring is a method used to assess the creditworthiness of obligors and thus is frequently used by lenders when deciding whether or not to provide credit products. Implementation of this method can reduce creditors cost and subsequently increase their profit. A new wave of interest originated with the introduction of the New Basel Capital Accord known as Basel II. The aim of credit scoring is an estimation of a firm's default probability.

This study showed that it is possible to use these traditional methods to monitor the financial stability of the corporate sector. Using accounting data on Czech firms, a scoring model based on seven financial indicators was estimated using logistic regression. Our result revealed that leverage indicators, interest coverage, gross profit margin, inventory ratio, cash ratio and return on equity have a sufficient power to predict firm's bankruptcy. By applying this model to the aggregate financial results of non-financial corporations, the scores of the Czech corporate sector as a whole – corresponding to its level of risk for the one-year prediction horizon – were calculated for 2004–2007. The results of our study suggest that the creditworthiness of the Czech non-financial corporate sector (JT index) improved between 2004 and 2006. However, the JT index for 2007 slightly deteriorated what could be explained through global market turbulences. This indicator will be incorporated into the quantitative system used by the Czech National Bank to assess financial stability. The calculated score will be used each year as auxiliary information for evaluating the probability of the corporate sector running into difficulties at the one-year prediction horizon. The used methodology for the construction of the JT index might be suitable for decision makers in emerging markets when evaluating the economy's financial stability.

APPENDIX

Appendix 1: Financial Indicators Used

Ratio	Definition	Notation	Expected Impact
Liquidity Ratios			
Current ratio	$\frac{\text{current assets}}{\text{current liabilities}}$	r1	-
Quick ratio	$\frac{\text{cash} + \text{ST}^* \text{ receivables}}{\text{current liabilities}}$	r2	-
Cash ratio	$\frac{\text{working capital}}{\text{assets}}$	r19	-
Working capital	$\frac{\text{financial assets}}{\text{current liabilities}}$	r15	-
Capitalization ratio	$\frac{\text{fixed assets}}{\text{long-term liabilities}}$	r10	-
Solvency Ratios			
Leverage I	$\frac{\text{debt}}{\text{equity}}$	r3	+
Leverage II	$\frac{\text{LT}^{**} \text{ debt} + \text{LT}^{**} \text{ bonds}}{\text{equity}}$	r4	+
Leverage III	$\frac{\text{debt}}{\text{assets}}$	r14	+
Debt payback period	$\frac{\text{LT}^{**} \text{ debt} + \text{ST}^* \text{ debt}}{\text{operating profit} + \text{interest expenses} + \text{depreciation}}$	r9	+
Interest coverage	$\frac{\text{operating profit} + \text{interest expenses}}{\text{interest expenses}}$	r5	-
Cash-flow I	$\frac{\text{net profit} + \text{depreciation}}{(\text{debt} - \text{reserves})/365}$	r6	-
Cash-flow II	$\frac{\text{net profit} + \text{depreciation}}{\text{debt}/365}$	r13	-
No credit interval	$\frac{\text{money} + \text{ST}^* \text{ payables} + \text{LT}^{**} \text{ payables}}{\text{operating expenses}}$	r16	-
Retained earnings	$\frac{\text{retained earnings}}{\text{assets}}$	r17	-
Profitability Ratios			
Gross profit margin	$\frac{\text{operating profit}}{\text{sales}}$	r7	-
Return on assets	$\frac{\text{operating profit}}{\text{assets}}$	r8	-
Return on equity	$\frac{\text{net profit}}{\text{equity}}$	r20	-
Net profit margin	$\frac{\text{net profit}}{\text{sales}}$	r21	-
Activity Ratios			
Average receivable collection period	$\frac{\text{receivables}}{\text{sales}/365}$	r11	+
Inventory ratio	$\frac{\text{inventories}}{\text{sales}/365}$	r12	+
Sales turnover	$\frac{\text{sales}}{\text{assets}}$	r18	-
Payables ratio	$\frac{\text{ST}^* \text{ payables}}{\text{sales}/365}$	r22	+

REFERENCES

- Baltagi, B. D. (2002). *Econometrics*, Springer.
- BIS (2006). *International Convergence of Capital Measurement and Capital Standards: A Revised Comprehensive Framework*, Bank for International Settlements.
- CNB (2007). *Financial Stability Report 2006*, Czech National Bank.
- CNB (2008). *Financial Stability Report 2007*, Czech National Bank.
- Damodaran, A. (2002). *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset*, 2nd Edition, John Wiley & Sons.
- Easton, P. J. & Wild, R. Halsey & M. McAnally (2007). *Financial Accounting for MBAs*, 3rd edition, Cambridge Business Publishers
- Hand, D. & Henley, W. (1997) "Statistical Classification Methods in Consumer Credit Scoring: A Review", *Journal of the Royal Statistical Society*, vol. 160, no. 3, p. 523–541.
- Hillegeist, S., Cram, D. & Keating E. & Lundstedt K. (2004), "Assessing the Probability of bankruptcy", *Review of Accounting Studies*, vol. 9, no. 1, p. 5–34.
- Jakubík, P. (2007) "Macroeconomic Environment and Credit Risk", *Czech Journal of Economics and Finance*, vol. 57, no. 1 and 2, p. 60–78.
- Jorion, P. (2007). *Financial Risk Manager Handbook*, Wiley Finance.
- Martin, D. (1977) "Early warning of bank failure: A logit regression approach", *Journal of Banking and Finance*, vol. 1, no. 6, p. 249-276.
- Mays, E. (2001). *Handbook of Credit Scoring*, Glenlake Publishing Company, Ltd.
- McKinsey et al. (2005). *Valuation – Measuring and Managing the Value of Companies*, 4th edition, John Wiley & Sons.
- Mejstrik, M., Pecena, M. & Teplý, P. (2008), *Basic Principles of Banking*, Karolinum Press, Prague, Czech Republic.
- Ohlson, J. (1980) "Financial ratios and the probabilistic prediction of bankruptcy", *Journal of Accounting Research*, vol. 18, no. 1, p. 109-131.
- Rosenberg, E. & Gleit, A. (1994) "Quantitative Methods in Credit Management: A Survey", *Operations Research*, vol. 42, no. 4, p. 589–613.
- Santomero A. & Vinso J.D. (1977) "Estimating the Probability of Failure for Commercial Banks and the Banking System", *Journal of Banking and Finance*. vol. 1, p. 185-205.
- Sironi A. & Resti A. (2007). *Risk Management and Shareholders' Value in Banking*, 1st edition, Wiley.
- Sorge, M., Virolainen, K. (2006) "A comparative analysis of macro stress-testing methodologies with application to Finland", *Journal of Financial Stability*, vol. 2, p. 113-151.
- Thomas, L. C., Edelman, D. B. & Crook, J. N. (2002). *Credit Scoring & Its Applications*, Society for Industrial Mathematics, 1st edition.
- Wiginton, J.C. (1980) "A note on the comparison of logit and discriminant models of consumer credit behavior", *Journal of Finance and Quantitative Analysis*, vol. 15, p. 757-76.
- Zmijewski, M. (1984) "Methodological issues related to the estimation of financial distress prediction models", *Journal of Accounting Research*, vol. 22, supplement, p. 59-82.

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SUSTAINABILITY AS A CATALYST FOR CURRICULUM RE-DESIGN OF A SUPPLY CHAIN PROGRAM

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ABSTRACT

This paper discusses a benchmarking study conducted over the summer of 2008 as part of the ongoing re-design of our Supply Chain & Operations Management (SC & OM) curriculum to reflect an underlying theme of sustainability (or the triple bottom line) in all of our Supply Chain & Operations Management major courses. We performed a gap analysis of our Supply Chain & Operations Management program compared to nineteen other undergraduate programs in Supply Chain and/or Operations Management in the United States. We found only one other program that required a course in sustainability and no other programs that require elements of sustainability within other courses required in their programs. In addition, we found that we needed to add a required course in Purchasing and Transportation to cover both of those subject areas in greater depth.

INTRODUCTION

The first widespread definition of sustainable development was presented in *Our Common Future* (World Commission on Economic Development, 1987, p. 8) in which sustainable development was described as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” Later, other authors, e.g., Elkington (1994, 1998), expanded the definition of sustainability to include the triple bottom line of economic, environmental, and social performance. Factors driving proactive corporate environmental management include cost factors (pollution control, pollution prevention, and costs savings from waste reduction), regulatory demands (more stringent regulations, increasing liabilities, and stricter enforcement), stakeholder forces (public demand for environmental protection, customer demand for clean processes and products, shareholder aversion to risk), and competitive requirements (new business opportunities, international trade agreements, spread of quality management principles, and voluntary standards) (Berry & Rondinelli, 1998).

This paper discusses a benchmarking study conducted over the summer of 2008 as part of the ongoing re-design of our Supply Chain & Operations Management (SC & OM) curriculum to reflect an underlying theme of sustainability (or the triple bottom line) in all of our Supply Chain & Operations Management major courses. We performed a gap analysis of our Supply Chain & Operations Management program compared to nineteen other undergraduate programs in Supply Chain and/or Operations Management in the United States.

The remainder of this paper is sub-divided as follows. First, we discuss the literature related to integrating sustainability into supply chain management activities. Second, we discuss how universities have integrated sustainability in their curricula. Third, we discuss how various Colleges of Business have integrated sustainability in their curricula. Fourth, we describe the findings of the gap analysis of our program that we performed during the summer of 2008. Fifth, we discuss the proposed changes to our program.

INTEGRATING SUSTAINABILITY INTO SUPPLY CHAIN MANAGEMENT

Wu and Dunn (1995) were some of first authors to introduce the concept of greening the supply chain. They proposed a model that showed how daily operational decision-making impacts overall firm environmental performance up and down the supply chain. Markley and Davis (2007) argued that one of the few remaining ways that companies can hope to find competitive advantage is through a sustainable supply chain. Preuss (2005) suggested that sustainable supply chain management should focus on the following five areas: (1) Products to be purchased (buying greener), (2) Manufacturing processes used by suppliers (the buying company could require that suppliers be accredited to an environmental management standard), (3) Supplier assessment (the buying company could include environmental performance in its assessment of suppliers), (4) Manufacturing processes within the manufacturing company itself (internal initiatives), and (5) Downstream logistics activities (product recovery, recycling, and improved coordination of incoming and outbound shipments).

INTEGRATING SUSTAINABILITY INTO UNIVERSITY CURRICULA

UNESCO trumpeted the importance of education for sustainable development when it declared 2005-2014 the United Nations Decade of Education for Sustainable Development (Education for Sustainable Development). The Association of University Leaders for a Sustainable Future (About ULSF) promotes sustainability education as a critical focus of teaching, research, and operations at universities worldwide (its members include more than 350 university presidents and chancellors from more than 40 countries who have signed the 1990 Talloires Declaration). Moore (2005) made seven recommendations for sustainability at the university level: (1) Infuse sustainability into all university decisions, e.g., update the sustainability development policy, use sustainability as the overall goal of the university, and use the campus as living/learning laboratory; (2) Promote and practice collaboration, e.g., create incentives for collaboration, implement broader based admissions standards, and promote group work; (3) Promote and practice transdisciplinarity, e.g., increase program flexibility for undergraduate students, redesign programs, and promote reflection of worldviews; (4) Focus on personal and social sustainability, e.g., increase job security for lecturers, reduce workloads, and promote personal wellness; (5) Integrate planning, decision making and evaluation, e.g., by creating appropriate criteria for evaluation and rewarding of faculty; (6) Integrate research, service, and teaching, e.g., promote the scholarship of teaching and community service learning; (7) Create space for pedagogical transformation, e.g., create space and time for reflection, dialogue, and action. Regarding curriculum change at the university level, Kagawa (2007) cautioned that students strongly associate sustainability with environmental aspects; therefore, curriculum changes must demonstrate the connections between the other two aspects of sustainability—economic and social. Integration of sustainability in non-business curricula appears to be strong in the engineering disciplines in particular (e.g., El-Zein, Airey, Bowden & Clarkeburn, 2008; Lourdel, Gondran, Laforest, & Brodhag, 2005; Mulder, 2004). This is not surprising given engineering's influence in product design, process design, project management, etc.

INTEGRATING SUSTAINABILITY INTO BUSINESS SCHOOL CURRICULA

As sustainability topics have become more prevalent in universities as a whole, those topics have filtered into business school curricula. For example, the Aspen Institute Center for Business Education (Beyond Grey Pinstripes, 2007-2008), in its most recent study of full-time 112 MBA programs accredited by AACSB, found that 35 of those MBA programs offer a special concentration or major that allows students to focus on social or environmental issues; however, the proportion of schools requiring content in core courses regarding social and environmental issues remains low. Murray (2006) also lamented the fact that sustainability topics are often taught as optional units rather than integrated into mainstream business courses. In another study, Biello (2005) cited sixty courses in sustainability offered in accredited graduate programs and in two non-accredited business schools (Bainbridge Graduate Institute and

Presidio School of Management) that offer MBAs in sustainable business. Much of the literature concerning sustainability in business schools appears to focus on what skills students should develop and how to integrate sustainability into the curriculum. These topics are discussed below.

Some authors emphasize the development of students' skills when integrating sustainability into the business curriculum. For example, Kearins and Springett (2003) advocated that instructors develop the following skills in students: Reflexivity, critique, and social action/engagement. Reflexivity would require students to reflect on the personal and societal values that impact on personal and management decisions. Critique requires students to consider issues of power and ideology that shape a given reality, e.g., the way in which a company is organized, to challenge those issues, and to investigate organizational forms that are more democratic. Social action/engagement motivates students to think about ways in which they could act in a more sustainable manner and how they could facilitate making their broader environment more sustainable. Bradbury (2003) discussed experiential exercises in sustainability geared toward management, organization behavior and strategy courses. The intent of these experiential exercises is to prod students into questioning what sustains their own lives, the lives of others close to them, and the organizations in which they work. The experiential exercises could be designed around case studies of companies that have implemented sustainability concepts, personal vision quests (walking around campus and pondering issues important to themselves), exercises that require students to reflect on their personal use of natural resources, and participating in projects to make an environmental improvement.

As for research on integrating sustainability into undergraduate business curricula, Bridges and Wilhelm (2008) proposed a framework for integrating sustainability into a marketing curriculum. They discussed a 4Ps (product, price, place/distribution, and promotion) approach to curricula in sustainable marketing by which sustainability issues could be included in courses as the 4Ps are presented. They then described an MBA elective that they developed along with their use of current readings and cases that focus on sustainability. Their future plans include adding an experiential learning activity to the course, creating a database of marketing internships with sustainable firms, requiring students to develop a marketing plan for making the university more sustainable, and starting a speaker series on sustainable marketing strategies.

INTEGRATING SUSTAINABILITY INTO SUPPLY CHAIN MANAGEMENT CURRICULA

Inclusion of sustainability topics in supply chain management courses appears to be very limited. Bandyopadhyay (2004) conducted a study of thirty supply chain courses offered by AACSB accredited universities and identified fourteen key areas. Reverse logistics/green issues was one of the key areas listed. Roome (2005) reported on a Sustainability and Supply-Chain Management residency (module) offered by OneMBA, a consortium of five MBA programs located in Hong Kong, Brazil, Mexico, Europe, and the U.S. This module used three different types of pedagogy: (1) Lectures, (2) Experiential learning (cases, exercises, projects, and role playing), and (3) Visits to companies. Based on our research, examples of integrating sustainability principles into supply chain management undergraduate programs appear to be almost non-existent except for our program (described below). We believe that our Supply Chain & Operations Management program is unique with its emphasis on sustainability. That belief, coupled with our desire to improve the subject matter in our major, led us to conduct a gap analysis comparing our program to other Supply Chain and/or Operations Management programs in the U.S. That analysis is presented in the subsequent section.

GAP ANALYSIS OF UW OSHKOSH SUPPLY CHAIN PROGRAM

Our analysis comparing our Supply Chain management program to other similar programs is presented next. First, we discuss the current state of the program (as of December 2008). Second, we provide a list of the twenty programs studied (19 other programs along with ours). Third, we provide a summary of courses required by all programs. Fourth, we generalize on the primary focus of these programs. Fifth, we analyze the strengths and weaknesses of our program compared to other programs.

Current State of UW Oshkosh Supply Chain Program (May 2008)

The purpose of this gap analysis was to assess our Supply Chain & Operations Management program in the College of Business relative to similar programs at other universities. We studied nineteen programs in Supply Chain Management and/or Operations Management. Note: We intentionally excluded programs with a primary focus on Engineering, Management Science, or Transportation because those types of programs are either so vastly different from our current program or would require expertise from a major (e.g., Engineering) not currently offered by UW Oshkosh.

As of May 2008, our program required 18 hours of required courses: BUS 342: Analytical Methods, BUS 343: Manufacturing Planning & Control, BUS 344: Supply Chain Management, BUS 445: Supply Chain Strategy, BUS 450: Environmental Management, and BUS 460: Advanced Quality Management. We also required 3 hours of electives in a Junior or Senior course offered in the College of Business (we have been advising students to take an elective in Sourcing that we have offered over the last 3 semesters). Table 1 highlights the topics taught and pedagogy used in each course. As of May 2008, sustainability-related topics and pedagogy were included in BUS 343 (Manufacturing Planning & Control), BUS 344 (Supply Chain Management), BUS 445 (Supply Chain Strategy), and BUS 450 (Environmental Management). BUS 343 includes discussion of remanufacturing along with readings of three sustainability articles. BUS 344 includes discussion of reverse logistics. BUS 445 requires students to maintain a reflection journal in which they must consider how they think, who influences their thinking, how fair their thinking is, the role of media in their perceptive process, all with a strong focus on social issues (both international and U.S.). BUS 450 is our Environmental Management course and includes a broad array of topics (shown in Table 1).

Identification of Universities with Supply Chain and/or Operations Management Programs

First, we identified universities with APICS Student Chapters. APICS is an organization that emphasizes both Supply Chain Management and the traditional Operations Management fields (APICS Student Chapter Locator, 2008). We used personal knowledge of universities with comparable programs to develop our list of programs also. Table 2 contains the list of the twenty Supply Chain and/or Operations Management programs that we studied.

Required Courses of Supply Chain and/or Operations Management Programs

Our next step was to study the College of Business web site of each program to identify the supply chain courses required by each program. In particular, we studied syllabi and course requirements posted on the web sites to determine which course were similar even though the course names were different. The results (in descending order) are shown in Table 3 below:

Table 1. Topics Taught & Pedagogy Used in UW Oshkosh SC & OM Required Courses (May 2008)

Course Number: Name	Topics Taught; Pedagogy
BUS 342: Analytical Methods	Topics: Linear programming, project scheduling, waiting line models, simulation, decision analysis, multicriteria analysis, green technology analysis. Pedagogy: Lecture & cases requiring the use of Excel Solver.
BUS 343: Manufacturing Planning & Control	Topics: Types of manufacturing processes, remanufacturing, forecasting, sales & operations planning, master scheduling, material requirements planning, capacity planning, production activity control, JIT/lean, theory of constraints, inventory management. Pedagogy: Lecture; cases requiring the use of Excel Solver; reading and discussing three sustainability articles related to topics such as sustainability and its impact on operations management (Inman, 1999), Green MRP (Melnik, Sroufe, Montabon, Calantone, Tummula, & Hinds, 1999), and accounting for waste when planning capacity (Guide, Srivastava, & Spencer, 1996).
BUS 344: Supply Chain Management	Topics: Supply chain flows; drivers of supply chain performance; supply chain metrics; designing distribution networks; warehousing, packaging, and materials handling; project management; planning supply and demand in the supply chain; quantity discounts; safety inventory; transportation modes and costs, reverse logistics, sourcing decisions; information technology; coordinating the supply chain. Pedagogy: Lecture & cases requiring the use of Excel Solver.
BUS 445: Supply Chain Strategy	Topics: Strategy, integration, technology, facilities, lean/quality, organizational design. Pedagogy: Lecture, cases, major project, journal, on-line discussion.
BUS 450: Environmental Management	Topics: Environmental issues, regulation, green design (facility, product, process), cultural impact. Pedagogy: Lecture, cases, guest speakers, project, on-line discussion.
BUS 460 Advanced Quality Management	Topics: Quality gurus, total quality management, statistical process control, quality award, ISO 9000, seven management and planning tools, six sigma principles, measurement systems analysis, design of experiments, failure mode and effects analysis. Pedagogy: Lecture & cases.

Table 2: List of Supply Chain and/or Operations Management Programs Studied

University	Web Address of Supply Chain and/or Operations Management Program
Auburn University	http://business.auburn.edu/
Arizona State University	http://www.eller.arizona.edu/
Ball State University	http://cms.bsu.edu/Academics/CollegesandDepartments/MillerCollegeofBusiness.aspx
Boise State University	http://cobe.boisestate.edu/
Bowling Green State University	http://www.business.bgsu.edu/cba/index.html
California State University – Chico	http://www.csuchico.edu/cob/
Colorado State University	http://www.biz.colostate.edu/
Miami University	http://www.fsb.muohio.edu/
Michigan State University	http://www.bus.msu.edu/
Northern Illinois University	http://www.cob.niu.edu/
Penn State University	http://www.smeal.psu.edu/
Syracuse University	http://www.whitman.syr.edu/
University of Arizona	http://www.eller.arizona.edu/
University of Delaware	http://www.lerner.udel.edu/
University of Wisconsin – Eau Claire	http://www.uwec.edu/cob/
University of Wisconsin – Milwaukee	http://www4.uwm.edu/business/
University of Wisconsin Oshkosh	http://www.business.uwosh.edu/currentstudents/undergraduate/majors/supplychain.php
University of Wisconsin – Stout	http://www.uwstout.edu/programs/bsba/
University of Wisconsin – Whitewater	http://www.uww.edu/cobe/
Western Michigan University	http://ism.hcob.wmich.edu/

Table 3: Supply Chain & Operations Management Required Courses

Course	Number of Programs Requiring Course
Supply Chain Management/Logistics	16
Operations Planning & Control	13
Quality Management	10
Strategy/Applied Projects/Cases/Capstone Course	10
Purchasing	8
Transportation/Distribution	7
Management Science/Analytical Methods/Quantitative Business Analysis	4
Enterprise Systems	4
Project Management	3
Modeling/Spreadsheets	3
Sustainability/Environmental Management	2
Productivity Improvement	2
Negotiations	1
Safety	1

Focus of Programs

1. Supply Chain Management/Supply Chain & Operations Management (11 programs): Auburn, Arizona State, Cal State – Chico, Colorado State, Michigan State, Syracuse, Bowling Green, Miami of Ohio, UW Oshkosh, UW – Milwaukee, and UW – Whitewater.
2. Traditional Operations Management (5 programs): Arizona, Delaware, Ball State, UW – Eau Claire, and UW – Stout.
3. Supply Chain Management & Information Systems (3 programs): Boise State, Northern Illinois, and Penn State.
4. Supply Management (1 program): Western Michigan.

Strengths & Weaknesses of UW Oshkosh SC & OM Program

Strengths of the UW Oshkosh program are as follows:

1. The program includes the top four courses required by all programs studied: Supply Chain Management, Operations Planning & Control, Quality Management, and a Capstone course.
2. The focus of the program is fairly broad and similar to ten of the other programs studied.
3. The required course in Sustainability is still unique—only one other program (Colorado State University) has a required course in Sustainability. No other programs integrate sustainability topics throughout their curricula.

Weaknesses of the UW Oshkosh program are as follows:

1. The program does not require a course in Purchasing (required by 8 other programs).
2. The program does not require a course in Transportation (required by 7 other programs).
3. BUS 342 and 460 need sustainability topics and pedagogy added to them.
4. The pedagogy in the remaining courses needs to be improved—the number of experiential exercises in sustainability is still too low and the articles on sustainability are no longer current.

UW Oshkosh SC & OM Program Improvements

1. We have revised each course description to include a statement that reads, “This course covers subject matter that incorporates the triple bottom line of economics, social equity, and environmental outcomes.” This statement became our guiding principle as we started to revise the requirements for the program along with the topics and pedagogy in each course.

Table 4. New Topics Taught & New Pedagogy Used in UW Oshkosh SC & OM Required Courses (January 2009)

Course Number: Name	New Topics Taught; New Pedagogy
BUS 342: Analytical Methods	New Topics: Data Envelopment Analysis New Pedagogy: In-Class Exercise – DEA & Sustainability (Refer to appendix). In-class exercise – Linear programming using environmental constraints.
BUS 343: Manufacturing Planning & Control	New Topics: Sustainability and operations management. New Pedagogy: Reading and discussing current article relating sustainability to operations management (Kleindorfer, Singhal, & Van Wassenhove, 2005).
BUS 344: Supply Chain Management	New Topics: Increased emphasis on reverse logistics. New Pedagogy: Reading and discussing current articles on reverse logistics (Srivastava & Srivastava, 2006; Visich, Li, & Khumawala, 2007).
BUS 445: Supply Chain Strategy	New Topics: Supply chain management & social equity. New Pedagogy: Reading and discussing current article on social equity in supply chain management (Ansett, 2007). Increasing utilization of on-line discussion.
BUS 450: Environmental Management	New Topics: More emphasis on emerging energy issues, political regulations New Pedagogy: Strategic-based Triple Bottom Line project in the NE WI region
BUS 460 Advanced Quality Management	New Topics: Sustainability as an extension of TQM; Introduction to the ISO 14000 Standard. New Pedagogy: Reading and discussing articles relating sustainability to TQM (Corbett & Klassen, 2006; Isaksson, 2006). Present ISO 14000 Essentials (International Standard for Organizations).

- We are proposing a new course in Purchasing & Transportation with the topics and the pedagogy shown in Table 4. This new course will include an in-class exercise using the analytic hierarchy process (AHP) in a supplier or a transportation selection model incorporating the triple bottom line.
- In BUS 342, we have added two sustainability exercises in BUS 342: The first exercise introduces sustainability topics in a Data Envelopment Analysis (DEA) problem (refer to the appendix). DEA is just multifactor weighted inputs and outputs, e.g. we can compare the 10 cities for 'productivity = wt output / wt input' to get the 'average' and rank them relative to each other. This allows students to see which city performs when they alter the weights. The second exercise is a linear programming problem with an objective function based on profit maximization and constraints that ensure that desired levels of environmental performance are met.
- In BUS 343, we have replaced the older articles with an article that provides an overview of sustainable operations management.
- In BUS 344, we have added reading and discussing of two articles that discuss reverse logistics (closed loop supply chains).
- In BUS 445, we have added reading and discussing of an article that relates supply chain management to social equity issues. We have also added a section on global strategic issues involving social impact.
- IN BUS 450, we have added sections on energy analysis and potential and increased the focus on the local economic development region (New North - 18 counties).
- In BUS 460, we have added reading and discussing of two articles that discuss the relationship between total quality management and sustainability. Additionally, we have added an in-class

exercise in which students must visit the ISO web site (ISO 140000 Essentials) and then break up into small groups to debate the merits of the ISO 14000 standards.

REFERENCES

- Ansett, S. (2007) "Mind the Gap: A Journey to Sustainable Supply Chains," *Employee Responsibilities and Rights Journal*, vol. 19(4), December, p. 295-303.
- APICS. *APICS Student Chapter Membership and Application*. (n.d.) Retrieved on June 21, 2008 from http://www.apics.org/NR/rdonlyres/6FEF7E4-E95E-41BF-A3D1-7D28574C58E5/0/0702199_StudentBroWEB.pdf
- Association of University Leaders for a Sustainable Future. *About ULSF*. (n.d.) Retrieved on January 17, 2009 from <http://www.ulsf.org/about.html>
- Bandyopadhyay, J. (2004) "Developing a Model for a Supply Chain Management Major in a United States University in the New Millennium," *International Journal of Management*, vol. 21(1), p. 67-76.
- Berry, M. & Rondinelli, D. (1998) "Proactive Corporate Environmental Management: A New Industrial Revolution," *Academy of Management Executive*, vol. 12(2), p. 38-50.
- Biello, D. (2005) "MBA Programs for Social and Environmental Stewardship," *Business Ethics*, vol. 19(3), p. 22-27.
- Bradbury, H. (2003) "Sustaining Inner and Outer Worlds: A Whole-Systems Approach to Developing Sustainable Business Practices in Management," *Journal of Management Education*, vol. 27(2), April, p. 172-187.
- Bridges, C. & Wilhelm, W. (2008) "Going Beyond Green: The "Why and How" of Integrating Sustainability Into the Marketing Curriculum," *Journal of Marketing Education*, vol. 30(1), April, p. 33-46.
- Corbett, C. & Klassen, R. (2006) "Extending the Horizons: Environmental Excellence as Key to Improving Operations," *Manufacturing & Service Operations Management*, vol. 8(1), Winter, p. 5-22.
- Elkington, J. (1994) "Towards the Sustainable Corporation: Win-Win-Win Business Strategies for Sustainable Development," *California Management Review*, vol. 36(2), p. 90-100.
- Elkington, J. (1998) *"Cannibals with Forks,"* Stoney Creek, CT: New Society Publishers.
- El-Zein, A., Airey, D., Bowden, P. & Clarkeburn, H. (2008) "Sustainability and Ethics as Decision-Making Paradigms in Engineering Curricula," *International Journal of Sustainability in Higher Education*, vol. 9(2), p. 170-182.
- Guide, V., Srivastava, R. & Spencer, M. (1996) "Are Production Systems Ready for the Green Revolution?" *Production and Inventory Management Journal*, vol. 37(4), Fourth Quarter, p. 70-76.
- Inman, R. (1999) "Environmental Management: New Challenges for Production and Inventory Managers," *Production and Inventory Management Journal*, vol. 40(3), Third Quarter, p. 46-49.

Isaksson, R. (2006) "Total Quality Management for Sustainable Development: Process Based System Models," *Business Process Management Journal*, vol. 12(5), p. 632-645.

International Organization for Standardization. (n.d.) *ISO 14000 Essentials*. Retrieved on January 20, 2009, from http://www.iso.org/iso/iso_14000_essentials

Kagawa, F. (2007) "Dissonance in Student's Perceptions of Sustainable Development and Sustainability: Implications for Curriculum Change," *International Journal of Sustainability in Higher Education*, vol. 8(3), p. 317-338.

Kearins, K. & Springett, D. (2003) "Educating for Sustainability: Developing Critical Skills," *Journal of Management Education*, vol. 27(2), April, p. 188-204.

Kleindorfer, P., Singhal, K. & Van Wassenhove, L. (2005) "Sustainable Operations Management," *Production and Operations Management*, vol. 14(4), Winter, p. 482-492.

Lourdel, N., Gondran, N., Laforest, V. & Brodhag, C. (2005) "Introduction of Sustainable Development in Engineer's Curricula: Problematic and Evaluation Methods," *International Journal of Sustainability in Higher Education*, vol. 6(3), p. 254-264.

Markley, M. & Davis, L. (2007) "Exploring Future Competitive Advantage through Sustainable Supply Chains," *International Journal of Physical Distribution & Logistics Management*, vol. 37(9), p. 763-774.

Melnyk, S., Sroufe, R., Montabon, F., Calantone, R., Tummula, R., & Hinds, T. (1999) "Integrating Environmental Issues into Material Planning: 'Green' MRP," *Production and Inventory Management Journal*, vol. 40(3), Third Quarter, p. 36-45.

Moore, J. (2005) "Seven Recommendations for Creating Sustainability Education at the University Level," *International Journal of Sustainability in Higher Education*, vol. 6(4), p. 326-339.

Mulder, K. (2004) "Engineering Education in Sustainable Development: Sustainability as a Tool to Open Up the Windows of Engineering Institutions," *Business Strategy and the Environment*, vol. 13(4), July/August, p. 275-285.

Murray, S. (2006) "Going Green on Campus Takes Fresh Impetus," *Financial Times*, Oct. 9, p. 7.

Preuss, L. (2005) "Rhetoric and Reality of Corporate Greening: A View from the Supply Chain Management Function," *Business Strategy and the Environment*, vol. 14(2), p. 123-139.

Roome, N. (2005) "Teaching Sustainability in a Global MBA: Insights from the OneMBA," *Business Strategy and the Environment*, vol. 14(3), May/June, p. 160-171.

Srivastava, S. & Srivastava, R. (2006) "Managing Product Returns for Reverse Logistics," *International Journal of Physical Distribution & Logistics Management*, vol. 36(7), p. 524-546.

The Aspen Institute Center for Business Education. *Beyond Grey Pinstripes 2007-2008*. (n.d.) Retrieved on January 19, 2009 from http://beyondgreypinstripes.org/rankings/bgp_2007_2008.pdf

UNESCO.ORG. *Education for Sustainable Development*. Retrieved on January 17, 2009, from http://portal.unesco.org/education/en/ev.php-URL_ID=27234&URL_DO=DO_TOPIC&URL_SECTION=201.html

Visich, J., Li, S. & Khumawala, B. (2007) "Enhancing Product Recovery Value in Closed-Loop Supply Chains with RFID," *Journal of Managerial Issues*, vol. 19(3), Fall, p. 436-452.

World Commission on Environment and Development (1987) "*Our Common Future*," Oxford University Press.

Wu, H. & Dunn, S. (1995) "Environmentally Responsible Logistics Systems," *International Journal of Physical Distribution & Logistics Management*, vol. 25(2), p. 18-39.

APPENDIX

BUS 342: Data Envelopment Analysis & Sustainability Exercise

Of growing concern to cities is their carbon footprint. With energy use from many sources as the input, we want to see which cities may serve as models of efficiency. The "outputs" for a city are population and tax revenue. Clearly, a city with a larger population will have a larger carbon footprint. In addition, having money in the form of taxes is necessary for the city to be prosperous.

Here are the cities and outputs:

	Population (M)	Tax Revenue (\$M)
Oshkosh, WI	0.63	5
Detroit, MI	0.88	20
Chicago, IL	2.8	50
Houston, TX	2	40
Los Angeles, CA	3.8	55
Seattle, WA	0.56	20
Atlanta, GA	0.47	45
Pittsburg, PA	0.33	20

These are the inputs for each city along with weights.

	Co2 Emissions	Electricity (kWh)	Natural Gas (therms)	Gas fuel (gal)	Diesel fuel (gals)
Oshkosh, WI	50	100	300	1300	1500
Detroit, MI	400	50	2000	840	560
Chicago, IL	280	250	2800	1020	1200
Houston, TX	640	375	1800	3000	1450
Los Angeles, CA	512	400	2400	2400	600
Seattle, WA	83	180	400	650	420
Atlanta, GA	315	400	2100	1860	2640
Pittsburg, PA	461	600	2400	2020	2800
Weight	2.00	0.95	0.80	1.50	0.75

Enter these data into Excel.

Assume the weights for outputs are both 1.0:

Which city is most efficient? _____

What is the 2nd most efficient city _____, and what % of the most efficient is it? _____

We decide that having a large population is better than tax revenue. Now the weights for outputs are 2.0 for population and .25 for tax revenue:

Which city is the most efficient now? _____

Which city is the least efficient? _____

A new study finds that Diesel wrecks eco-systems. The new weight for Diesel is 3.0. Leave the output weights as you had for the prior question.

Which city is the most efficient? _____

Which city now is the least efficient? _____

NEGATIVE AND POSTIVE LESSONS FROM THE 2007-2008 FINANCIAL CRISIS

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ABSTRACT

While the form of crises may change, their essence remains the same (e.g. a cycle of abundant liquidity, rapid credit growth, and a low-inflation environment followed by an asset-price bubble). The current market turbulence began in mid-2000s when the US economy shifted to imbalanced both internal and external macroeconomic positions. We see two key causes of these problems – loose US monetary policy in early 2000s and US government guarantees issued on the securities by government-sponsored enterprises what was further fueled by financial innovations such as structured credit products. We have discovered both negative and positive lessons deriving from this crisis and divided the negative lessons into three groups: financial products and valuation, processes and business models, and strategic issues. Moreover, we address key risk management lessons derived from the current crisis and recommend policies that should help diminish the negative impact of future potential crises.

INTRODUCTION

In 2007, the sub-prime mortgage crisis undermined the US financial market, resulting in global credit and liquidity shortages and revising the structure of the world financial market. In this paper, we discuss the history, macroeconomic conditions, and milestones of the US mortgage crisis. We also describe key investment banking and risk management practices that exacerbated the impact of this crisis, such as the industry's reliance on ratings assessment, an originate-to-distribute model, risk-shifting, securitization techniques, and the use of off-balance sheet vehicles. Moreover, we address key lessons for risk management derived from the current global market turbulence and recommend policies that should help diminish the negative impact of future potential crises.

This paper is organized as follows. After a brief introduction we describe the background of the crisis. In section three we define key market players, risks and relevant risk management issues. The fourth section presents both negative and positive lessons emerged from current financial problems. The fifth section reviews how troubles of a virtual economy might affect a real economy in the US and subsequently spill over the world. Finally, in conclusion we summarize the paper and state final remarks.

BACKGROUND OF THE CRISIS

Comparison of the Current Crisis with Other Crises

Before discussing the main aspects of the current crisis, we provide the historical context needed to better understanding these issues. When compared to other financial crises (see Figure 1), the 2008 turmoil has caused serious problems for many institutions around the world and resulted, among others, in the end of an era in investment banking.

When comparing the dot.-com bubble crisis in late 1999 and the current crisis, it is evident that both crises accounted only for relatively-low market shares in US market capitalization (6% of US equities market capitalization in 1999) and securitized mortgage debt outstanding in the US respectively (14% share in 2007). However, the consequences of these crises affected the whole economy and world financial markets significantly. Specifically, the dot.-com bubble was followed by a 49% fall in the S&P

500 index over the next two and a half years (and a recession), while the latter crisis caused a US market crash and roiled world financial markets.

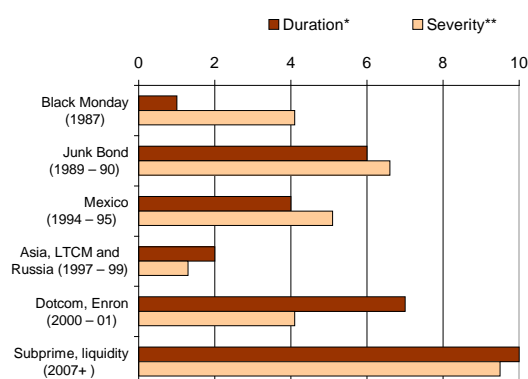
Macroeconomic Imbalances in the US

No economy can live perpetually beyond its means and the case with the US proves this theorem. Both an increasing current deficit, as well as US growing consumption (spurred oversized US consumer demand), led to the negative consequences discussed below (e.g. low savings, moral hazard in financial markets, unrealistic goals of home ownerships implying in increasing demand on mortgages in the US etc.). Last but not least, the Federal Reserve's (FED) monetary policy supported this imbalance through maintaining low interest rates fostering excessive US consumer demand.

First, in the period from 1995-2006, the US current account deficit jumped from 1.5% of GDP to 6% and was financed through foreign market lenders who hold dollars as the world's reserve currency. Some researchers were talking about a new "Bretton Woods II" arrangement, whereby "surplus savers such as China could forever recycle excess dollars into US assets in order to keep their currencies competitive and their export-led growth models humming" (Roach, 2008). The question remains if such unrestrained borrowing is sustainable.

Second, in the mid-1990s, the shift in US consumers' preferences caused another problem – the consumers started to prefer asset-based savings (e.g. home equity) to income-based savings. As a result, US personal consumption rose by 3.5% p.a. in the real terms in the period from 1994-2007, becoming the highest increase in a protracted period for any economy in modern history (Roach, 2008). Between the years of 1997 to 2007, household sector indebtedness jumped from 90% to 133% of disposable personal income. Moreover, the ratio of personal consumption on the US GDP grew from 67% in 1997 to 71% in 2007. However, the decline in the US household consumption has caused problems to Asia's export-led growth dynamic, which is highly-dependant on continued exports to the US.

Figure 1: Impact of Recent Capital-market Crises on Investment Banks



Notes: *Number of quarters till earnings at pre-crisis levels, ** Earnings lost, number of pre-crisis-quarter earnings
The figure shows an impact of recent capital-market crises on investment banks based on data from Morgan Stanley and Oliver Wyman.

The History of US Mortgage Market

We see two key causes of the crisis – loose US monetary policy in 2003-2004 and US government guarantees on the securities by government-sponsored enterprises what was further fueled by financial innovations such as structured credit products. These facts resulted in an enormous amount of money invested in home mortgages followed by soaring prices of home building.

Although the problems in the US mortgage market first materialized in 2005, the whole problem started in 1977, when the Community Reinvestment Act (CRA), a United States federal law, came into force (see

Table 2). The CRA tightened credit standards for the US commercial banks and savings associations as it required the provision of loans for the whole market segment, i.e. also for low- and moderate-income loan applicants. In 1995, the credit standards were further eased as new US regulation required banks to provide more loans to low-income borrowers (in terms both the number and aggregate dollar amount) or risk serious sanctions. On the other hand, we should note that the CRA fostered problems of the US mortgage market rather than caused it.

Table 2: Background Milestones of The Mortgage Crisis

Year	Event	Short description
1977	Community Reinvestment Act (CRA)	Relaxing lending standards -> mortgages for "everyone"
1995	Introduction of systematic ratings of banks in terms of CRA compliance Permission of securitization of CRA loans containing subprime mortgages	Loosening credit standards for banks -> more loans to low-income borrowers
1997	First securitization between Union Bank (later taken over by Wachovia) and Bear Stearns (later taken over by JPMorgan)	This securitization started a wave of similar transactions/ investment structures
2003	Guarantees from US government to Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac)	Explicit guarantees -> lower risk -> issuance of debt with lower rates than competitors
Mid 2005	Surging delinquencies on US sub-prime adjustable-rate mortgages (ARM)	Delinquency rates are good harbingers of future foreclosure rates
Mid 2006	Falling house prices in the US Homeowners' equity started declining	Higher loan-to-value ratio (best predictor of future defaults) Higher delinquency rates on both sub-prime and prime mortgages

The table shows key milestones of the mortgage crisis and is based on Zeleny (2008) and ECB (2007).

In mid-2005, the US market saw increasing delinquency rates on sub-prime adjustable-rate mortgages (ARM), which historically has been a good predictor of future foreclosure rates. Consequently, in mid-2006, the situation deteriorated as the US housing prices started to fall and delinquency rates on sub-prime mortgages surged, later also prime mortgages in a lesser extent.

Future US housing prices will be crucial for the next development of the market. However, according to IMF (2008b) the troubles on the US housing market are anticipated to continue through 2009 (mainly due to the combination of tighter lending standards, falling home prices, and lower recovery values). As a result, the potential increase in charge-off rates on residential mortgages could sky-rocket from 1.1% today to 1.9% by mid-2009. Moreover, consumer loan charge-off rates could move higher as a result of strengthened bank lending standards and slowing economic growth (Teply and Cernohorsky, 2009).

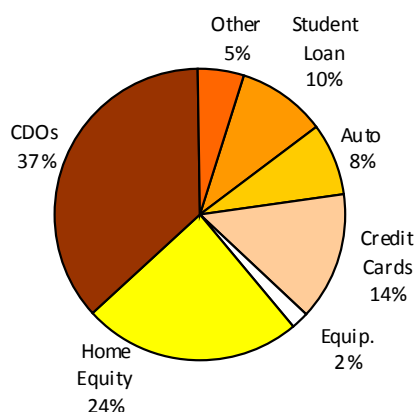
Securitization

Securitization is a modern financial process whereby traditional bank assets (for example, mortgages or receivables from credit cards) are pooled and repackaged into securities that are then sold to investors. The results of securitization are the multi-billion sized asset-backed securities (ABS) markets. Specifically, the bank could issue a bond with the pooled assets serving as collateral, but the credit rating assigned to the new security is based on the reserve requirements, leading to AAA rated securities. Meanwhile, the assets are included in any computation of the bank's capital ratio. However, the essence of securitization is that banks can avoid these constraints if a separate entity is established (special purpose vehicle or SPV). The bank sells then the asset pool to the SPV, which pays for the assets from the proceeds of the sale of securities (For more details about securitization see Fabozzi, Kothari (2008) or Mejstrik, Pecena, Teply (2008)). The big problem principles of securitization was, among others, mezzanine structured-finance CDOs with AAA rating were backed by subprime mortgage bonds below BBB rating (Teply and Cernohorsky, 2009).

The global issuance of bonds backed by mortgages saw a rapid annual growth until the year 2005. However, not only mortgagees have been securitized; Figure 2 implies that securitized credit card

receivables amounted 14% (USD 346 billion) of total ABS outstanding in the US in 2007, while securitized auto loan receivables reached 8% (USD 198 billion). We expect that US banks will face huge losses stemming from these products in the coming years.

Figure 2: ABS Outstanding by Collateral in The US as of The End of 2007 (Total = USD 2,472 Billion)



The figure demonstrates composition of ABS outstanding by collateral in the US in 2007 based on data provided by SIGMA.

Risk Management During the Crisis -Key Market Players

Before presenting risk management lessons, the key players during global financial turmoil need to be identified. We have divided these players into six groups: mortgage originators, risk shifters/transformers, investors, insurers, rescuers and others (see Table 2).

Table 2: Key Players during The Crisis

1. Mortgage originators <ul style="list-style-type: none"> • Lenders • Commercial banks 	4. Insurers <ul style="list-style-type: none"> • Insurance companies • Monoline insurers • Reinsurance companies
2. Risk shifters/ transformers <ul style="list-style-type: none"> • Commercial banks • Investment banks/prime brokers • Government-sponsored enterprises 	5. Rescuers <ul style="list-style-type: none"> • Central banks • Governmental institutions • Sovereign wealth funds • International Monetary Fund • Private investors
<ul style="list-style-type: none"> • SPVs (ABCP/SIV/conduits)* 3. Investors <ul style="list-style-type: none"> • Commercial banks • Investment banks • Hedge funds • Pension funds • Insurance companies • Investment funds • Private investors 	6. Others <ul style="list-style-type: none"> • Rating agencies • US government • Regulatory bodies

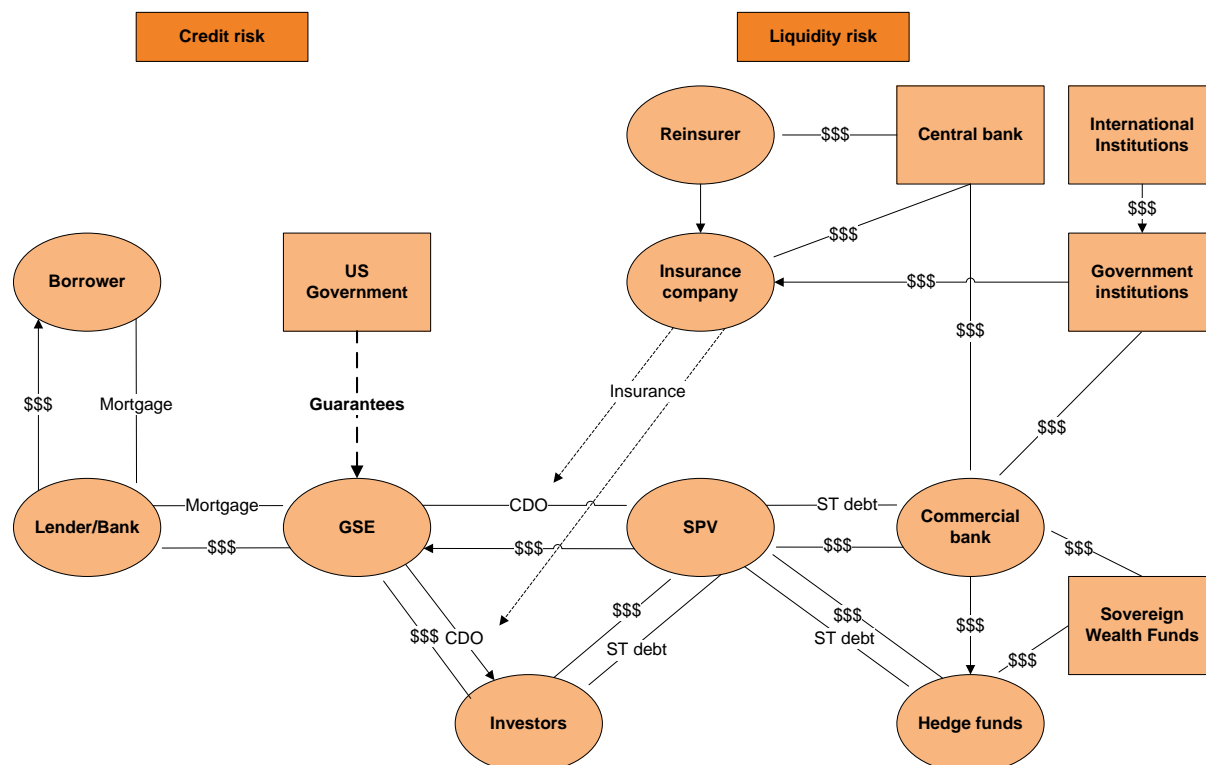
Note: * ABCP = asset-backed commercial paper, SIV = structured investment vehicle
The table displays key players during the crisis based on authors' research..

Main Risks Involved

As Figure 3 indicates, the pending crisis started as a credit crisis (from mid-2007 until August 2008) and later became a liquidity crisis (since September 2008). Although this figure is simplified (e.g. only CDOs

and general SPV structures are considered), it shows main money flows during the crisis. We should note that the existence of US government guarantees on behalf of government-sponsored enterprises (GSE) - Fannie Mae and Freddie Mac - have distorted the CDO market significantly. As a result of these state guarantees market players considered CDOs as safe financial instruments, although they were backed by low-quality underlying assets such as subprime mortgages.

Figure 3: The Credit and Liquidity Risk during The Pending Crisis



The figures reveals main money flows during the crisis based on Teplý, Cernohorsky (2009).

Other than credit and liquidity risks, risks such as operational (For more details of operational risk management see Chalupka and Teplý (2008), Mejstrik, Pecena and Teplý (2008) or Rippel and Teplý (2008)), market, off-balance sheet, contagion, systematic, regulatory and globalization risk have materialized concurrently (see Table 3). We should note that only credit, market and operational risks are covered in Basel II requirements, while the others are not.

For investing to securitized products some banks used off-balance sheet entities – such as structured investment vehicles (SIVs) and conduits – that required less capital charges and hence enabling a higher leverage. SPVs were not included in the balance sheets of these banks. However, these conduits were facing liquidity risk because they invested to long-term assets such as CDOs or ABSs but were funded through shorter-term asset-backed commercial paper (ABCP). When CDOs' value deteriorated, conduits' creditors stopped lending money to the conduits. As a result, the banks had to fund these conduits, because they appeared on banks' balance sheet, what further intensified liquidity problems of these banks.

Table 3: Risk Typology

Risk	Short description	Example
Credit	Risk to a financial institution of losses resulting from the failure of a counterparty to meet its obligations in accordance with the terms of a contract under which a financial institution has become a creditor of the counterparty	Default of mortgage borrowers Bankruptcy of Lehman Brothers
Liquidity	The probability of a situation when a financial institution cannot meet its proper (both cash and payment) obligations as they become due.	Overall lack of liquidity in inter-bank markets
Operational	Risk to a bank of loss resulting from inadequate or failed internal processes, people and systems, or the risk to a bank of loss resulting from external events, including the legal risk	Mortgage frauds by dealers Misconduct of managers
Market	Risk to a financial institution of losses resulting from changes in prices, exchange rates and interest rates on the financial markets	Sudden increase in interest rates
Off-balance sheet	Risk that off-balance assets/liabilities appear on a balance sheet of a financial institution	Off-balance sheet SPVs became balance-sheet items
Contagion	Risk of a negative indirect impact of other financial institutions on a financial institution itself the transmission of an idiosyncratic shock affecting one bank or a group of banks to other banks or other banking sectors	Mistrust in inter-bank/short-term markets
Systematic	Risk that cannot be diversified through portfolio diversification	Worldwide market crash
Regulatory	The risk of potential loss due to the violation or a sudden change of the regulatory framework	Change in regulatory framework of credit derivatives/OTC market
Globalization	The risk of worldwide contagion - increasingly correlated markets and a decoupling of markets	Worldwide global turmoil

The table defines main risks materialized during the financial crisis and is based on authors' research.

Central banks provided emergency liquidity (discount windows, extra credit lines. For instance Primary Dealer Credit Facility (PDCF), Term Auction Facility (TAF) or Term Securities Lending Facility (TSLF) or Commercial Paper Funding Facility (CPFF)) into the financial system in order to refresh confidence among market players and stabilization the situation. For example, as of October 2008 the European Central Bank has lent more than EUR 770 billion to banks. However, despite this central bank liquidity support and lower policy interest rates, the crisis has deepened and broadened. For instance, current monetary policy enacted by the Czech National Bank seems to be inefficient; as late as October 2008 a Czech basic interest rate (2W-repo rate) amounted 3.5% p.a., while the Czech inter-bank rate PRIBOR oscillated around 3.8% p.a. These figures indicate high risk premium on the Czech market implying pending mistrust between market players.

LESSONS FROM THE CRISIS

The current global financial upheaval raise few issues related risk management tools, processes and techniques, which might give several lessons for future development on the financial markets. We find both negative and positive lessons from this crisis.

Negative Lesson

The negative lessons can be divided into three groups: financial products and valuation, processes and business models, and strategic issues (see Table 4).

Positive Lessons and Winners

Despite the above-mentioned negatives, we can find several positives and winners of the current situation (see Table 5).

Table 4: Negative Lessons

Issue	Description	Who failed	Lesson
Financial products and valuation			
Adjustable-rate-mortgage (ARM)	Lack of information about ARMs for borrowers	Mortgage originators, regulators, GSE	More publicly-available information for consumers
Credit default swaps	Unregulated credit default swaps/OTC market	Regulators, risk managers	Sensitive regulation of OTC markets
Financial innovations	Financial innovators were one step before regulators	Regulators, rating agencies	Clearing centre
Structure product valuation	Nobody understood risk inherent in structured products	Rating agencies, internal auditors, risk managers, regulators, GSE, investment banks	Sensitive regulation of new products
Processes and business models			
Basel II requirements	Reliance on rating RWA concept failed Own bank models	Regulators	Better both external and internal regulation of structure products
Mortgage frauds	High fees for dealers/low lending standards	Mortgage dealers, mortgage originators, GSE	Failed rating assessment Broker-dealer had low RWAs but higher leverage
Originate-to-distribute model	Banks with no incentives to assess borrower's creditworthiness	Regulators, internal auditors	NINJA loans
Rating agencies	RAs did not evaluate true risk of securitized products	Regulators, internal auditors	Better regulation of risk management processes
Reliance on rating	Strong reliance on incorrect rating assessment	RAs, investors, regulators, risk managers, internal auditors	RAs should evaluate credit + liquidity + systematic risk
Risk management process	Inadequate process, weak supervision	Investors, regulators, risk managers, internal auditors	Investors should do own valuation of investments
Use of OBS vehicles	Banks used OBS vehicles to avoid capital requirements	Internal auditors, regulators, top and risk managers	Better regulation of processes
Wholesale funding	Reliance on wholesale funding possible in good times	Top and risk managers, regulators	Better regulation of OBS vehicles (e.g. Basel II)
Strategic issues			
Corporate governance (principal-agent problem)	Top managers preferred own interest to company's interest	Risk managers	Liquidity risk might be stress-tested
Fair-value accounting	Fair-value accounting caused further price falls (fire-sale prices)	Top managers, regulators, shareholders	Motivation of managers on long-term goals of a company
Government guarantees	US government guarantees to GSEs totally distorted the financial market	Risk/finance managers	Fair-value accounting is a good concept
Moral hazard	State bailouts/support of private financial institutions	US government	"Careful" state guarantees
Too-big-too-fail doctrine	State rescues of AIG, GSEs, Icelandic and UK banks etc.	Governments	"Careful" state intervention
Too-connected-too-fail doctrine	State rescues of AIG, GSEs etc.	Governments, international institutions	"Careful" state intervention
Transparency	Lack of transparency in securitization process, blurred structures of SPVs	Governments, international institutions	"Careful" state intervention
		Regulators, securitization originators (investment banks, GSEs)	Encouragement of self-discipline of market players

ARM = adjustable-rate-mortgage, GSE = government-sponsored enterprises, OTC = over-the-counter, OBS = off-balance sheet, RA = rating agency, RWA = risk-weighted assets, SPV = special purpose vehicles. The table lists negative lessons from the crisis based on authors' research.

Table 5: Positives and Winners of the Turmoil

Positives	Winners
1. Governments were not the only buyer	1. Institutional investors (JPMorgan, etc.)
2. Central banks provided liquidity support to banks/insurers	2. Private investors (Warren Buffet etc.)
3. Investments from sovereign wealth funds (now decreasing, though)	3. The International Monetary Fund (will justify its existence)
4. Valuation techniques worked (some investors bought distressed assets)	4. Bankruptcy lawyers/advisors (will assist to companies in trouble)
5. Proper regulation/new prudence rules are expected (Basel II revision 1)	5. Head-hunter companies (will earn money for placing fired employees)
6. Falling (speculative) oil prices	6. Academics (will write about the crisis and produce future outlook)
7. World-wide inflation threat receded.	7. Politicians (will take power over nationalized companies)

The table presents both positives and winners of the turmoil, based on authors' research. (1) For more details about Basel II requirements see Teply, Divis and Cernohorska (2007) or Mejstrik, Pecena and Teply (2008).

FUTURE OUTLOOK

As we noted earlier, the US sub-prime crisis had roots in macroeconomic imbalances of the US economy. On a related note, the credit crisis has spread over the global financial markets and negatively effected global macroeconomic situation.

We believe that the current credit crisis is the first phase of the global crisis (see Table 7). In the first phase, a virtual economy was affected through the subprime meltdown (cross-product contagion from mortgage-backed securities to credit derivatives markets, inter-bank markets, leverage lending markets etc.).

During the second phase, the real side of the US economy would be affected. The household consumption will fall, foreclosures on home-equities will rise, higher unemployment will result in lower disposable personal income. The US households will have less money to repay their debts (mortgages, auto loans, credit cards) and aggregate demand will fall deeper.

Finally, during the third phase the US troubles would spread cross-border and would negatively affect foreign trade and global capital flows. Consequently, export-dependant economies would see a decline in their export, what would further harm a global economic situation.

Table 6: Taxonomy of A Crisis

Impacts	Transmission mechanism	Outcome	Period
First-order	Cross-product contagion: derivatives and structured products	De-risking De-leveraging	2007-2010
Second-order	Asset-dependent real economies	Consolidation of consumption and homebuilding	2008-2013
Third-order	Cross-border linkages trade and capital flows	Export and vendor financing risks	2009-2015

The table illustrates taxonomy of the pending crisis based on Teply and Cernohorsky (2009).

CONCLUSION

While the form of crises may change, their essence remains the same – repeating cycles of abundant liquidity, low interest rates, rapid credit growth, and a low-inflation environment followed by an asset-price bubble. The current market turbulence began in mid-2000s when the US economy shifted to an imbalanced macroeconomic position. By 2007, mounting defaults in the US sub-prime mortgage market led to US market instability, unleashing a global fiscal contagion that spread around the world, roiling markets and causing world economic upheaval. This contagion led to, for example, the nationalization of big financial institutions, bank failures, the end of an era in investment banking, increased federal insurance on banking deposits, government bailouts and opportunistic investments by sovereign wealth funds.

The 2008 global financial upheaval has taught risk management lessons that will be crucial for future financial markets development. We see two main causes of the crisis – loose US monetary policy, US government guarantees on the securities by GSEs what was further fueled by financial innovations such as structure credit products or credit derivatives.

We have discovered both negative and positive lessons deriving from this crisis. We have divided the negative lessons into three groups: financial products and valuation (e.g. failure of rating agencies when valuating structured products), processes and business models (e.g. the failed originate-to-distribute model), and strategic issues (e.g. moral hazard or principle-agent problem). Moreover, the 2008 crisis heralded a new risk occurred during the crisis – globalization risk as a risk of worldwide contagion resulting from increasingly correlated markets and a decoupling of markets.

The pending global market turbulences negatively affected financial institutions' performance. To offset this drop in profits, pressure on lower costs and related cost-cutting initiatives might be expected in financial institutions during coming months. Moreover, we recommend the following four policies to protect against repeating these errors and limiting future risk exposure: internationally-coordinated policy when funding private financial institutions, tighter regulation and higher transparency of financial markets, revision of Basel II requirements, and a change in financing rating agencies. These steps should help diminish the negative impact of future potential crises by adding higher credibility, accountability, transparency and risk diversification of the world financial markets.

At present we are seeing two potential remaining problems in the US financial market: credit cards defaults and auto loans defaults, which could cause USD multi-billion losses for financial institutions in coming years. We believe that the current credit crisis is the first phase of an ongoing global crisis. In the first phase, a virtual economy was affected through the subprime meltdown. During the second phase, the real side of the US economy would be affected. Finally, during the third phase the US troubles would spread cross-border and would negatively affect foreign trade and capital flows. In other words, we are at the beginning of the global crisis that could take several years to unfold.

REFERENCES

- Arthur D. Little (2008). *Demystifying the Credit Crunch*, July 2008
- Chalupka, R., Teply, P. (2008) "Operational Risk Management and Implications for Bank's Economic Capital – A Case Study", IES Working Paper 17/2008, IES FSV, Charles University.
- ECB (2007). *EU Banking Sector Stability*, November 2007
- Fabozzi, F. J. & Kothari, V. (2008). *Introduction to Securitization*, Wiley
- Fabozzi, F. J. et al. (2008). *Subprime Mortgage Credit Derivatives*, Wiley
- IMF (2008a). *Global Financial Stability Report*, April 2008
- IMF (2008b). *Global Financial Stability Report*, October 2008
- Mejstrik, M., Pecena, M. & Teply, P. (2008). *Basic Principles of Banking*, Karolinum Press, Prague, Czech Republic.
- Rippel, M., Teply, P. (2008) "Operational Risk - Scenario Analysis", IES Working Paper 15/2008, IES FSV, Charles University
- Roach, S.S. (2008) "Pitfalls in a Post-Bubble World", Morgan Stanley Research, August 2008
- Teply, P. & Cernohorsky, J. (2009) "Risk Management Lessons from The Current Financial Crisis", Karvina, Czech Republic
- Teply, P., Divis, K., Cernohorska L. (2007) "Implications of the New Basel Capital Accord for European Banks", E+M Journal, Czech Republic, 1/2007
- Zeleny, M. (2008) "World financial crisis has long roots", Czech Business Weekly 39/2008
- www.economist.com
www.ft.com
www.thebanker.com

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REGULATORY AGENCY LEVERS TO REDUCE MANUFACTURING EMISSIONS

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ABSTRACT

As environmental issues become more important to citizens, they demand enhanced environmental performance from companies by exerting pressure on public policy makers to enact regulations, taxes, permits, and penalties that motivate companies to improve their environmental performance. We present a model that governmental policy makers could utilize to predict the effects of reducing the number of emissions permits and of increasing the penalties for exceeding allowable emission limits. We propose a two-stage newsvendor model to estimate a manufacturing company's optimal production quantity based on maximization of expected profits given the cost of emission permits and penalties for exceeding emission limits allowed by the permits. In addition, the newsvendor model provides insights to policy makers on the effects of adjusting the regulatory levers of emission permits and penalties.

INTRODUCTION

Public interest in environmentally safe products continues to increase. Methods to motivate manufacturers to reduce emissions are increasingly important for policy makers to implement as citizens are becoming more conscious of the negative effects of pollution. More than four out of five Americans believe that pollution threatens the quality of their lives (Kuzmiak, 1995, Krosnick and Langer 2007, GMI 2006). In other words, Americans are becoming increasingly aware of the environment, and they are attempting to influence manufacturers and government to take action. As regulations become more pervasive and stricter, manufacturing companies must be prepared to invest in new production methods, materials, and equipment or pay higher penalties for producing pollution. Therefore, a manufacturer must explicitly account for emissions in its product cost. In the European Union, the impact of emissions on the environment has been the focus of study for some time. The European Union (EU) recently enacted the Registration, Evaluation, and Restriction of Chemicals (REACH) regulation that forces manufacturing companies and importers to find safer alternatives for high concern chemicals (Lockwood, 2008). However, the United States has lagged behind the EU in research and action that would enable policy makers to bring about pollution reduction. The recent US presidential election results will also impact how companies react to environmental issues, as the incoming administration will be seeking to come in line with the rest of the world regarding most pollution issues, particularly those impacting climate change.

Even with the lagging regulation in the U.S., companies such as 3M launched Pollution Prevention Pays in 1975, which they claim, has since eliminated 1.6 billion pounds of air, water and land pollution (Meyer, 2000). Similarly, DuPont reportedly has halved its landfill waste (Meyer, 2000). Interface Carpets' environmentally sound product lines accounted for 10-15% of profits in 1997 (Meyer, 2000). General Electric (GE) estimates that the revenue it will bring in from environmental technology alone will reach \$20 billion by 2010 (Wade, 2005). Rennie (2008) discussed other initiatives at Ford, where designers are starting to incorporate post-industrial materials in seats, and at Caterpillar, which since 2001 has seen its remanufacturing business grow by almost 70%. Of course, stricter environmental laws are also keeping companies such as GE from polluting. For example, in 2007 GE incurred Global Paid Penalties of \$236,000, down from \$351,000 in 2004 (GE Citizenship Performance Metrics).

The total cost of complying with environmental laws over the past 25 years has exceeded \$1 trillion, and about \$120 billion continues to be spent annually for pollution abatement and control (Berry & Rondinelli, 1998). A higher tax can be charged for waste (a disincentive) or taxes can be lowered on desirable activities to provide economic incentives for reducing excessive environmental and social costs (Corson, 2002). Taxes can also be levied to the end users, to the manufacturer, or to multiple players. However, charging the end users is often ineffective as they are too far removed from the design and manufacturing processes to bring about significant changes in material use or pollution. Therefore, to encourage the design of ways to control pollution, upstream instruments are needed (Calcott & Walls, 2000). Two commonly used methods to reduce harmful emissions are subsidies for not emitting pollutants or a tax on the level of emissions. Many argue that subsidies can increase the cost of government, burden the economy, and hurt long-term development (Kohn, 1992). However, Nakada (2004) found that with taxes, profit losses are offset by the incentive to engage in Research and Development.

A company will produce products using processes that may or may not pollute, depending on the best way to maximize profit. We posit that a company may not necessarily be environmentally conscious from an altruistic standpoint, but if the proper government levers are applied, the manufacturer's optimal production strategy will be aligned with the government's desire for a clean environment. The government can enact regulations for fees on pollution, hazardous waste disposal, permit prices, and a cap on the total number of permits available for emissions. In addition, some firms may be motivated to invest in green production processes to attract green consumers and investors (Fairchild, 2008).

Aidt and Dutta (2004) take a more generalized approach to the issue of who should be responsible for the cost of emissions; they describe the differences between three policy instruments: (1) Uniform emissions standards, (2) tradable permits and (3) emission taxes, all of which are methods for motivating manufacturers to reduce emissions. Subramanian, Gupta, and Talbot (2007) studied different manufacturer compliance strategies under permits for emissions: Investment in abatement, bidding for permits, and adjustment of output levels. We deal primarily with emission permits, penalties, and adjustment of output levels within our paper. We treat investment in abatement as an issue for future study. Unlike Subramanian, Gupta, and Talbot (2007), we allow for the possibility of firms paying penalties for exceeding emission limits, assume that demand is stochastic (rather than deterministic), and include a disposal/salvage cost at the end of the season.

We seek to gain wide-reaching insights by examining one particular manufacturer that seeks to maximize profits by producing one product that is subject to a policy maker's costs for permits, disposal, pollution penalty fees, and a cap on the maximum number of permits available. Our model should prove useful to a manufacturing company to determine its profit-maximizing production quantity and to policy makers to establish permit numbers and penalty costs.

PROBLEM

We examine a single manufacturer that makes only one product in a competitive setting. The product is perishable and due to the toxicity of its components, a disposal fee must be paid for any products on hand at the end of the selling season. This disposal fee could be a landfill fee. During manufacture of the product, permits for a certain level of emissions are available. Additional emissions incur a penalty substantially higher than the permit price. We assume that the manufacturer is a price taker. Given that substitute products from other manufacturers exist, the manufacturer is unable to pass on the cost of environmental compliance to its customers. The manufacturer does not have to exist strictly in a commodity market; rather, we assume that even with moderate product differentiation and a brand premium, there is a limit to how much the manufacturer can charge to offset increased costs due to

polluting. The manufacturer cannot merely raise its prices to offset permit prices and penalty fees. The manufacturer seeks to maximize its profit given the permits and penalties set by the government. Given a forecast of demand and an expected standard deviation of demand for a product, it would be optimal for the manufacturer to solve a newsvendor equation and to buy exactly the specified number of permits corresponding to its optimal production quantity for the product. However, we assume that there is a scarcity of permits due to government regulations directed at reducing overall emissions.

Given that the product is perishable, the manufacturer would determine its profit maximizing quantity using a newsvendor equation assuming unlimited permits. The manufacturer would then purchase as many permits as it could up to its profit maximizing quantity. After that, the manufacturer would solve another newsvendor equation to determine how many units above the permit quantity to produce. This revised newsvendor model would consider the increased penalty costs, which would be substantially higher than permit costs. The manufacturer's goal once again would be to maximize its expected profit.

MODEL

Notation

p	Selling price per unit the end product
c	Manufacturing cost per unit (materials and labor)
a	Maximum number of permits available
e	Emissions permit cost (per unit of output)
λ	Emissions penalty cost (per unit of output without permit)
δ	The cost per unit to dispose of unsold products (assessed to the manufacturer)
F	Cumulative distribution function of demand
f	Probability density function of demand
μ	Mean demand
σ	Standard deviation of demand
q_1^*	Optimal quantity to produce when permits are unlimited
q_p^*	Optimal quantity to produce if no permits are available
q_2^*	Optimal quantity to produce beyond the permit cap
q_u^*	Optimal quantity to produce if no permits or penalties apply to the product

Assumptions

The product is perishable and cannot be sold after the selling season, for example, high-tech electronic components. Furthermore, the product has zero value at the end of its selling season and may incur a disposal cost. A salvage value could easily be modeled by letting δ include a negative component corresponding to the salvage value. Thus, δ would be the net of disposal costs and salvage value. The penalty per unit of emission without a permit is greater than the cost per unit for a permit (i.e., $\lambda > e$). If this relationship did not hold, there would be no market for emissions permits. The parameters of the end customer demand distributions are known. Furthermore, we will assume that the distribution of demand is normal, uniform, or exponential. The selling price, p , is greater than the manufacturing cost plus the

emissions permit price ($p > c + e$). This relationship makes it profitable for the manufacturer to sell this product.

Step 1

The manufacturer determines its profit-maximizing production quantity working from the assumption that an unlimited number of permits are available. The manufacturer wants to understand the optimal quantity to produce when a permit cap does not constrain production. Expected profit in this case with a single selling season is shown in (1) where the subscript 1 denotes Step 1 and the variable x denotes the end customer demand.

$$E[\Pi_1] = \begin{cases} -(c+e)q_1 + pq_1, & x > q_1 \\ -(c+e)q_1 + px - \delta(q_1 - x), & x \leq q_1 \end{cases} \quad (1)$$

$$\text{Equivalently, } E[\Pi_1] = -(c+e)q_1 + p \int_{-\infty}^{q_1} xf(x)dx + pq_1 \int_{q_1}^{\infty} f(x)dx - \delta \int_{-\infty}^{q_1} (q_1 - x)f(x)dx \quad (2)$$

Equation (2) can be rewritten as:

$$E[\Pi_1] = -(c+e)q_1 + p \left(\int_{-\infty}^{\infty} xf(x)dx - \int_{q_1}^{\infty} (x - q_1)f(x)dx \right) - \delta \left(\int_{-\infty}^{\infty} (q_1 - x)f(x)dx + \int_{q_1}^{\infty} (x - q_1)f(x)dx \right) \quad (3)$$

Which can be simplified given that $\gamma = \int_{q_1}^{\infty} (x - q_1)f(x)dx$ is the loss function as:

$$E[\Pi_1] = -(\delta + c + e)q_1 + (p + \delta)\mu - (\delta + p)\gamma \quad (4)$$

Taking the partial derivative of Equation (4) with respect to q_1 and setting it to zero allows us to solve for the critical fractile:

$$\begin{aligned} \frac{\partial E[\Pi]}{\partial q_1} &= -(\delta + c + e) + (\delta + p) \int_{q_1}^{\infty} f(x)dx = 0 \\ &-(\delta + c + e) + (\delta + p)(1 - F(q_1)) = 0 \end{aligned} \quad (5)$$

Thus, the critical fractile is as shown in Equation (6):

$$F(q_1^*) = \frac{p - c - e}{p + \delta} \quad (6)$$

Taking the second derivative of Equation (4) with respect to q_1^* gives a negative number since p and δ are positive. This confirms that we are finding the profit maximum (and not a minimum).

$$\frac{\partial^2 E[\Pi]}{\partial q_1^2} = -(\delta + p)f(x) < 0 \quad (7)$$

By substituting Equation (6) into Equation (4) we can find the expected profit for the normal distribution.

For a normal distribution, the loss function γ is $\sigma G\left(\frac{q_1 - \mu}{\sigma}\right)$. Let $z = \frac{q_1^* - \mu}{\sigma}$, therefore $q_1^* = \mu + z\sigma$.

For the normal distribution we can rewrite Equations (4) as (8) below. We use the superscript n , u , and e for normal, uniform and exponential distributions respectively. The subscript 1 denotes that this profit is for Step 1.

$$E[\Pi_1^n] = -(\beta d + c + e)q_1^* + (r + \beta d)\mu - (\beta d + r)\sigma G\left(\frac{q_1^* - \mu}{\sigma}\right) \quad (8)$$

This can be simplified to Equation (9) below:

$$E[\Pi_1^n] = -(\beta d + c + e)q_1^* + (r + \beta d)\mu - (\beta d + r)\sigma[\phi(z) - z(1 - \Phi(z))] \quad (9)$$

For a normalized uniform demand distribution over the range $[0, 1]$, we know the probability density function is $f(x) = \frac{1}{1-0} = 1$ and $\mu = 1/2$. The q_1^* in the following equations is the quantity produced scaled to be in the range $[0, 1]$. Using this probability density function in Equation (4) with the loss function $\gamma = \frac{1}{2}(1 - q_1)^2$ gives the expression in Equation (10):

$$E[\Pi_1^u] = -(\beta d + c + e)q_1^* + \frac{1}{2}(r + \beta d) - \frac{1}{2}(\beta d + r)(1 - q_1^*)^2 \quad (10)$$

For an exponential distribution with mean $\mu = 1$, the probability density function is $f(x) = e^{-x}$ and $\gamma = e^{-q_1^*}$ provides:

$$E[\Pi_1^e] = -(\beta d + c + e)q_1^* + (r + \beta d) - (\beta d + r)e^{-q_1^*} \quad (11)$$

Determining the optimal quantity to produce requires balancing the costs of having too many units (overage cost of c_o) and the costs of having too few units (shortage cost of c_u). We define c_u as the marginal benefit to profit of having more units to sell when demand exceeds the production quantity. The shortage cost is the incremental loss of profit for one unit. Explicitly, the shortage cost is the selling price (r) minus the manufacturer's costs (c for materials and labor plus e for the permit cost). Therefore, we end up with the shortage cost equation below:

$$c_u = r - c - e \quad (12)$$

We define c_o as the marginal cost of having one too many units beyond the end demand. The overage cost includes product costs (c for materials and labor plus e for the permit cost) plus a disposal fee value βd , where β is the proportion of the disposal fee that the manufacturer is responsible for and $(1-\beta)d$ represents the remainder of the disposal fees spread between other players in the supply chain. The overage cost equation for a single selling period is defined below:

$$c_o = c + e + \beta d \quad (13)$$

If the cap on permits (a) does not constrain the production quantity, the optimal quantity for the manufacturer to produce q_1^* is shown in Equation (14) below in general form equated to the result found in Equation (6):

$$F(q_1^*) = \frac{c_u}{c_u + c_o} = \frac{r - c - e}{r + \beta d} \quad (14)$$

Step 2

The manufacturer buys permits to maximize its profits subject to the permit cap imposed by the government. In this step the manufacturer purchases the minimum of the number of permits available (a) or the number of permits equating to the optimal production quantity q_1^* calculated in Equation (14). Let m denote the number of permits that the manufacturer purchases. If $a > q_1^*$, there is no constraint on the manufacturer's production quantity.

$$m = \min(a, q_1^*) \quad (15)$$

Step 3

The manufacturer decides how much, if any, to produce in excess of the number of permits using the newsvendor equation. In this third step, the emissions permit cost (e) is replaced by a more expensive emissions penalty (p). For example, the Clear Skies Act of 2003 (Energy Information Administration) specified levels of SO₂; the penalty before 2008 was set at 2,000 per ton of SO₂ if offsets were made and payments were received within 30 days. If offsets were not made or payments were not received within 30 days, then the penalty was set at \$4,000 per ton of SO₂.

If the manufacturer desires production beyond the permit cap (a), it must now pay the more expensive emissions penalty (p) rather than the permit (e) price. The manufacturer decides how much production should exceed the number of permits using the newsvendor equation. Now in the base model the emissions permit cost (e) has been replaced by a more expensive emissions penalty (p). The new critical fractile equation below uses the penalty (p) instead of the permit (e). Furthermore, on the same distribution, $q_1^* > q_2^*$ because $p > e$ is assumed and all other parameters are constant. We find the optimal quantity to produce under penalty fees similarly to Equation (14) but with the emissions permit (e) replaced by the penalty cost (p) as shown in Equation (16):

$$F(q_p^*) = \frac{c_u}{c_u + c_o} = \frac{r - c - p}{r + \beta d} \quad (16)$$

The quantity to produce beyond the permit cap (a) is:

$$q_2^* = \max(q_p^* - a, 0) \quad (17)$$

Step 4

The manufacturer produces the optimal number of units ($q_1^* + q_2^*$). The manufacturer incurs material and labor costs (c) per unit, permit cost (e) per unit of q_1^* , and penalty cost (p) per unit of q_2^* for a total cost of:

$$c(q_1^* + q_2^*) + eq_1^* + pq_2^* \quad (18)$$

Therefore the manufacturer's expected profit is determined by the following equation based on the cost of q_1^* units with emissions permits (e), the cost of q_2^* units with penalty fees (p), the expected disposal fees (βd) for having unmet demand, and the expected revenue for units sold.

$$E[\Pi_1] = \begin{cases} -(c+e)q_1 - (c+p)q_2 + r(q_1 + q_2), & x > (q_1 + q_2) \\ -(c+e)q_1 - (c+p)q_2 + rx - \beta d(q_1 + q_2 - x), & x \leq (q_1 + q_2) \end{cases} \quad (19)$$

Equivalently,

$$E[\Pi_4] = -q_1(c+e) - q_2(c+p) + r \int_{-\infty}^{q_1+q_2} xf(x)dx + r(q_1+q_2) \int_{q_1+q_2}^{\infty} f(x)dx - \beta d \int_{-\infty}^{q_1+q_2} (q_1+q_2-x)f(x)dx \quad (20)$$

Equation (20) can be rewritten as below, letting $q = q_1 + q_2$ for ease of notation:

$$E[\Pi_4] = -cq - eq_1 - pq_2 + r \left(\int_{-\infty}^{\infty} xf(x)dx - \int_q^{\infty} (x-q)f(x)dx \right) - \beta d \left(\int_{-\infty}^{\infty} (q-x)f(x)dx + \int_q^{\infty} (x-q)f(x)dx \right) \quad (21)$$

Which can be simplified given that $\gamma = \int_q^{\infty} (x-q)f(x)dx$ is the loss function:

$$E[\Pi_4] = -(\beta d + c + e)q_1 - (\beta d + c + p)q_2 + (r + \beta d)\mu - (\beta d + r)\gamma \quad (22)$$

We can now find the equations for different demand distributions. For a normal distribution, the loss function γ is $\sigma G\left(\frac{q-\mu}{\sigma}\right)$. Let $z = \frac{q-\mu}{\sigma}$, therefore $q = \mu + z\sigma$. For the normal distribution we can rewrite Equation (22) as Equation (23) below.

$$E[\Pi_4^n] = -(\beta d + c + e)q_1^* - (\beta d + c + p)q_2^* + (r + \beta d)\mu - (\beta d + r)\sigma G\left(\frac{q-\mu}{\sigma}\right) \quad (23)$$

This can be simplified to Equation (24) below as follows:

$$E[\Pi_4^n] = -(\beta d + c + e)q_1^* - (\beta d + c + p)q_2^* + (r + \beta d)\mu - (\beta d + r)\sigma[\phi(z) - z(1 - \Phi(z))] \quad (24)$$

For a normalized uniform demand distribution over the range $[0, 1]$, we know the probability density function is $f(x) = \frac{1}{1-0} = 1$ and $\mu = 1/2$. The q_1^* , q_2^* and q in the following equations are the quantities to produce scaled to be in the range $[0, 1]$. Using this probability density function in Equation (22) with the loss function $\gamma = \frac{1}{2}(1-q)^2$ gives the expression in Equation (25):

$$E[\Pi_4^u] = -(\beta d + c + e)q_1^* - (\beta d + c + p)q_2^* + \frac{1}{2}(r + \beta d) - \frac{1}{2}(\beta d + r)(1-q)^2 \quad (25)$$

For an exponential distribution with mean $\mu = 1$, the probability density function is $f(x) = e^{-x}$ and $\gamma = e^{-q}$, gives:

$$E[\Pi_4^e] = -(\beta d + c + e)q_1^* - (\beta d + c + p)q_2^* + (r + \beta d) - (\beta d + r)e^{-q} \quad (26)$$

Step 5

Demand is realized at the manufacturer. At the end of the selling season, the disposal costs βd would be incurred by the manufacturer. In Figure 1 below, the cumulative pollution generated is the curve labeled Total Pollution that extends to the right. If permits do not constrain optimal production, the manufacturer will choose a production quantity q_U^* to maximize its expected profits. With a constraining cap on the available number of permits and a higher penalty for emissions beyond that limit, the optimal production

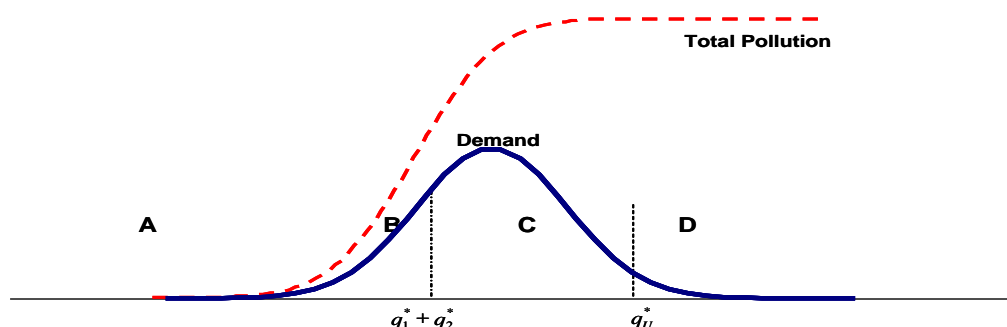
quantity shifts left to $q_1^* + q_2^*$. As the penalty to permit fee ratio increases, $q_1^* + q_2^*$ shifts further left from q_U^* .

IMPLICATIONS FOR POLICY MAKERS

The government policy makers can dictate the cap on emissions permits, thereby directly or indirectly passing on some of the costs to the manufacturer. The manufacturer's direct material and labor cost may be outside the policy maker's control, but the effective total manufacturing costs are influenced by the costs of permits and penalties for polluting as well as the disposal costs for unsold products. A policy maker in charge of the number of available permits can reduce pollution in two ways:

- 1) Limiting permits lowers the quantity of goods that can be produced and so directly reduces pollution.
- 2) The difference between permit price and the emission penalty indirectly forces a lower production quantity for the manufacturer. This, in turn, should result in fewer emissions during production and reduced likelihood that excess inventory will be disposed of.

Figure 1: Optimal Manufacturer Quantity and Total Pollution



The letters in the figure show some possible optimal quantities for the manufacturer to maximize its expected profit under different scenarios: A = Permits and penalty fees too high to produce units profitably. B = Optimal production when no permits are available. C = Permits capped. Quantity depends on ratio of permit/penalty fees. D = Theoretical quantity limit for no pollution controls or disposal costs.

The disposal fee influences production levels, especially if the proportion of the fee allocated to the manufacturer (β) is larger. A small β could signify that consumers are responsible for the disposal fees. Calcott and Walls (2000) found that end consumer fees provide incentives only when there is a fully functioning recycling market. Our current models do not include recycling. Therefore, a schedule of phased out permits, with increasing penalties, may induce manufacturers to adopt clean technologies or cease production of polluting products. Regardless, because the optimal quantity of production will be lower given higher costs set by the regulator and because the manufacturer's expected profit would decrease, the manufacturer will inevitably pollute less to maximize its expected profit.

Policy makers are cautioned that the welfare effect of a permit cap may be negative (Fredriksson, 2001). Jobs may be lost and the demand for products may go unfilled with a strict permit cap. High disposal and emissions penalty costs might be passed directly onto the consumer. However, a key goal of the policy maker is to influence manufacturers to switch to cleaner process technologies or to different products that do not harm the environment. A high cap will have little effect if it does not constrain production. However, a low cap combined with high penalties will reduce the most profitable production quantity. High disposal costs with a high β so that the manufacturer bears the most costs, along with high permit prices, will serve to lower the optimal production in even the unconstrained production environment where the cap is not a factor for the manufacturer.

MANAGERIAL IMPLICATIONS

The manufacturer's objective is to maximize expected profit. According to the costs and the emissions cap, the manufacturer will adjust its production level either up or down to balance the overage cost with the shortage cost. If the unit production cost plus emissions cost is greater than or equal to the unit price, there will be no production. This situation would force the manufacturer out of business or induce it to produce a different product with lower production and/or emissions costs. The government can make a policy decision on the cost for emissions permits to eliminate a product for the good of society.

If the unit production cost plus penalty cost is greater than or equal to the unit price, there will be no production beyond the number of permits. If the government lowers the number of permits each year, this would force the manufacturer to explore alternative production methods or products. As disposal cost (d) increases (decreases), the optimal production quantity decreases (increases). As permit cost (e) and penalty (p) fees increase (decrease), the optimal production quantity decreases (increases). By charging a sufficiently high penalty, the government can ensure that there will be no production beyond that allowed by permits.

As the proportion (β) of salvage costs that the manufacturer is accountable for increases, the optimal production quantity will decrease because, in effect, overage costs will go up. As d , e , p or β increase, the optimal expected profit will correspond to a lower production quantity. Therefore, producing more will lead to costs in excess of the marginal revenue. To earn higher profits, the manufacturer must invest in technology or processes that produce less waste and therefore require fewer permits. Additionally, if unsold product costs less to dispose of, then expected profits will also increase. Having more recyclable materials or a reduction in hazardous materials in the product can lead to reduced disposal costs. The decision to reduce hazardous materials or to include more recyclable materials is a strategic policy decision for the manufacturer to make. As a last resort, a manufacturer will need to develop new products that can be produced with clean technologies.

From the manufacturer's standpoint, environmental policy instruments provide incentives to redesign products and processes to make them more environmentally friendly. The point of this research is not simply to determine the optimal production quantity from the model outlined above, but also to demonstrate that the predicted phasing out of the polluting product can be calculated with some degree of certainty. This study should provide guidance to management regarding the need to proactively introduce clean technologies and/or new environmentally friendly products.

CONCLUSIONS AND EXTENSIONS

A rational manufacturer will produce to maximize its expected profit. If its profit decreases because of pollution costs during manufacturing, it will either produce less or introduce a different and less polluting product. If the regulating body believes that the social and environmental costs of pollution are sufficiently high, it can force the manufacturer to reduce pollution by imposing costs in the form of permits and higher penalties for pollution beyond the permit cap. A pre-determined and communicated schedule of permit caps over time allows the manufacturer to plan to reengineer processes, adopt cleaner technologies, and/or find cleaner products to produce. In this manner, the governmental regulating body and manufacturers become partners in reducing overall emissions.

We have shown that a two-stage newsvendor equation models both the manufacturer's quantity choices for production under permits and the penalties for exceeding available permits. With the combined expected profit equation, the key levers and their effects can be observed. The disposal fee for unsold products inversely influences the quantity produced. The number of permits, the permit fees, and the

penalty fees are also inversely related to the quantity that the manufacturer will produce. The regulator can set a cap on the number of permits, their price, the penalties, and even on waste disposal fees.

The newsvendor model discussed here could be enhanced through the addition of competitors, i.e., modeling a situation in which there are multiple players would provide competitive insights. The model could be extended to include the holding costs for keeping the product until the following season as such costs would lower the optimal production quantity. The ratio of holding costs compared to the other costs and the discount factor for future revenue would dictate the significance of the holding costs. Another possible extension would be to include remanufacturing such that the revenue stream from future sales of remanufactured products would be included in the shortage cost. Remanufacturing would increase the optimal production quantity contingent on the additional reverse logistics costs and any cannibalization effects between new and remanufactured products.

Finally, adding competitors with various levels of environmental friendliness would be an interesting extension. These competitors would compete for the scarce permits through bids. A provocative dynamic appears when a greener competitor needs just a few permits, but needs them desperately, as compared to a dirty competitor that needs many permits yet also has lower margins to recover. It seems intuitive that this extension would clearly show why, over the long-term, green companies have a greater likelihood of survival. Another interesting dynamic would involve a firm that follows a triple bottom line strategy and works with local and national agencies to receive differential treatment.

REFERENCES

- Aidt, T. & Dutta, J. (2004) "Transitional Politics: Emerging Incentive-based Instruments in Environmental Regulation," *Journal of Environmental Economics and Management*, vol. 47(3), May, p. 458-479.
- Berry, M. & Rondinelli, D. (1998) "Proactive Corporate Environmental Management: A New Industrial Revolution," *Academy of Management Executive*, vol. 12(2), May, p. 38-50.
- Calcott, P. & Walls, M. (2000) "Can Downstream Waste Disposal Policies Encourage Upstream "Design for Environment"?" *The American Economic Review*, vol. 90(2), May, p. 233-237.
- Corson, W. (2002) "Recognizing Hidden Environmental and Social Costs and Reducing Ecological and Societal Damage through Tax, Price, and Subsidy Reform," *The Environmentalist*, vol. 22(1), March, p. 67-82.
- Energy Information Administration (EIA), Analysis of S.1844, the Clear Skies Act of 2003.* Retrieved January 6, 2008, from <http://www.eia.doe.gov/oiaf/servicerpt/csa/background.html>
- Fairchild, R. (2008) "The Manufacturing Sector's Environmental Motives: A Game-theoretic Analysis," *Journal of Business Ethics*, vol. 79(3), May, p. 333-344.
- Fredriksson, P. (2001) "How Pollution Taxes May Increase Pollution and Reduce Net Revenues," *Public Choice*, vol. 107(1-2), p. 65-85.
- GE Citizenship Performance Metrics.* Retrieved January 6, 2008, from http://www.ge.com/citizenship/performance_metrics/ehs.jsp

Global Market Insite, (April 6, 2006) *90% of Americans Concerned About Environment*. Retrieved from www.gmipoll.com.

Koth, R. (1992) "When Subsidies for Pollution Abatement Increase Total Emissions," *Southern Economic Journal*, vol. 59(1), July, p. 77-87.

Krosnick, Jon & Langer, Gary. (2007). *Americans Concerned About the Environment*. Survey conducted by Stanford University. Retrieved at <http://paltoonline.com/news.story>.

Kuzmiak, D. (1995) "America's Economic Future and the Environment: Shaping Tomorrow through an Awareness of Yesterday," *Managerial Auditing Journal*, vol. 10(8), p. 3-14.

Lockwood, D. (2008) "The REACH Regulation: Challenges Ahead for Manufacturers of Articles," *Environmental Quality Management*, vol. 18(1), Autumn, p. 15-22.

Meyer, H. (2000) "The Greening of Corporate America," *The Journal of Business Strategy*, vol. 21(1), January/February, p. 38-43.

Nakada, M. (2004) "Does Environmental Policy Necessarily Discourage Growth?" *Journal of Economics*, vol. 81(3), March, p. 249-275.

Rennie, E. (2008) "Growing Green," *APICS Magazine*, vol. 18(2), February, p. 33-35.

Subramanian, R. Gupta, S. & Talbot, B. (2007) "Compliance Strategies under Permits for Emissions," *Production and Operations Management*, vol. 16(6), November-December, p. 763-779.

Wade, J. (2005) "Easy Being Green," *Risk Management*, vol. 52(7), July, p. 10-18.

PROSPERING: CREATING A NEW TYPE OF STUDENT MANAGED FUND

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ABSTRACT

Running an investment fund allows students to experience real-world challenges first-hand, enhancing their learning. However, most of the funds that currently exist are relatively large, equity-focused portfolios; few funds concentrate on debt, since fixed-income investing usually requires larger investments and higher expenses. In this paper, we present a new type of fixed-income student managed fund: a peer-to-peer lending portfolio, run through the Prosper Marketplace electronic platform. Such portfolios can be hundreds of times smaller than even the smallest traditional student-managed funds. Using Prosper, business programs of almost any size can offer students the experience of running an investment fund.

INTRODUCTION

Finance students can gain great insight from managing their own funds. The number of university-affiliated student managed funds (SMFs) has grown rapidly since the 1990s: while there were about 30 SMFs in the early 1990s, there are more than 200 today (Peng, *et al.*). The rising popularity of these funds underscores the contribution they make to students' learning. While both students and their faculty advisors note that running a fund takes a lot of time, they also report that the experience of running real money in real time provides insight and understanding impossible to gain from a textbook alone.

However, most of the extant student managed funds are equity funds. Fixed-income has proved unwieldy, since these assets tend to be very large and expensive to trade. In this paper, we discuss a new type of fixed-income fund, whose assets are Prosper peer-to-peer (P2P) loans. Prosper loans can be as small as \$50 each, so creating funds of these loans should be possible for even the smallest business program. No special infrastructure is required—only internet access. Since students need not devote considerable time to learning the platform—which extrapolates almost seamlessly from popular social networking sites—they can concentrate their efforts on analysis, counterparty evaluation, and portfolio construction. Prosper lending thus offers unique opportunities: to students, who can experience debt trading in a cutting-edge, rapidly growing OTC marketplace; and to small schools, which may lack the resources to provide such an experience using the traditional expensive, infrastructure-intensive SMF model.

STUDENT MANAGED FUNDS

Most student managed funds focus on equities. For example, Morgan (2008) finds that 2/3 of his sample of student managed funds “act as equity funds even though some are allowed to acquire bonds,” and while “14% behave as if they are bond or fixed income funds” (page 7), only seven funds are fully invested in fixed income and cash assets. The fixed-income funds that do exist are larger than their equity counterparts. For example, all of Morgan's “pure” fixed income funds had more than \$1 million in assets, with one fund (Iowa State University's) having around \$100 million. For comparison, 18% of Peng *et al.*'s (2008) equity-heavy sample are below \$100,000, while only one-third of their funds exceed \$1 million. Thus, Morgan's effective \$1 million minimum for fixed-income funds is more comparable to the *maximum* for standard equity funds. He concludes that fixed income funds are “at least double or triple the size of equity funds” (page 8).

Morgan attributes this size discrepancy to the underlying challenges of managing bond portfolios. For example, while the bond market may be less volatile than the stock market, it is also much less liquid and less transparent. There is less readily available information on bonds, and their round-lot size is large (a minimum of \$5,000 in par value). These challenges translate into higher fixed transactions costs and management expenses for bond portfolios than for equity portfolios, expenses which may be only manageable for very large funds. Thus, the existence of only a few, very large, student bond funds may be a consequence of the greater inherent difficulties of running fixed-income portfolios. We now consider how using Prosper can alleviate these difficulties.

THE PROSPER MARKETPLACE

Prosper is an on-line, peer-to-peer lending platform. While there are now several other similar sites, Prosper, launched in 2006, was the first in the U.S. It currently has about 750,000 registered members, both lenders and borrowers. So far, these participants have contracted for more than \$160 million in loans, at an average size of about \$6,300. As with online dating sites, not every would-be participant is successful on Prosper: fewer than one in ten posted loan requests are actually funded. However, the lenders and borrowers who do successfully negotiate for loans may benefit from Prosper's P2P platform, splitting the spread they would otherwise pay in a traditional intermediated market.

Individuals who want loans post a "listing," noting the amount of money they want (from \$1,000 to \$25,000), the maximum interest rate they are willing to pay, and the number of days that the bidding will stay open (from three to ten days). Listings also note a borrower's (self-reported) income, occupation, and employment status. Borrowers may add additional information to entice lenders: for example, they may add descriptions of their plans for the money, other background information on themselves, or pictures.

Prosper pulls each potential borrower's credit report, then assigns her one of seven credit grades (from AA to HR, or "high risk"), based on her Experian ScorexPLUSSM credit score. Lenders therefore do not see the credit score, but only Prosper's credit grade. Summary information from the credit report is included in the listing, however—for example, the number and age of open credit lines, the bank card utilization ratio, and any delinquencies. Prosper also calculates and reports a debt-to-income ratio for the borrower, using her self-reported income and the debt amounts from her credit report.

Lenders on Prosper can be individuals or institutions. Lenders bid on listings, specifying the amount of money they will lend to a particular borrower (with a minimum of \$50) and the minimum rate they will accept. If the total of all lenders' bids on a listing equals or exceeds the amount the borrower requested ("full financing"), the loan will be made, with the rate set at the lowest rate acceptable to the winning lenders. There may be hundreds of winning bids per listing.

Despite the terminology, lenders do not really "lend." Instead, they buy "notes" from Prosper. Prosper issues these notes—one for each winning bid—after it funds the loan. Thus, Prosper is an intermediary, first lending its own funds to borrowers whose listings have garnered sufficient lender bids, then selling notes in the amount of that loan to the winning bidders. Notes are "three-to-five year, unsecured, fully amortizing credit obligations of individual borrowers," which are "without recourse to Prosper" (Prosper, page 1).

Lenders and borrowers may know each other only by "screen names," pseudonyms that they adopt for use on Prosper. Participants may choose to reveal their identities, however; for example, they may identify themselves as "friends" of other participants. They may also choose to form groups, using as criteria for membership any "common interests, including social, cultural, ethnic, professional, athletic, religious, or

any other official or unofficial affiliation” that they wish (Prosper, page 13). Prosper rates each of its groups based on the repayment history of its members. Thus, being a member of a group with a good rating may help a potential borrower draw more favorable bids. A borrower’s group membership also may translate into better performance for the lender; in its prospectus, Prosper states that it “believes that the group structure may positively influence Borrowers’ Loan repayment performance, in that Borrowers in groups may be less likely to default since default would negatively affect the group to which they belong.” The importance of group membership links Prosper lending to traditional microfinance, which in turn suggests a possible charitable aspect to students’ lending. As we discuss next, the students running our P2P fund have explicitly incorporated a charitable dimension into their lending criteria.

THE FOUR HORSEMEN INVESTMENTS FUND

Our fund’s mission is education, not profit. The structure of the fund—its relationship to the curriculum, the nature of the initial funding, the role of the instructor, and the responsibilities of the students—helps ensure that the participants are *students*, not investment advisors. The process that the students use to screen loans and create the portfolio helps ensure that they actually learn investment principles.

Investment advisors are required to register under the Investment Advisors Act of 1940. Clinebell, *et al.* (2008) note that there are several structural features of a student managed fund that help clarify its educational mission and thereby avoid this requirement. The first is the fund’s place in the academic curriculum. Clinebell *et al.* (2008) describe four designs for a student managed investment fund: funds may be (1) the focus of a special credit-bearing class; (2) an element of an existing class; (3) part of a traditional extracurricular activity, bearing no academic credit; or (4) part of an activity for which students are paid. Our fund will be closest to the third, “club”-type structure. There will be no remuneration for either the students or the advisor, and no expectation of any profit. Our students, therefore, do not appear to be acting as investment advisors, and should not need to register.

This interpretation is strengthened by our source of funding. The money that will start the fund was a gift. The gift is specifically intended to be used to by student lending on Prosper. The donor will retain no rights to the funds; any return will remain in the fund. Clinebell *et al.* (2008) suggest that this type of donor funding, without expectation for professional management or investment return, helps avoid any liability issues. They view it as the “safest” approach for creating a student-managed fund.

A unique aspect of our donor funding is that it will be made to an independent 501(c)(3) organization, Four Horsemen Investments, not to our university. Carving out an SMF from an endowment is a common funding strategy for SMFs, but one that requires that the university bear fiduciary responsibility. In addition, student management of university funds may deter some university donors, who may not wish to have their money managed by students (Gullapalli, 2006). Separation of our fund from our university allows us to avoid these complications.

The students will make the lending decisions for our portfolio. This is consistent with the usual practice for SMFs. Student decision-making is also important to ensure that faculty advisors do not stray from activities that are “solely incidental to the practice of their profession,” so that they need not register as investment advisors. We plan to have students involved in the fund for at least two years, with senior students mentoring the newer members. Having members involved for two years should allow them to observe problems with the loans they choose. In addition, the two-year participation commitment should allow us to take advantage of the mentors’ growth as lenders. Thus, our fund can take advantage of both new-lender enthusiasm and experienced-lender learning as students cycle through the two-period program.

The initial criteria established by the founding members of Four Horsemen Investments are shown in Table 1. These criteria illustrate the members' primary screens for risk management. Before a loan is funded, however, the loan must be approved by a majority of Four Horsemen's members.

Table 1: Criteria for Initial Portfolio Loans

Criterion	Justification
no loans below credit grade C (below 640 credit score)	This was the consensus risk/reward cutoff.
no loans to borrowers with DTI below 20%	DTI > 20% signals too little available cash flow for loan service.
no loans for debt consolidation	"We do not want to become the new creditors they [borrowers] avoid."
no loans for start-up businesses	These sorts of loans were deemed too risky.
borrower must have been employed for more than 2 years at same job	Consistent employment signals stability. ("We like consistency.")
borrower should be a home owner	Homeownership also signals stability.

This table lists the lending criteria established by the founding members of Four Horsemen Investments.

All quotations come from their project proposal.

Choosing the loans means shaping the portfolio: giving students this level of control enhances their enthusiasm for the experience. Thus, members of Four Horsemen Investments may determine their own objectives for the fund. For example, the founding members have identified two short-term and three long-term goals, which are described in Table 2.

Table 2: Goals for Four Horsemen Investment Fund

Short-Term Goals	Discussion
create a legacy	We would like our endeavor to carry on to students in the future. We would like to set up a sound system of investing that allows future students to experience finance outside the classroom.
positive reinvestments	By analyzing the data we will acquire and by evaluating our experiences, we will be able to reinvest the money with sound strategies that we will gain with experience and research.
Long Term Goals	Discussion
create a scholarship fund	In the future, if this money could help fund a student's education, it would be being put to good use.
create a business experience fund	Money could be put toward other projects that would enhance learning. For example, it could help take students to conferences to present their research.
create an emergency discretionary fund	Money could be used to help students who come down with a sudden illness or get into any sort of accident.

This table lists and describes the goals determined by the founding members of Four Horsemen Investments.

Several of the goals listed above are clearly charitable. Of course, if charity drives the loan choices, we may expect a lower return from the portfolio. However, we—like many SMF sponsors—are more concerned with furthering an educational goal than with generating above-average returns. The miniscule minimum size, low infrastructure requirements, and simple assets of the Prosper P2P lending marketplace make furthering this educational goal accessible for even the smallest business programs.

CONCLUSIONS

Many authors have documented the growth in student managed investment funds. These funds enhance student learning and enthusiasm through real-world experience. In this paper, we describe an unusual structure for such a fund: an independent, not-for-profit fund whose assets are Prosper peer-to-peer consumer loans.

Our fund is unique for several reasons. Most student-managed funds are run with some explicit connection to a university program; ours is independent, and is set up as its own not-for-profit entity. Debt-focused funds are rare to begin with, and ours, to our knowledge, is the only one of those that focuses on peer-to-peer lending. The debt funds that do exist are quite large; ours is extremely small, even relative to equity funds. Prosper's minimum loan size of \$50 means that even the smallest schools can create this type of fund, even if traditional types are out of reach. (The smallest fund in Neely and Cooley's [2004] survey is *100 times* the initial size of our fund.)

The nominal infrastructure requirements add to the appeal for small schools. While there are twenty students, on average, running the fixed-income funds in Morgan's (2008) study, Prosper portfolios can be run with far fewer. Prosper's lender expense ratio (1% of the outstanding note balance per year) is higher than Morgan's average 0.4%, but infrastructure costs—i.e., internet access—are negligible. However, the minimal requirements do not translate into educational irrelevance: some projections put the P2P loan market at \$9 billion by 2017. The new technology incorporated by Prosper, by itself, is an enticement for students. Thus, studying and using Prosper, the United States' oldest and largest P2P platform, not only teaches students investment basics, but also prepares them to understand and appreciate tech-heavy P2P market's growth.

Morgan (2008) notes that most existing fixed-income funds are based in “emerging” business schools—those competing with the “older, higher profile” schools. As fixed-income funds allow newer schools to compete with more established ones, so Prosper allows even the smallest schools to compete with the more well-endowed. Thus Prosper offers an unusual opportunity for small business schools: as Prosper democratizes lending, so may Prosper portfolios democratize student managed funds.

SELECTED REFERENCES

Clinebell, John M., Douglas R. Kahl, David Redle, and Jerry L. Stevens (2008) “The Fiduciary and Legal Aspects of Establishing and Operating a Student Managed Investment Fund,” working paper

Glassman, Thomas, Michael Gordon, Max Kabrich, and Jiri Senkyrik, “Peer-to-Peer Lending Project,” unpublished manuscript, Fall, 2008.

Gullapalli, D. (7/14/06) “They Give It the Old College Try: Funds Let Students Invest Millions,” *Wall Street Journal*, p. C1

Morgan, George (2008) “Fixed Income Student-Managed Funds: A Report on Recent Innovations,” working paper

Neely, Walter P. and Philip L. Cooley (2004) “A Survey of Student Managed Funds,” *Advances in Financial Education*, vol. 2, Spring, p. 1-8

Peng, Zhuoming, William P. Dukes, and Ronald Bremer (2008) “Student-Managed Investment Fund Survey: An Analysis of SMF's Operations in 35 Universities in the U.S.,” working paper

Prosper Marketplace, Inc., Form S-1, “Registration Statement for Face-Amount Certificate Companies,” 12/30/07.

THE IMPACT OF EDUCATION ON THE WAGE GAP BETWEEN IMMIGRANTS AND LOCALS: A CROSS NATIONAL COMPARISON

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ABSTRACT

This paper examines the impact of education on the wage gap between immigrants and locals using data from the Luxembourg Income Study (LIS) for 4 countries over a multi-year period. The four countries in this study include Germany, Italy, Norway, and Luxembourg. We use person level data from the LIS for this study. By including four countries in the analysis, we are able to compare the wage gap between immigrants and locals in these countries. We analyze the impact of education on the wage gap between immigrants and locals for low, medium, and high levels of educational attainment. The LIS is a non-profit co-operative research project with a membership that includes 30 countries on four continents. The LIS project began in 1983 under the joint sponsorship of the government of the Grand Duchy of Luxembourg and the Centre for Population, Poverty and Policy Studies (CEPS). The project is mainly funded by the national science and social science research foundations of its member countries.

PART-TIME ENTREPRENEURSHIP: THEORY AND EVIDENCE

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ABSTRACT

Why do people become part-time entrepreneurs? Early studies on entrepreneurship do not deal with part-timers. In contrast, recent evidence from a large cross-national study on the level of entrepreneurial activity of 40 countries has established that 80 percent of those who implement start-ups also hold outside paid jobs. To explain part-time entrepreneurship, I develop a model of entrepreneurial choice where one can hold an outside paid job while also being involved in a start-up. Individuals become part-time entrepreneurs because they do not know their entrepreneurial ability ahead of time. Initially, they would prefer to spend only a fraction of time in entrepreneurship without the risk of starving if their ability turns out to be low. Based on their expectations, entrepreneurs choose how much time to spend in business and how much capital to invest. They will receive a signal about their entrepreneurial ability that is proportional to the time spent in the start-up and will make a decision about what to do next. Better entrepreneurs manage to transform their start-ups into successfully operating businesses; those with lower entrepreneurial ability withdraw. The model gives rise to industry selection and agrees with the empirical evidence from the Panel Study of Entrepreneurial Dynamics.

Keywords: Entrepreneurship, entrepreneurial ability, start-ups, industry selection.

JEL: M13

INVESTMENT DECISION MAKING OF ENTERPRISES IN THE CZECH REPUBLIC

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ABSTRACT

Investments belong to important activities of companies. Every company must invest in order to keep going and develop. Capital investments and their financing have also significant impact on expectation economic results of companies. But only accurate investment decision making process can conduce to investment projects that will support development of companies. This paper is focused on enterprises in the Czech Republic and their investment decision making. Investment behavior of Czech enterprises was surveyed on the basis of questionnaire analysis. As a whole 387 firms participated in this survey. The purpose of survey was to discover most often methods that enterprises use when they evaluate efficiency of investment projects and simultaneously most often problems associated with these activities. The questionnaire was aimed at four areas: general principles of investment decision making process, determination of required rate of return (determination of discount rate), identification of cash flows and investment financing from European Union funds. The paper also summarizes the main results discovered from this questionnaire analysis.

INTRODUCTION

The primary aim of investment decision making is to determine assets in which an enterprise should invest. The object of investment decision making is also decide how much, in what, when and how invest (Tetrejova, 2006). Investment decision making and investment financing are characterized by certain specifics which result from the fact, that it is long-term decision making. It is also necessary to take into account the time factor and possible risks of changes during preparation and implementation of an investment project. Capital investments and their financing have significant impact on expectation economic results of companies, their competitive advantage, profitability and financial stability, because investments are generally capital intensive processes. When new investment projects are successful, they conduce to performance growth and general prosperity of a company. Whereas unsuccessfulness of projects can lead to the performance fall or even to the threat of company existence. Investment decision making influences also the market value of a company.

The enterprises have usually choice from some investment alternates. These alternates vary in different technical and technological parameters as well as investment return. Separate investment alternates are evaluated according to their impacts and effects on the firm. The quality preparation, evaluation and especially selection of acceptable investment alternate are fundamental for final success of realized investment projects. As Mace (2006) says, "every investment is capital outlay and so the investment should ensure return of capital".

When we evaluate economic efficiency of investment projects, we compare the effects from projects on the one side with capital outlays on the other side. Capital outlay presents in financial theory larger cash expense that should convert into cash income in time period longer than one year (Valach, 2005). Overall investment projects efficiency is judged according as investment projects contribute to primary aim of business, i.e. maximization of firm market value. The enterprises should also accept such investment projects which conduce to the increase of their market value. According to the recent theory, the contribution of an investment to the firm market value increase is best expressed through the use of net present value (NPV) of investment.

PROBLEMATIC AREAS OF INVESTMENT DECISION MAKING

In spite of many textbooks are devoted to the area of investment decision making and principles of investment decision making which are well known and often used, we can meet with certain theoretical and application problems that are necessary to solve by evaluation of investment projects. We can already include identification of input data for whole decision process in these problems, i.e. identification of capital incomes and capital expenditures associated with realization of an investment project. Investment evaluation can be based on too optimistic estimates of investment cash flows. The question of risk and time is concerned with investment cash flows estimates, too. The selection of concrete criterion of investment efficiency evaluation can be sometimes disputable. It is not concerned only with the selection of correct evaluation criterion, but with its exact application too. Then an enterprise must determine minimum required rate of return on investment, which is not easy task, as well as the time when the investment will yield profit (life time of investment). Recently we meet with problems of real options, which we must take into account, when we make investment project evaluation.

These individual problematic areas of investment decision making were examined in practice of Czech enterprises. The aim was to analyze whether these problems are only theoretical, or they are solved in business practice too. Furthermore it investigated what problems the enterprises have by evaluating of their investment, how they solve these problems and withal if they use the procedures and methods recommended by theory.

The analysis of real state of investment decision making of enterprises in the Czech Republic was accomplished on the basis of questionnaire survey. The questionnaire was composed of four parts:

- general principles of investment decision making,
- determination of required rate of return (determination of discount rate),
- identification of cash flows,
- financing of investment from European Union funds.

The survey was carried out in 2007 and 387 enterprises participated in this survey. Questionnaires were divided according to the size of enterprises, it means to small, medium and large enterprises, in order to discover differences in investment decision making depending on size of enterprises. The enterprises were divided according to the number of employees, as following table shows.

Table 1: Enterprises According to the Number of Employees

Type of enterprise	Number of employees
Micro enterprises	0 – 9
Small enterprises	10 – 49
Medium enterprises	50 – 249
Large enterprises	250 and more

GENERAL PRINCIPLES OF INVESTMENT DECISION MAKING

First part of questionnaire survey was focused on general principles and procedures that enterprises use by their investment decision making. The areas of survey were investment planning, investment efficiency evaluation methods, risk solving, utilization of real option by investment decision making etc.

Most of Czech enterprises are concerned with planning of their investment. Most enterprises that don't plan their investment fall into small enterprises (more than third of enterprises), as we can see from the next table. They mostly realize investment when the investment is necessary for enterprises survival. Simultaneously small enterprises don't have much time for these activities as well as skilled employees. Their main tendency is to ensure fluent running of the enterprise. Though we can the results concerning

investment planning of Czech enterprises consider as satisfactory. As well as the fact that enterprises monitor the influence of investment on other operations and business results.

Table 2: Percentage Share of Enterprises That Are Engaged in Investment Planning

Type of enterprise	Ratio of enterprises (%)
Small enterprises	64.4
Medium enterprises	87.9
Large enterprises	98.6

Most of enterprises calculate economic efficiency of investment in time of investment preparation. The greatest share of enterprises that don't evaluate investment efficiency is again from the group of small enterprises, largely from the same reasons as it was by investment planning. Percentage shares of enterprises illustrate table 3.

Table 3: Percentage Share of Enterprises That Evaluate Investment Efficiency

Type of enterprise	Ratio of enterprises (%)
Small enterprises	84.4
Medium enterprises	96.5
Large enterprises	98.7

The most often used criterion of investment efficiency evaluation is payback period, following with cost criterions. Czech enterprises use also rather traditional evaluation methods than modern methods of investment evaluation. Modern methods based on discounting of cash flows from investment apply mostly large enterprises, least small enterprises.

Table 4: Criterion of Investment Efficiency Evaluation

Evaluation criterion	Percentage of use		
	Small enterprises	Medium enterprises	Large enterprises
Payback period	45.2	38.5	34.4
Cost criterions	23.3	24.8	18.9
Net present value	8.2	9.4	15.6
Profitability index	6.9	11.1	12.2
Internal rate of return	6.9	8.5	11.7
Average return	6.8	6.8	5.6
Other	2.7	0.9	1.6

Czech enterprises have certain gaps in area of risk analysis by investment projects evaluation. More than half of small enterprises and more than third medium and large enterprises don't solve the question of risk by their investment decision making. Risks that Czech enterprises most often meet are competition risk, financial and operational risk. Small enterprises make market research and provision by means of credits as preventative measures against possible risks. Medium and large enterprises place emphasis on quality preparation of investment projects and selection of acceptable investment alternate in initial phase of investment. The size of risk of certain investment project is mostly determined on the basis of estimates coming out of experience in previous investments and their riskiness.

Table 5: Percentage Share of Enterprises That Make Risk Management of Investment Projects

Type of enterprise	Ratio of enterprises (%)
Small enterprises	46.7
Medium enterprises	74.1
Large enterprises	77.3

The questionnaire contains questions about usage of real options as newer approach to the investment projects evaluation too. No questioned enterprise uses this method by investment efficiency evaluation. Only more than third small and medium enterprises and more than half large enterprises know that this method exists.

DISCOUNT RATE DETERMINATION

Czech enterprises have two favorite methods from different methods of discount rate determination offered by theory. Large enterprises derive discount rate most often from weighted average cost of capital (WACC), small and medium enterprises mostly take into account the discount rate of central bank.

As regards the estimate of cost of equity capital for WACC determination, many enterprises don't use any theoretical method, they use only their own estimate. The most used methods are determination of cost of equity capital on the basis of average return on equity capital in given economic sector and according to the cost of debt. Czech enterprises use also rather subsidiary methods of equity cost determination instead of basic methods as capital asset pricing model (CAPM) or build-up model. The results of survey concerning the discount rate determination we can see in the next two tables.

Table 6: Methods of Discount Rate Determination

Methods	Percentage of use		
	Small enterprises	Medium enterprises	Large enterprises
According to the commercial paper yield with same risk rate	19.1	16.7	14.9
According to the discount rate of central bank	42.6	33.3	29.7
WACC	25.5	28.4	37.8
Other method	6.4	13.3	12.2
No discount rate determination	6.4	8.3	5.4

Table 7: Methods of Cost of Equity Capital Estimation

Methods	Percentage of use		
	Small enterprises	Medium enterprises	Large enterprises
CAPM	2.1	6.4	9.5
Build-up model	0	0	7.1
Average return on equity	36.2	44.4	41.7
According to the cost of debt	12.8	14.3	11.9
Dividend model	0	1.6	3.6
Other method	0	0	3.6
No mentioned method	48.9	33.3	22.6

CASH FLOWS IDENTIFICATION

As exact as possible estimate of cash flows from investment presents the base for accurate investment decision making and evaluation of investment efficiency. So a part of questionnaire survey was also focused on the area of cash flows identification. The survey showed that there are deviations between planned and real cash flows from investment, especially in case of cash incomes. More than half of enterprises take into account the influence of inflation by cash flows identification. But many enterprises don't think the influence of inflation on discount rate by their investment decision making.

Czech enterprises forecast expected sales from investment on the basis of experience with analogical previous investment projects. The least used procedures of investment sales estimation are statistical methods as regression and correlation analysis. Small and medium-sized enterprises don't use these

methods. Most of medium and large enterprises make possible sales variants according to the possible changes of individual factors that the sales can influence. Small enterprises don't consider any sales variants by investment decision making. They don't have time and employees for these activities and they don't need to make some possible variants thanks to character of their investments. More than 60 % of medium and large enterprises investigate their market shares and more than 60 % of small enterprises don't do this. Medium and large enterprises make market survey and competition analysis, small and medium enterprises only estimate their market share. Some of large enterprises utilize the services of external marketing firms.

FINANCING OF INVESTMENT FROM EUROPEAN UNION FUNDS

Financing of investment from financial resources of Structural Funds of European Union is not a common thing for Czech enterprises. Most of enterprises don't utilize this possibility, because there are many problems and obstructions with which the enterprises meet. As the survey shows, the problem is insufficient awareness of enterprises about the possibility of investment grant utilization. Many enterprisers also don't utilize the opportunity that Structural Funds offer, either by reason of lack of information or thanks to bad communication by data acquisition. Next problems for enterprises are complicated rules of financial resources utilization and complicated administration. Enterprises also often use the help of professional firms.

SUMMARY

The paper summarizes the main results discovered from questionnaire survey of investment decision making of Czech enterprises. Though we can think, that investment decision making belong to current activities of the firms, there are certainly problematic issues, that firms have to solve when they invest. The results of questionnaire survey show, that enterprises don't always use methodology of evaluation of investment projects that advise the theory and some enterprises don't have any idea about this, especially small enterprises. Simultaneously, here are the differences in evaluation of investment projects between small and medium-sized enterprises and large enterprises. Small and medium-sized enterprises don't know some approaches and methods of investment decision making that the theory advises. Although they some methods know, these methods are unusable for these enterprises. When they make evaluation of efficiency of their investment, they use less sophisticated methods of evaluation and they make decision only on the basis of their estimation in many areas.

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REFERENCES

Mace, M. (2006) *Financial analysis of investment projects*. Prague: Grada Publishing

Tetrevova, L. (2006) *Financing of investment*. Prague: Professional Publishing

Valach, J. (2005) *Investment decision making and long-term financing*. Prague: Ekopress

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A GENERAL VIEW OVER THE STRATEGY FOR NATIONAL SUSTAINABLE DEVELOPMENT: THE CASE OF ROMANIA

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ABSTRACT

Strategies may be international, national or local. In many countries, economic, social and environmental strategies are uncoordinated and the development plans are more attention to implement a successful strategy for sustainable development. Practical, sustainable development for Romania opens new horizons of research through taking into consideration of externalities (positive or negative) generated by human activities. Acknowledging the fact that the outputs of economic activities do not limit at outcomes strictly accounting aimed at by the present system of national accounts, the economic theory and practice are challenged to accomplish and to rethink the actual mechanisms. According to the Romanian policy this strategy is a process of developing a long-term vision or sense of direction (priority issues, key influences on those issues) and engaging everyone concerned to carry them out. The main components of a Romanian strategy must continue together and reinforce one another but is better that implementation starts early because it does not have to wait for all planning to be completed. So, the sooner implementation begins, the sooner a strategy can benefit from experience. The present paper presents how the principles of Romanian sustainable development should be understood and the ways these principles should be applied.

INTRODUCTION

Sustainable development is no new issue. The concept of sustainable development is campaigning for inclusion in human activities present a liability in the longer term. It integrates environmental principles, commercial, and social.

Over the past 35 years, growing numbers of people have come to recognize that efforts to improve their standards of living must be in harmony with the natural world. Economic development and the preservation of the environment are no longer seen as necessarily being at odds with each other. Indeed, sustainable development recognizes that there can be no improvement in standards of living, no eradication of poverty, without wise use of scarce natural resources that minimizes the impact of our actions on the well being of our children and grandchildren.

For most of the 21st century, in many societies the issue of sustainability was neglected, as industrialization and economic growth took precedence over the preservation of the environment and the need to ensure a fair standard of living to people across the world.

STRATEGIES FOR SUSTAINABLE DEVELOPMENT

We show that the developed countries still enjoy the majority of the benefits from services trade and stand to benefit most from liberalization under the Doha Round. However, developing countries also have a large and growing potential to benefit from services trade in the near future.

Such benefits will only accrue to the developing world if:

1. liberalization includes factor movements as well as the liberalization of developed country manufacturing sectors;
2. development-oriented institutions are established to prepare services markets, manage their liberalization, and continuously monitor and maintain services markets in the aftermath of liberalization;
3. trade rules give nation-states the policy space to establish those appropriate no market institutions.

The global commitment to sustainable development runs long and deep. Sustainable development was defined most clearly in Agenda 21. Article 3 says that “the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.” Agenda 21 also stresses that sustainable development should be development not only from an economic perspective, but from environmental and social perspectives as well. Key among the core goals of sustainable development is the eradication of poverty and to give special treatment to the developing world.

The successive strategies for sustainable development of the European Union (2001 and 2006) have focused on the preservation and development of natural capital cautious. One of the main factors determining this development was the real dangers of conscientement due to climate change caused by human activities.

As a member of the European Union, Romania has assumed specific obligations regarding the acquits communitarian, including the adoption of a model of sustainable development, including the principles, objectives and modalities of work agreed within the European Union.

In 2007, the Government has adopted the Drafting of the National Strategy for Sustainable Development in accordance with the objectives agreed at Community level and methodological requirements of the European Commission.

The time horizon of the strategy of Romania for Sustainable Development has been divided into three stages, as unequal length, but each with its own meanings:

- before 2004 (inclusive) - period when he was printed bottom line of economic growth and the consolidation of macroeconomic balance, including the reduction of inflation, as well as the conclusion of negotiations for the integration in the European Union;
- the 2005-2007 period - marked by the finalization of the pre-accession process to the European Union, which has imposed happened to the community and the performance of absorption structural instruments; this period has resulted, among other things, by the denomination of our national currency; by institutional modernization, increasing the competitiveness of the Romanian economy, the campaign against corruption.
- during intervals 2007-2010-2013 we saw de integration of Romania into the European Union and we expect the country's development in a new context, including the costs and benefits with the opportunities and constraints.
- for the period 2013-2025 it is planned changes in Romania on the path of sustainable growth, similar to specific countries with a high level of development, the main effect of integration into the European Union and that the estimate of our own efforts, taking into account the reduction of absolute and relative lag in comparison with the average level of the European Union.

The strategy for the 2007-2013 periods includes:

- the EU Lisbon agenda (for 2010), whose objectives are arriving at the global competitiveness, based on the promotion of the information society;
- the changeover to the euro which requires compliance with convergence criteria (regarding inflation, the budget deficit, changes in the course of trade, public debt, etc.);

- the creation of the National Plan for Development (PND) for the period, by an inter-institutional committee under the Ministry of Economics and Finance.

It should be noted that the training of human resources and research of environmental technologies, generally viewed as instruments of policy for achieving specific goals were viewed by the authors of the study as a priority strategic directions, with a view to benefiting any necessary financial attention.

The development of the National Strategy for Sustainable Development (NSSD) from Romania in the form revised in accordance with the objectives agreed at Community level and methodological requirements of the European Commission was established by Government Decision (Government Decision No. 1216 / 2007 published in the Official Gazette No. 737/2007). It is a joint project of the Government (through the Ministry of Environment and Sustainable Development) and the United Nations Program for Development (by the National Center for Sustainable Development).

The strategy will be finalized and submitted to the European Commission until the end of this year, will have an orientation perspective on the medium and long term and will contain targets, measures for implementation and evaluation of sources realistic funding on the horizon for years 2013, 2020 and 2030. Therefore, the document must include synthesis (2013) national and sectorial strategies as well as operational programs approved or pending approval. For the 2020 projections are oriented attack by Romania in the average level of the European Union completed in 2007, and for the year 2030 to a middle level of Member States on that date.

In our country, the objectives of the sustainable development tie on the economic, social and ecological stability. These objectives looking inside at the economic activities and objectives are concerning the external economic relations.

In the first the objectives appear that have in view the global economic resultants (GDP); the objectives to the direct impact on the lasting development: the investments and the formation of the capital and the effects of their employment; the global offer of goods and services, the monetary circulation, the budgetary execution, the distribution of incomes, the public debt and the objectives bound to the scientific research and to the outside trade, the movements of capital that meet in the balance of external payments, the external investments.

The social objectives relate to the use of the human resources and the occupation of the manpower, to the education, the instruction, information, to the professional formation, to health, to the leisure, to the fairness and social aid,.

The ecological objectives materialize in the protection of the environment and the conservation of the nature, the security of the biologic diversity and the lasting use of the resources non recyclable.

The objective fundamental of the National Strategy for the Development, Lasting in Romania is the growth of the prosperity and the well-being individuals and the social whole to the national level, while following a development economy to the limits of support of the Natural Capital that can guarantee the quality of life for the next generations.

To achieve lasting development, Romania has need, except its own funds, the important investments and aid. The deficit of resources that can appear in the beginning of the development of the strategies and the programs of development the development of the strategies and programs of development one at the time of starting up, pose the problem to assure the necessary resources while often calling at the outside sources.

Romania is not only a country possessing a natural capital and of the varied resources but also is a believable partner for the associations with other countries or international companies, although it persists some economic, institutional and social inconveniences.

Romania is a member of the EU there is more than two year, which implies status analysis and the setting of priorities for the future. The index of the company has moved into a new parameter assessment for our country. The index of the sustainable society (ISD) has become the new parameter for assessing our country. Project of the National Institute of Statistics, the ISD is calculated on the basis of 22 indicators pointing to the level of sustainability of Romanian society. In 2007, the Netherlands have published for the first time the index for 150 countries; Romania held the 12th place.

CONCLUSIONS

To conclude, the sustainable development supposes a new code of values feasible in the setting of a general suit of transition toward a viable society, where people can be attracted by new modes to organize their life and to become conscious of what can happen if they don't change the way of life. Its can be the solution of conciliation of all conflicts provided that the unanimous interests convergent toward the human evolution. It is necessary to assure the passage of the idea to the makes by individual and collective efforts so that the lasting development really achieves itself.

Also for Romania sustainability should represent the main goal of present leaders at both economic and political level. Although respecting the principles of sustainability might not seem cost effective, not respecting them will lead to much higher expenses for future generations.

So, it depends on each individual to recognize it, accept it and apply it in everyday life. We, as a civilization have passed the moment when we could learn from our errors. From now on we have to move forward flawlessly.

REFERENCES

- Atkisson, A., (2006) "Sustainability is Dead-Long Live Sustainability," *The Future of Sustainability*, Springer, Dordrecht.
- Bartlett, A., (2006) "Reflections on Sustainability, Population Growth, and the Environment," *The Future of Sustainability*, Springer, Dordrecht.
- Cogburn, J., Rahm D., (2007) "Government Green Procurement in the U.S.: an Approach to Meeting Global Environmental Challenges," published in *Handbook of Globalization and the Environment*, CRC Press, Boca Raton.
- Ciupagea, C., Manoleli D., Niță, V., Papatulică, M., Stănculescu, M., (2006) "Direcții strategice ale dezvoltării durabile în România," *Studiul III – Institutul European din România*, (177 pg.) put online by Florian Colceag - http://strategia.ncsd.ro/docs/comentarii/3_fc.pdf.

FROM TECHNOLOGICAL READINESS TO BUSINESS SOPHISTICATION THROUGH ICT APPLICATIONS

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ABSTRACT

The knowledge based society raises some new imperatives, challenges and opportunities for firms, generally speaking, because newer and better knowledge can lead to an estimate rising of 70- 80% in firm competitiveness under the circumstances characterized by the transformation of the older economy into the new economy – with the help of the global informational and technological influence. The present study tries to analyze the importance of some ICT applications on the transition of efficiency economies – delimited also by technological readiness – to the innovation economies – delimited also by business sophistication – with the help of the regression index R^2 . From all ICT applications we consider the e-Commerce and e-Business to be the most relevant and to have a very strong impact; in fact we consider, on one hand, that e-Commerce is related with technological readiness and e-Business is related by business sophistication, on the other hand.

INTRODUCTION

Creating the information society as support for the knowledge society has become a common objective, both on an individual and a country level. The evaluation of the progress is possible only by using some indexes that can measure exactly the degree of penetration of novelties required by the informational society. The indexes will facilitate the evaluation of the individual progresses made by every country and at the same time it will allow a comparison between them.

The Information and Communication Technologies (ICT) sector is a rapidly developing area intensive in technological R&D&I and with immediate industrial effects. It is critically important for the competitiveness of all industrial sectors and it is considered a source of economic growth. Being at the leading edge of the development and innovation in these technologies this sector has always been an objective for governments.

RESULTS

According to the Commission of the European Communities (Preparing Europe's digital future i2010 Mid-Term Review, ICT Country Profiles, Working document, 2008) the 2 ICT applications – e-Commerce and e-Business – have the following composition:

For E-commerce

e-commerce as % of total turnover of enterprises

% enterprises receiving internet orders

% enterprises purchasing on the internet

For E-business

% enterprises with integrated internal business processes

% enterprises with integrated external business processes
 using ERP system
 using analytical CRM
 sending/receiving e-invoices
 using digital signatures
 using secure protocols for internet order
 using open sources operating system

The Global Competitiveness Report 2008/2009 identifies three stages of development for the economy such as: factor-driven economies, efficiency-driven economies and innovation-driven economies. Countries falling in between two of three stages are considered to be in transition. Countries that move from efficiency-driven stage into the innovation-driven stage must be able to sustain higher wages and the associate's standard of living only if their business they are.

Technological readiness is the 9th pillar of national competitiveness and is a key for efficiency-driven economy in stage 2 of development. It has the following composition: availability of latest technologies; firm-level technology absorption; laws relating to ICT; FDI and technology transfer; mobile telephone subscribers; internet users; personal computers; broadband internet subscribers. According to Global Competitiveness Report 2008-2009 the *technological readiness* measures the agility with which an economy adopts existing technologies to enhance the productivity of their industry. The importance of technology adoption for national competitiveness has been growing in recent years, as well as progressed in the dissemination of knowledge and the rising use of ICT has become increasingly widespread.

Business sophistication, the 11 pillar of national competitiveness, is a key factor for innovation-driven economy and concerns the quality of a country's overall business networks, as well as the quality of operations and strategy of individual firms. This pillar is very important for economies in stage 3 of development and it has the following composition: local supplier quantity; local supplier quality; state of cluster development; nature of competitive advantage; value chain breadth; control of international distribution; production process sophistication; extent of marketing; willingness to delegate authority.

Figure 1: The Values of E-Business in EU

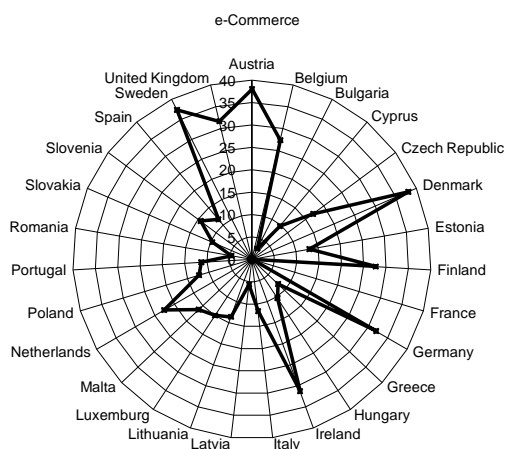
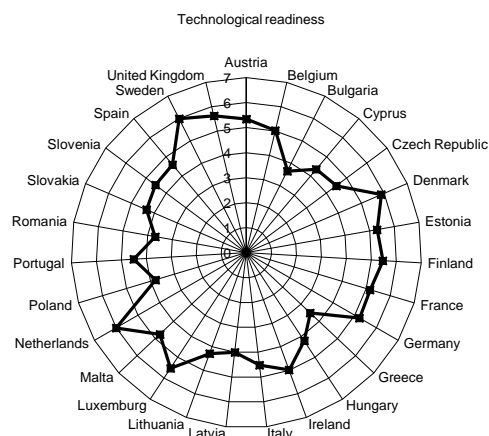


Figure 2: Values of Technological Readiness in EU

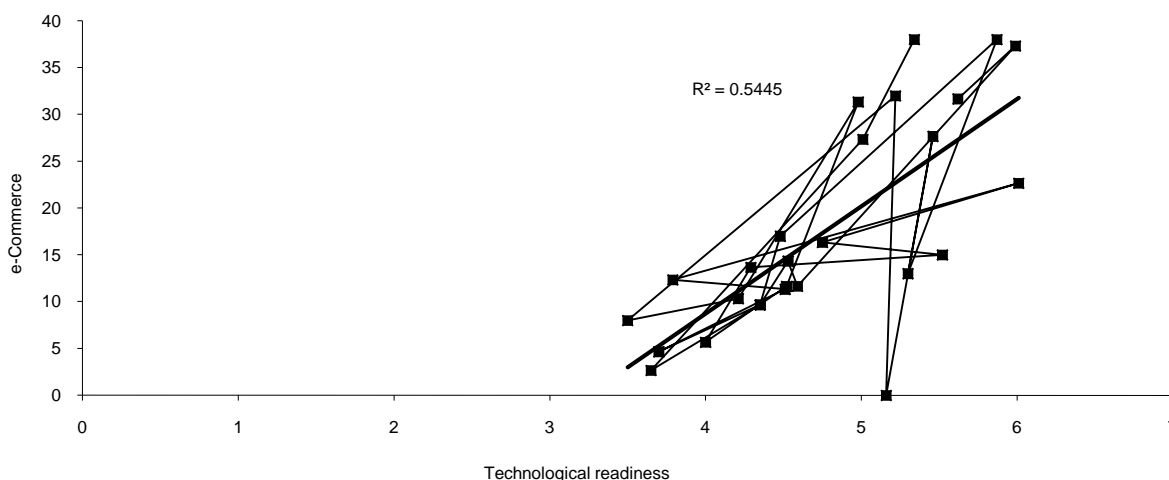


The link between the e-Business and business sophistication

Although e-Commerce is relatively developed in the European Union with an average of 17.51% only 9 countries show a value above average; among them we mention Austria (38%), Denmark (38%) and the other North countries, while the other 18 countries have values below average. The lowest two positions are taken by Romania with 4.66% and Bulgaria with 2.66%.

The 9th pillar of global competitiveness – technological readiness – shows that Romania takes the 25th position out of 27 member states of the European Union with a value of 3.7. The Netherlands finds itself in the top position followed by Sweden with 5.9. With an average of 4.77 we find countries like Ireland (4.98) and Malta (4.75). The lowest two positions are taken by Bulgaria with 3.65 and Greece with 3.5.

Figure 3: Interrelation between E-Commerce and Technological Readiness



The R^2 value of 0.5545 shows a direct relationship between the two variables, which means that in countries where the values of Technological readiness are high the values of e-Commerce are high as well and the other way around. Considering the fact that they are interdependent the y ax shows that e-Commerce is not dependent of x and the choice is aleatory in calculating the R^2 (correlation coefficient).

Figure 4: The values of e-Business in EU

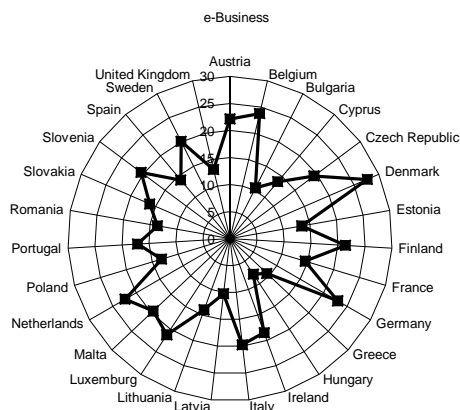
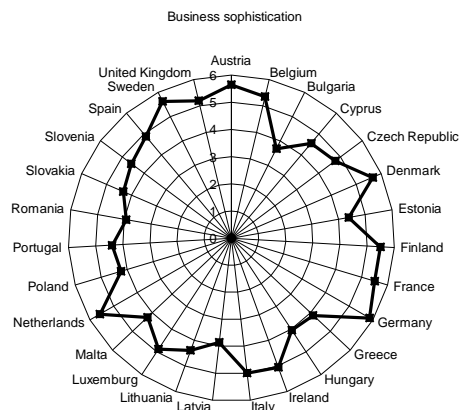
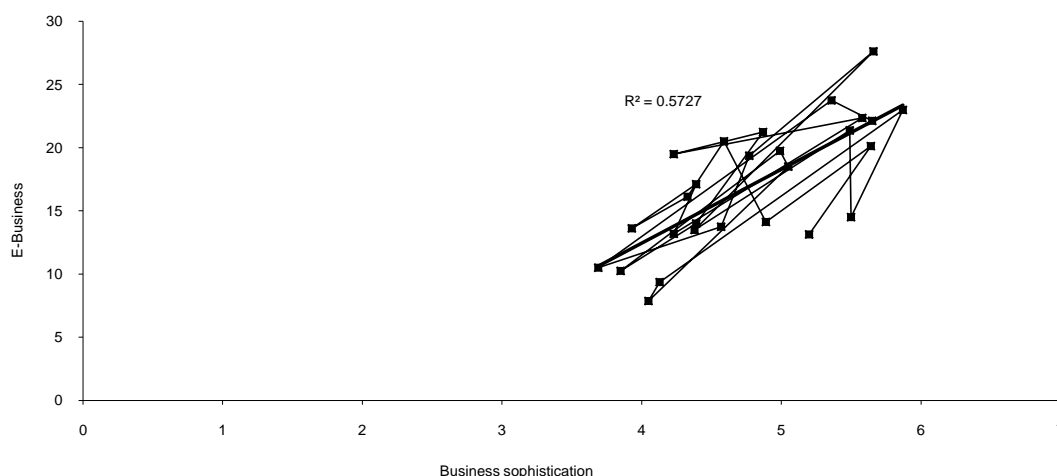


Figure 5: Values of Business sophistication in EU



The Business sophistication – the 11th pillar of the GCI composition (Global Competitiveness Index) – the average for the European Union of 4.79 is relatively low compared to other world economical powers. The values marked by countries like Germany (5.87), Denmark (5.66) and Austria (5.65) places them in stage 3 of development. It is not the same for countries like Romania (3.93), Latvia (3.85) and Bulgaria (3.69) which are in stage 2 of development.

Figure 6: Interrelation between E-Business and Business Sophistication



The calculation of the regression index number between e-Business and Business sophistication is important for the identification of the correlation between the two factors. The value 0.5727 of R^2 shows a direct interrelation between the two variables although this is not too strong. Therefore we can claim that in countries of the European Union where the e-Business factor is high the values of Business sophistication are also high (see countries like Germany or Denmark). At the same time when the values of e-Business are low the values of Business sophistication are also low (see countries like Bulgaria). As a conclusion countries that have values above/below average for one variable will have values above/below average for the other variable.

CONCLUSIONS

In conclusion, in recent years, many firms have elected to focus their efforts on gaining differentiation through the development of capabilities. Very often these capabilities come in the form of specific technologies. For example this might cover also the e-commerce. This technology can drive efficiency economies towards innovation economies in order to achieve competitive advantage in several ways including: reducing overall cost, enhancing inventory efficiency, improving order and production timeliness, supporting strategic planning and facilitating firm to firm information sharing.

The countries need to develop their own ICT strategies by creatively drawing available experience to configure their technical and human resources. The investment in ICT should be made to achieve the highest social and economic benefits at the lowest costs. Each developing country needs to prepare itself to make maximum use of the new opportunities.

In the European Union there are 17 countries in stage 3 of development, 5 countries are in transition between stage 2 and 3, and 5 countries are in stage 2 of development. In order for these countries to move

from stage 2 of development (efficiency-driven economies) to stage 3 (innovation-driven economies) they have to impose the utilisation of e-Commerce and Business sophistication on a wider scale.

REFERENCES

Andreas Credé, Robin Mansell (1998) *Knowledge Societies ... In A Nutshell*
Information Technology for Sustainable Development, for IDRC and the UN Commission on Science and Technology for Development.

Global Competitiveness Report 2008-2009

Preparing Europe's digital future i2010 Mid-Term Review, ICT Country Profiles, (2008) Working document, 2008

Raquel Rojo, Isabel Gómez, (2006), Analysis of the Spanish scientific and technological output in the ICT sector, *Scientometrics*, Vol. 66, No. 1 101–121

Richey, R Glenn, Daugherty, Patricia J, Roath, Anthony S, (2007) Firm technological readiness and complementarity: capabilities impacting logistics service competency and performance, Journal of Business Logistics.

Robert Premus and Nada R. Sanders, (2005) "Information Sharing in Global Supply Chain and Performance" *Journal of Business and Logistics*, 26(1).

Sanders, N.R., Premus, R. (2005), "Modeling the relationship between firm IT capability, collaboration, and performance", *Journal of Business Logistics*, Vol. 26 No.1, pp.1-23.

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THE IMPACT OF THE HIV/AIDS EPIDEMIC ON HUMAN RESOURCES: A CROSS COUNTRY STUDY OF THE BURDEN OF DISEASE

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ABSTRACT

This paper reviews the literature on growth theory, analyzes the importance of human capital and portrays the role of health as a determinant of economic performance. This survey also introduces the impact of a particular disease (HIV/AIDS epidemic) on human resources and includes empirical work explaining the interrelationship of health and income per capita which is measured using a multivariate framework controlling for other background variables. Good health improves economic performance whereas ill-health (using HIV prevalence as a proxy) deteriorates human capital, impacting negatively income per capita across countries. Health, as a component of human capital and a determinant of growth, has played an important role in recent developments in the economic literature. The two-way relationship between these variables has a mechanism of transmission that is explained through their impact on labor productivity and potential output.

BIOGRAPHY

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A CRITICAL VIEW ON THE CONCEPT OF FAIR VALUE

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ABSTRACT

Many authors are presenting the advantages of the fair value, but there are voices which contest this concept, because of its volatility and the tendency of subjectivism, of the manipulation of used models for the evaluation. Among the advantages of the fair value there can be named: utility, relevance, transparency and superior accuracy of the results and cash-flow of the company, it brings more clearance to the financial statements, it does a total accounting of the comparable value and it gives more liability to the manager. The credibility regards a reasonable evaluation, the using of market information in all possible situations for evaluating and justifying the subjective arguments. Starting from these concepts, the users of the accountancy information had demanded the elaborating of a model for a general appliance of the fair value. There are also specialists who criticize the limited use of fair values in IFRS. However, those criticizing fair value accounting do not seem to provide any credible alternatives. Do we go back to historical cost accounting, wherein the financial assets are stated at outdated values and hence are not relevant or reliable? In the current crisis, a question that is raised is: Should assets be marked down to their current throw away prices, as companies may not want to sell them at those values? This paper analyses the answer of this question, and also various controversial issues of the concept of fair value it as it is presented in the current project of the IASB and FASB.

INTRODUCTION

Fair value is a relatively new concept. It did not feature in the academic debate on current values in accounting that raged (not too strong a term) in the 1960s. In those days, the current values that were debated as alternatives to historical cost, and to one another, were replacement cost (Günter 1966), net realizable value (Chambers 1967) and deprival value (Baxter 1967).

The term 'fair value' seems to have been used first by accounting standards setters in the United States and has subsequently appeared in UK standards, in international standards and in the Directives of the European Commission, in addition to some more recent standards in the US. The use of the term by standards setters has been to describe, rather loosely, a market-based current value, as opposed to traditional historical cost.

The precise application of fair value has varied from standard to standard, and the United States Financial Accounting Standards Board (FASB) has recently developed a standard which prescribe a uniform method of calculating fair value, to apply within all standards that currently use the term. An exposure draft was issued in 2004 and the final standard was published in September 2006. The International Accounting Standards Board (IASB) is committed, as part of its international convergence program, to issuing a discussion paper (the first stage of its due process for developing a standard) based on the new FASB standard.

THE FUTURE OF THE CONCEPT OF FAIRE VALUE

The main problem of fair value adjustment is that many of the adjustments cause enormous fluctuations in earnings, assets, and liabilities that are washed out over time and never realized. The main advantage is that interim impacts that 'might be' realized are booked. It is a war between 'might be' versus 'might never be'. The war has been waging for over a century with respect to booked assets and two decades with respect to unbooked derivative instruments, contingencies, and intangibles.

On the other hand, the use of the fair value concept was favored by the disadvantages using the historical cost from what we mention:

1. Does not eliminate or solve such controversial issues as what to include/exclude from balance sheets and does not overcome complex schemes for off-balance sheet financing (OBSF). It is too simplistic for complex contracting. For instance, many derivative financial instruments having current values of millions of dollars (e.g. forward contracts and swaps) have zero or negligible historical costs. For example, a firm may have an interest rate swap obligating it to pay millions of dollars even though the historical cost of that swap is zero. Having such huge liabilities remain unbooked may easily mislead investors. Historical cost accounting has induced game-playing when writing contracts (e.g. leases, employee compensation) in order to avoid having to book what are otherwise assets and liabilities under fair value reporting.
2. Historical cost accrual accounting assumes a going concern. Under current US GAAP, historical cost is the basis of accounting for going concerns. If the firm is not deemed a going concern, the basis of accounting shifts to exit (liquidation) values. For many firms, however, it is difficult and/or misleading to make a binary designation of going versus non-going. Many firms fall into the grey area on a continuum. Personal financial statements seldom meet the going concern test since they are generally used in estate and divorce settlements. Hence, exit (liquidation) value is required instead of historical cost for personal financial statements.
3. Historical cost is perpetuated by a myth of objectivity when there are countless underlying subjective estimates of asset economic life, allocation of joint costs, allocation of indirect costs, bad debt reserves, warranty liabilities, pension liabilities, and so on.

It is not surprising that there appears to be some consistency between the recent IASB statements discussed above and recent FASB comments. On 23 June 2004, FASB issued an Exposure Draft of a proposed Statement, 'Fair Value Measurements'. This proposes a definition of fair value as 'the price at which an asset or liability could be exchanged in a current transaction between knowledgeable, unrelated willing parties', which definition seems at pains to preserve semantic differences between FASB and IASB, rather than to seek convergence. FASB proposes a hierarchy of the inputs which should be used to estimate fair value (note that this hierarchy is concerned with measurement estimations, not with definition).

The new definition resolves two of the alternatives within fair value as follows:

1. The reference to price rather than amount makes it clear that transaction costs are not included in fair value. If they are included in the measurement, the correct description would, in the case of assets, be 'fair value, less cost to sell'.
2. The reference to received to sell an asset and paid to transfer a liability clarify the choice of market, by specifying the exit market (disposal) rather than the entry market (acquisition).

There are two distinct dimensions to the consideration of alternatives to fair value. The first is to examine alternative current values, and the second is to consider historical costs. Discussions of fair value often fall in to the trap of debating the relative merits of fair value and historical cost while ignoring the existence of alternative current values. Thus fair value can, wrongly, be regarded as the only alternative to historical cost. In order to avoid giving this false impression, the current discussion will focus first on alternative measures of current value.

The term 'fair value' subsequently became widely used to describe the measurement basis used in the revaluation exercise required by acquisition accounting for initial recognition of an acquired entity. This

includes an entry value, current cost (subdivided into reproduction cost and replacement cost), two exit values (net realizable value and value in use) and one method that combines both entry and exit values (deprival value). For the sake of simplicity, the subsequent discussion is conducted in terms of measuring assets, although most but not all of it is equally relevant to liabilities.

Historical cost is the method of measurement traditionally used by accountants. It measures an asset at the cost of acquiring it. This provides a reliable basis for measurement, but an obvious disadvantage is that, as price change subsequent to acquisition, the relevance of historical cost declines if the objective of measurement is to reflect the current economic benefit represented by the asset. Moreover, it is possible that, in some cases, the transaction did not take place at market price (as in the case of bargain purchase) so that the transaction price did not represent the current economic benefit conferred by the asset, even at the moment of purchase. This comparison holds between historical cost and each of the current value alternatives described above. Each of the current values measures a current rather than an historical attribute of the asset and looks to the market rather than the specific transaction for evidence, but this leads, in each case, to a degree of estimation, because the current measures are not based on actual transactions but upon transactions that might take place in markets that are far from perfect and, in the extreme, may not even exist. Hence, current values include gains or losses in value that are unrealized, where as historical cost does not amend the measurement arising from the acquisition transaction until the gain or loss is realized in a disposal transaction.

These benefits of historical cost are obtained by sacrificing relevance to the current economic opportunities represented by the asset. From that perspective, historical cost loses its relevance as time passes and prices and opportunities change. Moreover, historical cost will measure otherwise identical assets of the same entity at different amounts, depending on the specific acquisition cost prevailing at the time of acquisition. Thus, it does not provide either a timely or a comparable basis for measuring the economic benefits conferred by the ownership of asset.

There are clearly several plausible alternatives to fair value. In choosing between them, it is necessary to have criteria with which to weight their relative costs and benefits. The conceptual framework of various accounting standard setters attempt to provide such criteria, although no standard setter has yet taken the courageous step of choosing a single valuation basis which is consider to be generally superior to the others. Thus, the extant standards are based upon mixed measurement systems.

The fundamental measurement issue is not application guidance and the choice of evidence to support measurement, but rather it is to determine the guiding objective of the measurement process. The primary objective of account, and therefore of measurement in accounts, is, according to the conceptual framework of the IASB and the FASB, relevance to the need of users. Those needs are assumed to arise from the economic decisions that users have to make. These decisions are assumed to be primarily those made by an investor, and they therefore relate primarily to the prediction of future cash flows. However, prediction does not imply merely forecasting, and the concerns of stewardship are also assumed to be included in the objective. Stewardship implies accountability by management to investors. The feedback that this provides is relevant to future cash flows because it will affect the future conduct of management and confidence which investors will place in the entity's prospects.

Many academic writers have advocated that a single measurement method be applied to all assets. This would have the obvious benefit of enabling different types of asset to be compared without having to allow the changes in valuation method and would also remove possible errors or bias arising from different classification methods being used by different entities or at different times. However, it seems likely that, in practice, cost/benefit considerations may justify the use of different measurement methods for different categories of asset (e.g. when market evidence is unavailable or expensive). In the latter case, it may still be helpful to users to have a common valuation objective, imposing consistency of purpose,

even if the techniques used to achieve it may vary according to asset type. Moreover, it may be preferable to choose techniques by reference to specific circumstances rather than asset type: thus, it would be the actual absence of market information, rather than asset type that would justify the use of an alternative technique, so that the measurement objective would always be followed as closely as was permitted by the available evidence. This is the approach adopted by the fair value hierarchy discussed above.

The positive result of the theoretical debates of the 1960s was to demonstrate the potential usefulness of different current valuation bases, such as replacement cost, net realizable value and deprival value.

CONCLUSIONS

To conclude, there are a number of plausible alternatives to fair value and that the choice will depend upon the specific circumstances of the entity and the needs of the user of accounts. In an uncertain world with imperfect and incomplete markets, no particular measurement objective should be regarded as having a monopoly, and different measurements should be regarded as complementing one another.

Fair value is here to stay. It is already deeply embedded in IASB and FASB literature and there are growing calls from the user community to increase its use in financial reporting. Conceptual support for fair value is demonstrable and will be further underpinned in the revised conceptual framework. Users, auditors and regulators will become more comfortable with the use of fair value as time passes.

Moving from theory to practice, the question perhaps becomes: What are the informational advantages and disadvantages of the practicable proxies to fair value, value, both when applied consistently, and when applied pragmatically on an item-by item basis? This takes us back to the academically traditional debates on the pros and cons of the various theories of income measurement and asset valuation. Many academics have strongly held view on these issues.

REFERENCES

FASB, (2007) "Fair Value Measurements," *Statement of Financial Accounting Standards No. 157*.

IASB, (2007) "International Financial Reporting Standards," London, *International Accounting Standards Foundation*.

Leonard, A. (2002) "Liabilities and How to Account for Them: An Exploratory Essay," London, *Accounting Standards Board*.

Van, T, and Whittington, G., (2006) "Deprival Value and Fair Value: A Reinterpretation and Reconciliation," London, *Accounting and Business Research*.

ENTERPRISE FINANCE MANAGEMENT IN GLOBAL ECONOMY

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ABSTRACT

Processes of globalization became a reality of our time. And if at a macro level we see a lot of papers, in particular articles dedicated to national strategies of development and in current economic policy; at a micro level we haven't such a discussion. And it's very strange fact. At the enterprise level the problem practically is not considered. Thus at a micro level gross domestic product and national income of the country are created. An increase competition in the market of limited material and selling of production is connected with globalization. Process of globalization covers various aspects, from the point of view of pre-acceptance by the most essential are globalization of the markets (manufactures leading new conditions and a competition and necessity of development of new methods of reaction to developing conditions) and globalizations of communications (which, as a matter of fact, can be named information revolution). Cultural, ideological and political globalization directly does not influence on the positions of the enterprise, however and these aspects through macroeconomic processes can influence on preferences of buyers and investors, and on a control system at the enterprise. So enterprise finance management must develop through global economy.

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INTRODUCTION

Processes of globalization became a reality of our time. We can see a lot of papers about globalization at a macro-level; in particular the globalization is taking into account during working out of national strategy of development and current economic policy of countries. But the problem practically is not considered at level of the enterprise. It can't be right. Thus at a micro-level gross national product and national riches of the country is created. A competition in the market of raw material and selling of production is connected with globalization.

THREATS AND CALLS OF GLOBALIZATION

Process of globalization covers various aspects, from the point of view of the enterprise; the most essential are globalization of the markets (manufactures leading new conditions and a competition and necessity of development of new methods of reaction to developing conditions) and globalizations of communications (which as a matter of fact can be named information revolution). Cultural, ideological and political globalization directly does not influence on the enterprise positions, however and these very aspects through macroeconomic processes can influence not only on preferences of buyers and investors, but also on a control system at the enterprise, and firstly on a finance control system. It concerns large firms which are compelled to pass to new paradigm of development. This paradigm must base on global strategy of manufacture and sales. Large firms with a view of purchase of additional competitive advantages "sell all over the world, delivering accessories and materials from everywhere, settle down in many countries to benefit from factors of manufacture with smaller value also form alliances with firms of other countries to use their opportunities" (Porter, 1993). Postulates of the classical theory on comparative advantages of the nation are modified. The multinational corporation use comparative advantages not one, and many countries, achieving growth productivity and dynamism, transforming the competitive advantages almost in absolute.

It is possible to tell, that globalization creates perfect conditions for a competition, free movement of capitals, the goods and a labor and, hence, for them most an effective utilization. Idealists consider that formation of uniform economic space on a planet will lead to overcoming of ethnic, religious and social conflicts.

Globalization develops a competition, but it not a classical competition on Adam Smith, in the global markets large players operate some, each of which supervises an essential share of the market. Players are well informed on plans actions each other and consequently conduct among themselves especially rigid competitive struggle, thus easily ruining fine firms. The western countries, standing up for an openness of economy, demand it from other states, at the same time in every possible way aspire to interfere with export from periphery, spending under a kind of antidumping procedures the rigid protectionist policy. Last years almost all countries of the West sharply toughen the immigration policy interfering free movement of a labor. Globalization of manufacture and operation of a cheap labor promoted decrease in costs and, according to Soros, were the major factors which have caused growth of profitableness of the companies and the prices of their actions in 90th years (Kochetov, 1999).

Opponents of globalization, do not deny globalization in general as objective economic and social process, and criticize its present neoliberal model and see in it a number of serious threats:

(1) sold model of globalization “provides construction of the world not on harmony of interests, not on preservation of variety of vital and economic ways and cultures, and on rigid principles of social-darwinism where lost perishes, and the winner manages all. An essence of going processes - in an establishment of uniform game rules which are favorable only strong and conduct to notorious loss weak, not leaving it of any chances” (magazine “Russian businessman”, 2002);

(2) “free-trade”, finished to global scales, or in other words market fundamentalism as the blind and unreasonable belief in the theory of self-regulation and self-organizing of the markets, is fraught destructive financial and economic crisis. Prompt growth of the financial markets which have been torn off from sphere of manufacture and trade, excessive concentration of financial resources in hands of financial speculators and at the international funds represent threat for national economies;

(3) strengthening of operation natural and manpower resources of developing countries, easing of the national states and loss of the control by them behind these resources;

(4) having poured (“Outflow”) in the developed countries of financial and intellectual resources, occurrence “dead” countries and reservations;

(5) removal of industrial production from developed in developing and new industrial countries generates unemployment in the countries of the West, sensation of uselessness among unemployed and as consequence - the social protest, flashes of senseless violence, degradation and self-destruction of the person (an alcoholism, drugs, suicides);

(6) the neo-liberal model of globalization destroys moral norms, (Pope) conducts to naked rationalism and inherently anti-social; successes of information technologies in a combination to knowledge in sphere to the mathematician, psychology and structural linguistics are used present globalists for change of human consciousness, as most effective kind of economic activities (Delyagin, 2000);

(7) according to the United Nations, growth of riches of mankind in 90th years for the first time automatically did not promote the decision of its such problems as poverty, illnesses, illiteracy, environmental contamination.

The list of threats and calls of present model of globalization could be continued, however and the listed problems it is enough to reflect on ways of their overcoming. Undoubtedly, cooperation on a global scale to achieve extremely difficultly, the resolution of conflicts by means of force how have shown recent events have not sunk into oblivion. Certainly, national states have the especial interests and priorities of development. For their realization they are united in regional economic groups (for example, EU and others). Within the limits of global system of the world economy they are original subsystems where integration processes and a regional division of labor roughly proceed. Thus on change to geopolitics for which roots under Henry Kissendzhera's statement it is necessary to search already in sights of cardinal Rishle who has proclaimed, that the states do not have principles, and there are only interests and consequently they operate egoistically, similarly to individuals as to participants of the market, gradual comprehension of necessity of collective actions in interests of all world community comes. On this ground the role over- national bodies of regulation of economy increases.

DEFINITION OF THE PHENOMENON OF GLOBALIZATION

In the scientific literature there are various approaches to an estimation and definition of the phenomenon of globalization.

By definition of UNIDO globalization is a re-structuring and the transformation of economic changing game rules for all participants during which break between those countries which have reached the critical industrial weight necessary for a global competition extends, and those who has lagged behind (UNIDO, 1996).

American scientist I.Vallerstajn defines globalization (“world economy”) as system formation with a uniform division of labor and set of cultures (Mironenko, 1999).

A number of Russian authors define globalization as an intensive stage of internationalization of manufacture and an economic life which is characterized by strengthening of non-uniformity of economic development, economic interdependence of the states and rather increased opportunities of economic, technological and information influence on this process (Gusakov, 2003). Thus change of a role of the national states is especially emphasized. If earlier the economic was a field on which the sovereign states operated, in conditions of globalization by A.I.Neklessa's words now it turns in the independent subject acting a floor of the national states (Lvov, 1999).

In S.Glazyev's opinion globalization at the present stage represents objective process of formation of the uniform world economic, financial, information and humanitarian space, causing decrease in a role of the state barriers on ways of movement of the information, capitals, the goods and services, and also increase of a role over-national institutes of regulation of economy (Russian businessman, 2002).

There are authors who consider globalization almost as pr-reception which is used the multinational corporation for hidden process of a robbery of resources half-peripheries and peripheries of the world

economy. However the analysis shows here again it is possible to agree completely with Dolgov, that globalization represents objective and absolutely inevitable phenomenon of the present which can be braked means of economic policy (as occurs in some cases), but it is impossible to stop or to cancel. Because, globalization is the imperative requirement of a modern society and scientific and technical progress is those (Dolgov, 1998).

Globalization is defined by many economists (for example, S.Dolgovym) as absolutely new phenomenon. Though globalization can be considered proceeding from the point of view, that cyclic it is possible to speak and about the periods of globalization (internationalization) and deglobalization the capital basically is inherent in capitalism. The analysis of international communications, in opinion of Kagarlitsky, shows, that cycles of globalization are replaced by cycles of national capitalist development. At the same time for a present stage of globalization new is not only the form in which these processes proceed, but also some essential characteristics. A lot of qualitative changes testifies to it, taken place in economic by the end of XX century (Kagarlitsky, 2005).

First of all is unprecedented till now the internationalization of the manufactures, shown in activity of the transnational companies. The multinational corporation represent a new form of the enterprises, generated the newest model of foreign economic relations. Unlike foreign trade (intermediary) for the given model active participation in all production - from scientific development before realization of production is characteristic. Thus the significant part of the foreign trade exchange is made with material streams within the limits of the same multinational corporations, caused by specialization and cooperation of manufacture. The basic form of activity of the multinational corporation is realization of direct investments, i.e. such investments which are directed on creation of own manufacture in other country or purchases of a control share holding of the foreign enterprise.

According to UNCTAD in the world in 1999 it was totaled nearby 40 thousand the multinational corporations including almost 300 thousand branches. The multinational corporations supervise more than 90 direct foreign investments (World Investment Report, 1999). It is possible to judge economic power of the multinational corporation on a total volume of sales and the general number borrowed. According to the American magazine "Fortune" in 1999 the total volume of sales of 50 largest multinational corporations has exceeded 3,6 bln. US dollars, and the aggregate number of the American multinational corporations borrowed only in 10 leaders has made almost 4 million people. Essential feature of present globalization are unprecedented on scales and depth quantitative and qualitative shifts, taken place in the world financial markets. As a result of action of a lot of the economic, political and technical factors directed on the decision of crisis problems of post-war economic, financial globalization has promoted most deeply. New information technologies, development of means of telecommunications in a combination to new financial tools have given to financial globalization new impulses, considerably having facilitated access on the financial markets not only juridical, but also to physical persons.

Global financial, and first of all the currency markets continue to develop quickly. The daily volume of currency transactions in the world makes over 2 bln. dollars from which only less than 10 serves international trade in the goods and services, and the others 90 address in the most financial sphere. It is considered, that full financial liberalization in a combination to the perfect competition in the financial markets promotes increase of efficiency of investments, more wide distribution of risks; the best transformation of savings in the investment. Increase of financial efficiency, in turn, automatically

causes growth of efficiency in other sectors of economy, reducing production costs and consumption, and is a powerful source of real economic riches. It gives the basis to approve, that in modern economic system the leading part passes from sphere of real economy to sphere of the finance which represents itself as the major factor of transformation of economic system. The model of economic development over which the financial purposes and the criteria leading to explosion of financial activity dominate, is shown in domination of the financial capital above industrial. Leadership from “Captains of the industry” passes to financiers as it is considered, what for reception of profit it is necessary not so much “Spirit of business”, but “Spirit of speculation” (Banking: world experience, 1999).

However social and economic consequences of financial globalization cause alarm in leaders of world financial sphere, heads of the national states, visible domestic and foreign economists. The Nobel prize winner, American economist James Tobin has counted up, that if to impose all financial operations by the tax at a rate of 0,1 it could limit sharply currency speculations, having made the most part from them unprofitable. The annual sum of this tax at a rate of 166 billion dollars could be transferred to the international organizations for struggle against an inequality and poverty, development of formation and rise of economy in the backward countries (Russian businessman, 2002).

Heads of some the national states are concerned by practically full disappearance of opportunities for national regulation of the international financial operations and rates of exchange which establishment was practically reduced almost to a simple parity between a supply and demand in the currency markets. Financial globalization undermines the national economic, monetary and fiscal policy. Considering global character of the market, its interrelation and interdependence, any economy can be subjected of crisis, because of shocks in the financial markets. Growth of Virtual economy to the detriment of Real economy, prosperity of “Economy of a casino”, are the result of grows out speculative operations in the international financial markets which the former president of France Z.Chirac has named AIDS of our economy (Dolgov, 1998).

The professor of the Geneva and Madrid universities E.Fontella allocates three groups of unresolved major problems which damage first of all to real sector of national economy:

the financial system in conditions of globalization remains not protected from crises what proves to be true events of last year;

it causes deflationary tendencies in a national credit policy and in many countries contains economic growth;

financial globalization opens a way for speculative and roguish operations and other kinds of undesirable behavior deforming use of resources of work and the capital.

Powerful impulse to processes of globalization development of new information technologies and telecommunications, and first of all has given to a global network the Internet. The elementary electronic shop in a network at once enters the global market and at the correct marketing policy can quickly succeed. On-line trade in the share market opens unprecedented before conditions for individual investors. Opportunities for remote labor attitudes grow. The global electronic environment opens practically before everyone the global market of goods, the finance and work. Processes of economic globalization have received such scope in conditions of liberalization of the external economic attitudes:

free capital flow, to decrease in trading barriers on a multilateral basis, owing to activity of WTO, free migration of labor. However abundantly clear, what from general liberalization win technological leaders as they possess monopoly for the innovative goods and by virtue of it can dictate the prices. Liberalization complicates “over-take modernization” technologically lagged countries, compelled to create regional groupings for boards of the interests. By virtue of non-uniformity technological developments even the USA and Japan have felt need for such groupings, not only the European countries which have formed EU.

Present globalization is a process of formation of complete system of the world economy on the basis of the transnational division of labor, described strengthening of a global competition and non-uniformity of economic development at preservation at the developed countries of monopoly for financial and intellectual resources (Matjushok, 2002).

In conditions of globalization and complication of a public life by strategy the state today cannot define one desirable strategy or apply for development of the unique answer for development of regions and the enterprises as problems become all more differential. It is necessary to divide the information and authority with others, to apply and encourage innovations and differentiate concrete decisions? (Rapport sur les perspectives de la France, 2000).

ENTERPRISE FINANCE MANAGEMENT MONITORING

The enterprise finance management problems can be brings to light and solve by constant monitoring the “complete criterion of quality enterprise finance management”. The enterprise finance management problems (Anthony, Dearden, Govmdarajan. 2000; Davenport, Prusak, 1998; Bitutckix, 2007; Grjaznova, 2005; Caravanova, 2006; Lapusta, 2007, Johnson, Kaplan, 1991; Kaplan, Cooper, 1998; Kaplan, Norton, 1996; Grant, 1993] can be solved by constant monitoring the “complete criterion of quality enterprise finance management (CCQEFM)”.

A structure of complete criterion of quality enterprise finance management (CCQEFM) is the following (Zhilkina, 2001, 2003, 2005, 2007, 2008. 2009): Finance stability; Liquidity; Probability of bankruptcy; Return on sales (Profit margin); Return on assets; Return on equity. The finance statement criterion levels represents in Table 1.

Now many Russian enterprises have poor finance state. The authors analysis insure us that more, then 60% of enterprises can not provide industrial assets (fixed assets and inventory) by normal resources of foundation (owners' equity, long-term debt and quick-term credit); 24% of enterprises have fixed assets to current assets ratio more then 0.3; 51 % of enterprises have ratio debt capital and current liabilities to owners' equity more then 1; 73% of enterprises have current ratio (liquidity) less 2; 75% of enterprises have profit margin low then 20%; 69% of enterprises have day's turnover off enterprise bills receivable more then 30 days and 80% of enterprises have day's turnover off enterprise bills payable more then 30 days (Zhilkina, 2009).

CONCLUSION

The basic means of many enterprises were not updated from the beginning of reorganization and come to full unsuitability, this fact, partly, it is possible to explain, rather low labor productivity level of workers in Russia on with comparison with foreign. Thus, competitiveness of the Russian enterprises, in conditions of globalization decreases. So the protectionist policy of the state, an orientation on updating of the basic means, increase of labor productivity, creation of new hi-tech products, the reasonable policy of attraction of the Russian human resources, interest of financial institutions (banks, the insurance

companies and investment funds) in development of real sector of economy is necessary. Summing up, it is possible to tell, that globalization for today for the majority of the Russian enterprises of real sector of economy represents more likely threat, than creates conditions for competitive advantages. However, the precise understanding of these threats and a finding of ways of their elimination at a favorable outcome of realization of the last can provide to each concrete Russian enterprise a sufficient level of competitiveness even in conditions of an openness of economy of the different countries.

Table 1: The finance statement level criterions

Level	State	Formula
Optimal	Absolute or normal finance stability	$FA + Inv \leq Eq + LTD,$ (1) were FA - fixed assets; Inv - inventory Eq - equity LTD – long-term debt
	Absolute liquidity	$DA \geq DD,$ (2) were: DA - discount asserts (Cash + 0,5* Accounts receivable + 0,3* inventory) DD - discount debts (Accounts payable + 0,5*Short-term debt + 0,3*Long-term debt)
	Low probability of bankruptcy	$MCA \geq CL,$ (3) were: MCA - material current assets (cash and inventory), CL - current liabilities.
	Increasing return on sails	$ROS_{bp} > ROS_{ep},$ (4) were: ROS_{bp} – return on sails at the beginning of the analyzing period; ROS_{ep} – return on sails at the end of the analyzing period.
	Increasing return on assets	$ROA_{bp} > ROA_{ep},$ (5) were: ROA_{bp} – return on assets at the beginning of the analyzing period; ROA_{ep} – return on assets at the end of the analyzing period.
	Increasing return on equity	$ROE_{bp} > ROE_{ep},$ (6) were: ROE_{bp} – return on equity at the beginning of the analyzing period; ROE_{ep} – return on equity at the end of the analyzing period.
	Finance instability	$Eq + LTD < FA + Inv \leq Eq + LTD + STC$ (7) were: STC - shot-tern credit.
Low	Low liquidity	$DA \geq 0,5 * DD$ (8)
	Middle probability of bankruptcy	$MCA \geq 0,75 * CL$ (9)
	Invariable return on sails	$ROS_{bp} \approx ROS_{ep}$ (10)
	Invariable return on assets	$ROA_{bp} \approx ROA_{ep}$ (11)
Critical	Invariable return on equity	$ROE_{bp} \approx ROE_{ep}$ (12)
	Critical finance stability	$FA + Inv > Eq + LTD + STC$ (13)
	Critical liquidity	$DA < 0,5 * DD$ (14)
	High probability of bankruptcy	$MCA < 0,75 * CL$ (15)
	Decreasing return on sails (profit margin)	$ROS_{bp} < ROS_{ep}$ (16)
	Decreasing return on assets	$ROA_{bp} < ROA_{ep}$ (17)
	Decreasing return on equity	$ROE_{bp} < ROE_{ep}$ (18)

REFERENCES

Anthony R.N., Dearden J., Govmdarajan V. (1992) “Management Control Systems,” 7th ed., Homewood: Irwin, 111 p.

Banking: world experience (1999) Moscow, №4 (in Russian)

Bitutckix E. (2007) “The tales of financial analysis and company cost management,” Moscow, Olimp-Business (in Russian)

- Caravanova B. (2006) "The strategy of company financial management," *Moscow, Finance and statistic* (in Russian)
- Davenport T. & Prusak L. (1998) "Working Knowledge," *Boston, Mass.: Harvard Business School Press*
- Delyagin M. (2000) "A policy of globalization: games and rules new epoch," *Moscow, INFRA_M* (in Russian)
- Dolgov S.I. (1998) "Globalization of economy: a new word or the new phenomenon," *Moscow, Publishing house "Economy"* (in Russian)
- Grant R.M. (1993) "Contemporary Strategy Analysis," *Oxford: Blackwell Business*
- Grjaznova A. (2005) "The cost of Business," *Moscow, Finance and statistic* (in Russian)
- Gusakov N.P. (2003) "A problem of external dependence in strategy economy safety of Russia," *Moscow, RUFP* (in Russian)
- Johnson H.T., Kaplan R.S. (1991) "Relevance Lost: The Rise and Fall of Management Accounting," *Harvard Business Press, Boston, Massachusetts*
- Kagarlitsky B. (2008) *Alternative to neo-liberalism*. Retrieved October 17, 2008, from Web site: http://nasledie.ru/global/17_1/ira13/htm (in Russian)
- Kaplan R.S., Cooper R. (1998) "Cost & Effect," *Boston, Mass.: Harvard Business School Press*
- Kaplan R.S., Norton D.P. (1996) "The Balanced Scorecard," *Boston, Mass.: Harvard Business School Press*
- Kochetov E.G. (1999) "Goeconomy (Development world economy spaces)," *Moscow, Publishing house "VEK"* (in Russian)
- Lapusta M. (2007) "Company finance," *Moscow, INFRA-M* (in Russian)
- Lvov D.S. (1999) "A way to XXI century: strategic problems and prospects of Russian economy," *Moscow, Publishing house "Economy"* (in Russian)
- Matjushok V.M. (2002) Problem of strategy of economic development of Russia in conditions of globalization," *Moscow, RUFP* (in Russian)
- Mironenko (1999) "Spatial structures of the world economy," *Moscow, Press-solo* (in Russian)
- Porter Michael E. (1993) "The competitive advantage of nations," *Paris, InterEditions*, p. 15 (in French)
- Report on the perspectives of France (2000) *Paris, Commisariat general of Plan* (in French)
- Russian businessman (2002), №1
- UNIDO. (1996) "The Globalization of Industry: Implication for Developing Countries beyond 2000," *Venn. Dec*

World Investment Report (1999)

Zhilkina A. (2009) "Finance management. Enterprise finance analysis," *INFRA-M* (in Russian)

Zhilkina A. (2001) "Enterprise finance analysis in graphic," *State University of Management Bulletin (University Vestnik)*, №1(2) (in Russian)

Zhilkina A. (2003) "Role and place of finance analysis in Finance management," *State University of Management Bulletin (University Vestnik)*, №2(6) (in Russian)

Zhilkina A. (2005) "Methodology of an enterprise synthetic analysis," *State University of Management Bulletin (University Vestnik)*, №2(11) (in Russian)

Zhilkina A. (2008) "Enterprise financial planning," *Moscow, Blagovest-V* (in Russian)

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THE VALUE RELEVANCE OF ENVIRONMENTAL AND SOCIAL PERFORMANCE FOR SIX 300 COMPANIES

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ABSTRACT

Environmental, social, and governance information has attracted close attention around the world and is becoming a focus of many companies, investors, financial analysts, and accounting policymakers. This paper provides insight into how environmental and social information is reflected in the market value of listed 300 SIX companies on OMX Stockholm. Our research is motivated by the recommendations of the Swedish Society of Financial Analysts regarding sustainability reporting. The recommendations propose that environmental and social information is value relevant since it is likely to affect the expected future earnings of listed companies. Extra-financial information disclosed beyond regulatory requirements and legislation assists investors to value intangible assets that are not recognized in historical cost-based financial reports. Applying the residual income valuation model, we express market value of equity as a function of book value of equity, accounting earnings, and environmental and social performance, where the last two variables are the proxies for other value-relevant information. We use the GES-Investment Services® risk and opportunity ratings for the period 2005-2008. The rating enables us to disaggregate the effects of various dimensions of environmental and social performance on market returns. The panel data analysis applies fixed and random effects models and covers 224 large, medium and small cap companies included in the stock market index SIX300. The evidence presented in this study finds support for the value relevance of environmental and social performance on aggregated and sub-aggregated levels. Positive relations between environmental preparedness, environmental performance, community, suppliers and market value of equity suggest that companies with high ratings are highly valued by investors. We contribute empirical findings to the current debate on the relationship between environmental and social performance and shareholder value and demonstrate the extra-financial value of environmental and social information.

Keywords: Environmental and Social Performance, Equity Valuation, Financial Accounting, Non-financial information

GLOBAL BRANDS, LOCAL COMMUNITIES: INTERNATIONAL STRATEGIES FOR COMPANY- MANAGED VIRTUAL COMMUNITIES

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ABSTRACT

Nowadays, many international businesses are experimenting with virtual communities of consumers in order to foster relationships between them and their customers. However, analysis of their strategies has rarely been considered in the existing literature. In this framework, our paper aims at providing a better understanding of the creation process and the management of these kinds of communities at an international level. To this aim, in the first part of the article, we propose a typology making it possible to distinguish between three types of international community strategies. After that, we follow a case study research design (DSA) and set the focus on the analysis of the creation process of two virtual communities coordinated by an international brand and implemented in the UK and in France. This allows us to highlight the strategic reflection, the tools and the roles of the people involved in the implementation of a community strategy. These elements are then considered under the lens of international marketing theories.

KEYWORDS: virtual communities, international strategy, DSA, consumption communities

INTRODUCTION

Since the mid '90s, marketers have developed an interest in virtual communities, both in terms of psycho-sociological factors linked to the participation of internauts in these groupings (Bagozzi and Dholakia, 2002; Dholakia et al., 2004) and their marketing implications (Algesheimer and Dholakia, 2006; Armstrong and Hagel, 1996; Kozinets, 1999; Brodin, 2000; Cova and Cova, 2001). Based on these analyses, numerous authors, mainly with a managerial background, consider virtual communities as a marketing tool that can be used by companies to foster the development of strong, reliable relationships with their customers (Armstrong and Hagel, 1996; McWilliam, 2000).

Beside these "C2C" virtual communities (which emerged from consumer initiatives), the Internet landscape is changing and numerous "B2C" virtual communities have been created and managed by brands in order to gather their consumers together and incite them to brand loyalty.

Academic literature relating to virtual consumer communities is mainly focused on people, their motivation and the consequences of their participation in virtual gatherings. The academic debate has neglected the managerial aspects related to the implementation of these actions by companies. More particularly in the globalization context, the integration of virtual communities in the international marketing strategy of the brand raises the question of the specificities of the communal approach, which could be implemented in different countries.

LITERATURE REVIEW

B2C Consumer Virtual Communities

The virtual community is often defined as a socio-cultural grouping that emerges when an adequate number of persons take part in public discussions during enough time and with enough emotions to build a network of human relationships inside the cyberspace (Rheingold, 1995). Previous research has set the emphasis on C2C virtual communities, but little has focused on consumer communities created by companies.

Among these works, Armstrong and Hagel (1996) propose to categorize B2C virtual communities into 4 types depending on the needs they aim to fulfill: interest communities (allowing people to interact on the basis of a shared interest for a specific topic), relationship communities (inside which members share life experience and find emotional and social support), fantasy communities (allowing the consumer to get involved in a virtual world), transactional communities (which can foster commercial exchanges). Porter (2004) distinguishes commercial communities (related to the sale of products) from non-commercial communities. Ben Yahia (2006) spreads this typology by distinguishing non-commercial B2C communities that are brand- and product-based from those based on a theme related to the brand and its activity. Ben Yahia (2006) stresses that the latter do not constitute brand communities such as those defined by Muniz and O'Guinn (2001). Actually these consumers share an interest for the same theme rather than for the brand sponsoring the virtual space in which their interactions take place.

Community strategies constitute a new kind of relational tool, allowing brands to get closer to their consumers through their passions and to foster the creation of intimate and genuine relationships with them leading to affective loyalty (Cova and Cova, 2001). Actually, previous research has often highlighted the benefits that can be generated by the implementation of this tool in relational strategies (Brodin, 2000; McWilliams, 2000; Li and Bernoff, 2008). Armstrong and Hagel (1996, p. 135), namely stress that "by creating strong on-line communities, businesses will be able to build customer loyalty to a degree that today's marketers can only dream of". Confirming practitioners' experience, recent research shows the positive impact of B2C consumption communities on consumers' emotional involvement with the brand supporting the group (Casalò et al., 2008; Kim et al., 2008). This involvement with the brand is the first step leading to the development of a loyal relationship. Some authors have studied the motivations leading consumers to participate in this type of grouping (Dholakia et al., 2004; Raïes and Gavard-Perret, 2006). Dholakia et al. (2004) show that search for information, entertainment, social status and self-discovery are the main factors in members' participation.

International Consumer Communities

Many companies use this type of community to assemble their customers. They offer a virtual space of exchanges based on a theme often linked to a consumption activity and want to gather people sharing a real interest in this activity. Companies try to take advantage of what Kozinets has called (virtual) consumption communities enabling people to gather around topics like wine, motorcycles, photography, etc.

These are defined as "groups whose online interactions are based on an enthusiasm and a shared know-how linked to a specific consumption activity" (Kozinets, 1999). The sharing of a common interest is the basis to members' identification and enables brands to assemble their customers (2006; Sitz, 2006).

A literature review related to communities (Armstrong and Hagel, 1996; McWilliam, 2000; Algesheimer and Dholakia, 2006; Li and Bernoff, 2008), and the accurate observations of community initiatives on the Web show that most B2C consumer communities are initiated by international brands.

In their study of the Warhammer community, Cova et al. (2007) analyze a global *brand community* and pinpoint the opportunity of dividing the collective framework into national “sub-communities”.

The authors highlight the differences between the way the two sub-communities (France and US) see the brand.

As far as we know, there has not been any other research aiming to identify the specificities of consumer communities in an international perspective, and no B2C community strategies have been studied in an international context.

Regarding the literature as far as international marketing strategy and process are concerned, authors distinguish two different perspectives: standardization of the marketing strategy or adaptation to each local market. Beside the standardization degree, authors have also considered marketing process which relates to the degree of centralization of the decision-making process between the head office and the subsidiaries (e.g Daniels, 1986; Ozsomer et al 1991)

Above these two strategic extremes authors highlight that the decision to go for standardization or adaptation and for centralization or decentralization is not a dichotomous choice. Indeed, managers have to find the right balance between these two situations (Quelch et Hoff, 1986 ; Harris, 1992 ; Vrontis, 2003 ; Croué, 2006).

Considering the lack of a sound theoretical background on this topic, we propose to highlight the specificities related to the implementation and management of B2C consumer communities in the international context. Our research will attempt to attain two objectives:

O1. Firstly, by developing a typology, we will identify the different ways of managing virtual consumer communities that can be considered by global companies.

O2. Secondly, we focus on a particular type of B2C virtual community from the typology: coordinated local community. By identifying the actors involved and tasks completed, we will try to improve understanding of the creation and management processes of international B2C virtual communities.

METHODOLOGY

Methodological Approach

To improve understanding of a concept on which little research has been done, Yin (1994) suggests implementing an exploratory qualitative approach, namely by using case study methods. In the strategic process study context, Cova, Mazet and Salle (1994) show that an exploratory approach could be valuable in bringing about a better knowledge of the complex process of launching virtual communities.

In order to come up with an accurate and reliable approach, our research is based on the DSA method (Decision Systems Analysis), developed by Capon and Hulbert (1975) in their paper studying the dynamics of the decisional process. Information collected through in-depth interviews with actors involved in the different levels of the process enables us to implement a descriptive schematization of the process that could lead to theorization. Capon and Hulbert (1975) suggest researchers implement a preliminary model of the investigated process, developed in the following section.

Creating an International Consumer Community: Preliminary Model

The first step in implementing a B2C virtual community, similar to every other marketing tool, should follow a strategic reflection. According to general marketing management literature, the definition of the marketing plan and tools are derived from an analysis of the business’s internal (objectives and available means, for instance) and external situations (competitors and consumers’ needs, for example) (Croué, 2006; Kotler et al., 2006). In this framework, the selection of the virtual community as a tool depends on

its ability to successfully contribute to the marketing objectives (O'Dell, 1966), which are derived from the global organizational strategy (Croué, 2006). After that, the virtual community will be assigned specific objectives and persons will be designated in charge of the coordination (McWilliam, 2000).

An analysis of the “community environment” within which the company will act should also be conducted in order to identify:

- Existing consumption communities that may be linked to the company's activity (Brodin, 2000; Cova and Cova, 2001);
- The consumers that will be targeted by the company through the community and the needs that the virtual community could meet (McWilliam, 2000)
- The community's potential competitors (Armstrong and Hagel, 1996)
- The community's potential partners (Armstrong and Hagel, 1996; Kozinets, 1999; McWilliam, 2000).

Based on this analysis, Sitz (2006) asserts that the role of the company is to define a “community frame” pertinent to and consistent with the community environment previously analyzed. This frame should be appealing enough to generate the interest of potential members and lead them to join the community, interact and become loyal members. To this end, the community frame should avoid a commercial tone that would drive members away (Brodin, 2000). This community frame is made up of three dimensions:

- a *project*, that represents the community's goal(s) and mission(s), the purpose for which people will join and interact;
- a *discourse*, that portrays the community's identity, its values, codes, traditions and hierarchy. In these terms, the discourse of the community influences the basis of members' identification;
- a *space*, that hosts the members' interactions. According to Raïes and Gavard-Perret (2006), there are three ways of setting up the community's space: the company can host the virtual community on its official website or on a dedicated website or combine the first two options. Also, the definition of the community's space involves choosing the means through which members will interact with each other, whether it is only through online media or if face-to-face communication will also be promoted.

In an international policy framework, strategic reflection must take into account the relevance of using a global approach and identify the required degree of adaptation of the community frame previously defined. Elements such as language and cultural differences are barriers to the implementation of a whole standardized strategy (Aaker and Joachimsthaler, 1999). This could lead to an adaptation of the community discourse, project or space. Moreover, the degree of centralization and the project coordination levels (international and/or local management) must be previously defined (Croué, 2006). Once those elements are settled, the community can be set online and managed by the persons in charge.

INTERNATIONAL COMMUNITY STRATEGIES: TYPOLOGY DEFINITION

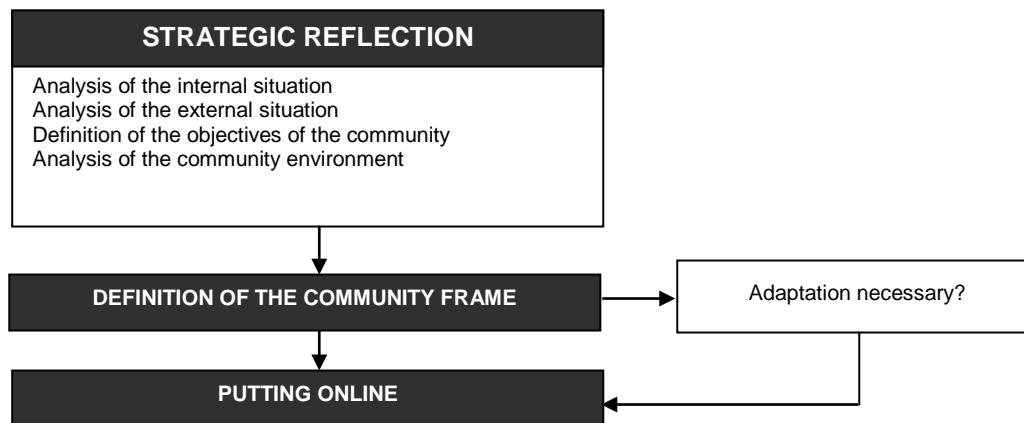
Consumer communities are considered as a marketing tool for the company. Their implementation relies on the marketing department (Armstrong and Hagel, 1996; McWilliam, 2000; Li and Bernoff, 2008). In the context of a global company, the degree of centralization of the marketing policy will influence the liberty offered to local divisions to define their own objectives, strategies and marketing tools (Croué, 2006) such as implementing a consumer community around the brand. So doing, in case of a decentralized marketing policy, each subsidiary could initiate the development of a community. A contrario, the company could assemble its customers by coordinating the community initiative globally.

In this context, we notice that the “non-geographical” dimension of virtual communities highlighted by several authors (e.g. Kozinets, 1999; Muniz and O’Guinn, 2001), can be limited by the choices made by the company initiating the community.

We can identify 3 factors that could affect the geographical spread of these communities: the reference language chosen by the community organizers; the geographical target and the extent of marketing efforts made to recruit members of the grouping; the organization of gatherings enabling virtual community members to meet each other face-to-face.

On the basis of these elements, we have analyzed company-initiated communities of 20 brands. This has led us to identify three types of international community strategies relying on two criteria: the geographical extent of the community (defined by its global vs. local characteristics) and the degree of centralization of the implementation (independently settled by a national subsidiary or coordinated by the parent company). These types of strategies are represented in *Figure 2*.

Figure 1: Creation of an International B2C Community



This figure shows the preliminary model of the creation process of an international B2C community. It is divided in 3 basic stages retrieved from our literature review.

Figure 2 – Typology of community strategies on an international scale

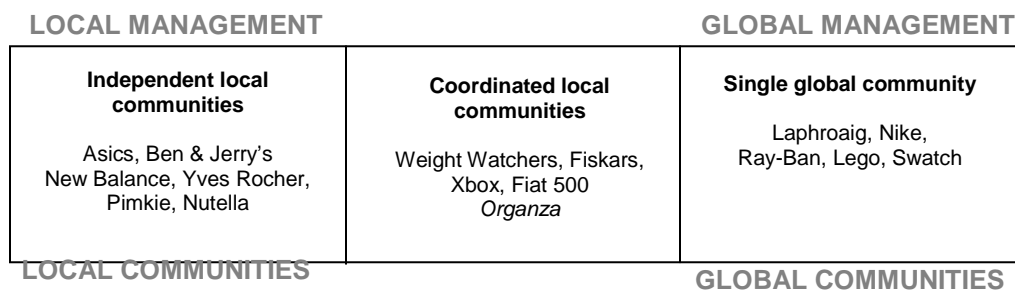


Figure 2 highlights the 3 types of international B2C communities

- 1) Independent local communities are initiated by each national subsidiary on their own according to the local marketing policy. The analysis of the tool relevance, its implementation and its control are locally carried out without any interaction with the parent company. Several consumer communities could emerge from the same brand without any consistency regarding the identity, the project or the place of interaction
- 2)

Ex.: Asics - www.asicslovesrunning.fr (France) and www.myasics.nl (Netherlands);

- 3) A single global community is initiated and managed by the marketing head and aims to gather brand customers around a common project in a specific virtual space without any content or language adaptation regarding local specificities. The company wants to develop a unique identity.

Ex.: Ray-Ban – Never Hide Community (www.Ray-Ban.com);

- 4) At a middle stage, we can identify local coordinated communities that are a network of local initiated communities managed by the international marketing manager. This aims to federate consumers from different markets around a common project and to foster the creation of a unique identity, by locally adapting the interaction space, namely regarding the language. The implementation is managed at a global level, local subsidiaries are in charge of day-to-day management, and if necessary, the adaptation of the community frame to the local market (in terms of language and content, among other things)

Ex.: Organza – www.Organzettes.fr (France) and www.Organzettes.co.uk (UK);

The company's choice as to the community strategy to implement relies on two factors: the opportunity to define a global community frame (depending on the uniformity of the international target and of the competitive environment, for instance) and the autonomy offered to local subsidiaries in the definition of their marketing policy.

CASE STUDY: ORGANZETTES

Case study choice

The results presented in this paper derive from interviews analysis with different players involved in the implementation of a network of local communities coordinated by Organza (The identity of the community has been removed to guarantee anonymity), an international brand offering a wide range of sewing products and dry goods. There are two local versions of the community, one in France and another in the UK: www.Organzettes.fr and www.Organzettes.co.uk. These sewing-dedicated communities are globally coordinated at a European level and they are locally adapted, namely with respect to the language. They consist of brand blogs, each of which is maintained by a local ambassador, highly knowledgeable in this field.

This successful initiative (based on the three criteria pinpointed by the interviewed managers: regular growth in membership, number of visits / day and number of contributions proposed by the members) regarding the target audience (sewing community) and the management techniques at a European level make this case study particularly interesting to investigate. This allows us to bring about a better understanding of the coordinated management strategy of communities at a global level and to contribute to a theoretical framework still missing in this field of research.

Analysis of the creation process

The implementation of the Organzettes community in France and in the UK can be divided into two stages: the first step consisted in strategy definition at a European level; the second step was the management and adaptation of tasks at a local level (see *Figure 3*). The implementation of the Organzettes community results from both internal and external analysis of the company at the global level. On the one hand, market analysis (1) should enable the company to value the community tool regarding its consumers and the relevance of implementing this strategy at a global level (are the customers homogeneous on this point?).

The external analysis also pertains to the competitive situation in order to allow the company to distinguish itself. On the other hand, the implementation of such a tool relies also on the analysis of the

internal situation (2) (marketing objectives, available resources and budget, for example). This first step of the process gives the company an idea of the utility and the chance of success of such a community strategy (3).

The consumer community implementation must contribute to reaching company marketing objectives (5). For example, in the Organzette community, marketing managers allocated four specific overall objectives to the community tool: to reinforce consumer loyalty to the brand, to recruit new customers, to integrate the brand as 'the' partner of the sewing enthusiasts and to discretely put forward brand products.

Marketing managers should ensure that the community tool is efficiently implemented and managed. It is necessary to be sure that the company has the adequate skills to develop and implement the community (6) (knowledge of the webplatform, of the community strategies, and so forth). If the company is not able to do that, it has to find external partners contributing to the success of the community (7).

Among these, choice of a qualified web agency is of prime importance. The implementation of Organzettes was from the start done in an international perspective, the marketing management opted for an international web agency able to ensure the implementation of the community in different countries.

Once the partners are selected, it is necessary to choose the persons (inside or outside the company) who will be in charge of developing, launching and managing the community (8). In order to guarantee the consistency of the project in the different countries where it will be implemented, a "community cell" composed of 2 persons (European marketing director and Web agency head) has to be settled at the European level. Its role is to ensure the project coordination, to guide global community policy, to define the common community frame to the locally-implemented community and to see that tool-specific objectives are reached.

The community cell is in charge of defining the community frame (discourse, project, space) (Sitz, 2006). As far as Organzettes communities are concerned, it was decided to implement a common community frame at the European level in order to guarantee the consistency of the strategy in the different countries where it will be carried out (9). It is composed of 3 elements:

- *A global discourse* allowing members to identify each other (sharing the passion of sewing, values related to creativity, brand presence and non commercial tone). According to literature recommendations (Brodin, 2000; Cova et Cova, 2001), the discourse should avoid a commercial tone in order not to impact authenticity of the approach and should avoid leading the members to leave. *"This is an expert community. As a brand as such we are not too much present on the blog. Up to now we are present with some packages, or with articles written by ambassadors (advice, tips,...) about some products"*. [European Marketing Manager]
- *A global project* to which the target audience could affiliate whatever its country of origin (exchange of information, personal work);
- *A global space* allowing each member to express his own identity and to interact with other participants (Mairinger, 2008). Nonetheless it is adapted in the different countries with the different languages.

However, the multiple implementation of community initiatives in the different countries is not always possible (for instance, lack of required resources or budget), so the company should identify the countries where it wants to implement the community as a priority (10).

The local market, its importance in the company's turnover and competitive situation are criteria that the company can use to value the local priority (11). *"France and the UK are the countries which offer the most important turnover for Organza in the sewing category [...] It is interesting to notice that in these countries blogs generated by enthusiasts are highly developed. It's time to react"* [European Marketing Manager]. Once the countries are chosen, local actions can be carried out.

The local managers are only involved in the process when the countries are selected and the common community frame is implemented (12). At this stage, their role is to carefully analyze the community environment in the selected countries (existing C2C and B2C virtual communities, their strengths and weaknesses) (13) and identify potential partners (14). Indeed, the working of the community requires collaborations with partners from the consumption field concerned (Kozinets, 1999) such as dedicated events organizers, virtual and physical C2C communities involved in the community environment. At this level the European community cell, in collaboration with local managers, has selected the local community ambassadors that will be responsible for the organization and the maintaining the community's activity. Thereafter, the role of the local managers and the ambassadors is to maintain relationships with potential partners and to ensure the integration of the community in the local community environment. *"The ambassadors are themselves popular bloggers in the sector, with online relationships networks and they can integrate the brand blog in the existing network"* [European Marketing Manager].

Moreover, besides the general objectives defined by the European management, the community can also play a specific part in the local marketing strategy (15). Based on the analysis of their "community environment" and on the local company's objectives, local managers can adapt some elements of the community. So doing, the Organzettes community content management in France or in the UK have been adapted in terms of local news of the brand (16).

Other adaptations related to the activity of the community (games, contests), to the environment (fairs dedicated to sewing), or members' local preferences (sewing, embroidering, patchwork) could also be implemented by local members in charge of the community (ambassadors and marketers). *"For example in the UK, at Christmas, we talk about that since September, while in France, this will not come up before October or November. We need to talk about that earlier on the English blog"* [Agency Project Leader]. All these adaptations are supervised by the European management, guaranteeing the consistency between both communities.

Finally, the virtual community can be set online (17) and its day-to-day management can be ensured by local teams (local marketing director and ambassador) (18).

As a last stage the community is monitored at both local and European levels (19). Managers then assess the necessity to modify the objectives and the frame of the community.

DISCUSSION

Specificities of international community approaches

Internet is a very attractive tool for companies acting on international markets (Prashantham, 2003). While numbers of international companies interested in community strategies are growing, it seems interesting to bring insight into creation and management strategies of international B2C virtual consumer communities.

Strategic aspects of B2C virtual community management highlighted by McWilliams (2000) and Arnone et al. (2009) along with existing literature on international marketing strategies (e.g. Buzzel, 1968; Van Mesdag, 1987; Aaker and Joachimsthaler, 1999; Quelch and Hoff, 1999; Vrontis, 2003; Croué, 2006), have allowed us to identify different international B2C virtual community management strategies and to set the focus on their respective strengths and weaknesses. The choice among these strategies can namely be influenced by the characteristics of the target market of the company.

Figure 3 – Coordinated local communities: Creation process

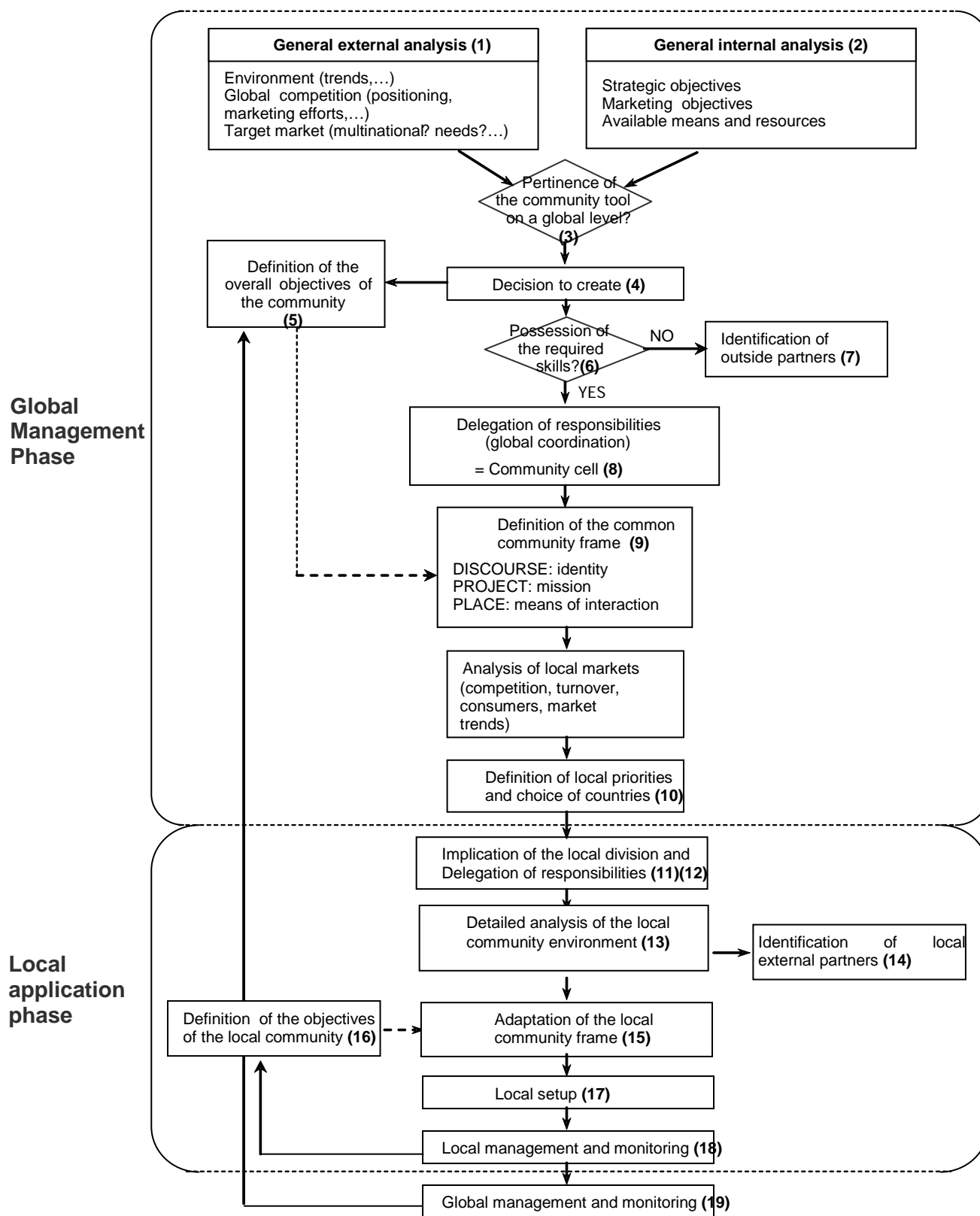


Figure 3 details the strategic process of the creation coordinated local communities. It is divided in 2 phases : global and local.

“At the European level the general guidelines to follow are decided, and after that they make the adaptations at the local level [...] it can pertain to newsletter content, or to a promotional plan specific to each country” [European Marketing Manager].

The case study highlights the implementation of a community segmentation (Kozinets, 1999) aiming to assemble consumers based on their passion for a given consumption activity. This type of segmentation can lead to the identification of an international market segment regarding which the company can carry out a united strategy (Hofstede et al., 1999). The implementation of coordinated local consumer communities could be relevant in this context.

Numerous international companies have launched their own virtual communities in order to federate their customers on a sharing and/or collaboration and/or exchange platform. Nevertheless, the implementation of the community tool at a global level requires a complicated decision-making process that has been neglected by the academic literature. In this context, our research aimed to reach two main objectives.

O1: Typology of B2C international virtual communities

The study of the strategies of a global brands sample leads us to identify three approaches to implement when creating a B2C virtual community at an international level: independent local communities, coordinated local communities and the single global community.

The typology we proposed in this paper is different from the previous research regarding classification (Armstrong and Hagel, 1996; Dholakia et al., 2004; Porter, 2004; Ben Yahia, 2006). Actually we categorized B2C virtual communities regarding their strategic management characteristics. Moreover, we have included an international dimension and highlighted the importance of the non geographical aspect of the B2C virtual communities, whose implementation can be related to a local strategy.

The identification of these 3 management modes of B2C virtual communities allows us to bring a better understanding of the strategic choices of international managers. This choice can be influenced by the company's international structure, the degree of centralization of the marketing policy and the characteristics of the international target market.

The case study, Organza, highlights the implementation of a community segmentation (Kozinets, 1999) aiming to assemble consumers based on their passion for a given consumption activity. This type of segmentation can lead to the identification of an international market segment regarding which the company can carry out a united strategy (Hofstede et al., 1999; Bille, 2003).

Nevertheless, as shown in the case study of Organzette communities in France and in the UK, though sewing enthusiasts can be considered as an international segment, the analysis of the local community environment demonstrates some specificities (enthusiasts' expectations, local activities, rituals and traditions, competition between communities,...) and requires the implementation of differentiated approaches in each country. This reactivity is even more important in the virtual world where the local community environments can change quickly (emergence of new virtual communities – C2C and/or B2C – , local activities, evolution of the consumer needs,...). Therefore managers should be aware of the importance of a local management of the community and its activities.

In this context, the most relevant choice would be to implement coordinated local consumer communities.

O2: Process, actors and parts: identification through the DSA Method

Community frame: between standardization and adaptation

The study of the implementation of local coordinated communities, such as Organzettes, demonstrates a creation and management process at 2 levels, enabling us to precise our preliminary model: the global level aiming to define the common community frame of the local “sub-communities” and to guarantee the uniformity of the strategy on the different markets; the local level aiming to adapt the frame to the local characteristics of the market and of the environment, while respecting the boundaries previously defined by the European management.

The organizational structure highlighted in this case study sets the focus on the “Europeanisation” trend of the marketing structure such as stressed by Lewi (1995)

According to Quelch and Hoff (1986), interactions between the two levels of decision-making make it possible to maintain the balance between “standardization” and “adaptation” of the community frame. Despite what we have expected regarding our preliminary model, each element of the global community frame is not locally adaptable.

Table 1 summarizes the constitutive elements present in the global community frame and those that can be adapted.

Table 1 – Global and local community frames

	Standardized elements GLOBAL COMMUNITY FRAME	Adapted elements LOCAL COMMUNITY FRAME
DISCOURSE	Name of the community – Values, codes and traditions – Tone – Importance of the brand – Roles of the moderator – Content (general themes, calendar of events)	Partial adaptation of the <i>content</i> (depending on marketing objectives, members’ local preferences, cultural specificities)
PROJECT	Sharing of a passion, exchanges	No adaptation
PLACE	Platform – Design – Arborescence – Functioning – Physical encounters	Language of interactions, organization of encounters according to local events

The balance of compliance between standardization and adaptation allows the company to conciliate local adaptation, global brand management and the minimization of marketing costs. The latter two are considered, respectively by 81% and 75% of the companies, as main concerns of the international policy (Vrontis, 2003).

Global brand management. Global brand building is a very tricky task to carry out. (Aaker and Joachimsthaler, 1999). It becomes even more difficult when the creation of a B2C consumer community leads to a company’s loss of control to the benefit of its customers. Those actively take part in producing content about the brand, which influences its building and its image (Mairinger, 2008). So, the lack of coordination between the different local communities could emphasize the differences between the brand image and its significations in the consumer’s mind (brand identity) on the international market (Cova et al., 2007).

In this context, while allowing members to interact in the virtual space provided by the brand, the Organzette case study demonstrates that the creation of global strategic guidelines for defining the community frame makes it possible to concentrate the brand-hijacking mechanisms and to guarantee consistency at the global level. Moreover, the use of blogs as the main interaction tool between members allows a better control regarding the content, while letting the members act on their own in the virtual space.

Cost minimization. As far as budgets allocated to the building of a virtual consumer community are concerned, the development of the community platform is the most expensive part of the process. The definition of a uniform community space at a global level (design, structure, functions), as in the case of

Organzettes, enabled the company to reduce costs by splitting the investment on the different local initiatives. The adaptation margin of local managers (integrated in the process once the platform is defined) is related to the elements that do not impact the economy of scale (Quelch and Hoff, 1986).

Process, actors and roles

The study of the Organzettes creation process in France and the UK allowed us to identify the actors and to clarify the tasks and processes related to the implementation of coordinated local B2C communities (summarized in table 2). Actually, three main points are emphasized through the Organzettes case study and enable us to precise our preliminary model proposed in Figure 2.

First, we notice that the implementation of an international B2C virtual community requires a two-stage process: global and local. Besides making an overall analysis of both internal and external situations of the company, managers should be aware of the need of an analysis of local situations. As virtual communities can play a part in both the local and global strategies, the attribution of specific objectives can be carried out at these two levels as well as in monitoring results.

Table 2 – Actors and roles in community creation and management

ACTORS		ROLES
Global level	European Marketing Directors	Evaluate the pertinence of the tool, define the objectives of the community, define the common community frame, coordinate local adaptations, define the budgets allocated to the community initiative,
	Web Marketing Agency	Develops the common community platform as well as local versions, manages the technical aspects, analyzes the community environments, guides the marketing decisions, accompanies the local management, makes statistical analyses (number of members, number of visits, etc.)
Local level	Local Marketing Directors	Define the local objectives, adapt the content and the calendar locally, identify local partners
	Expert Ambassadors	Write the first contents, provide new content (articles, photos and videos, answer questions), organize and facilitate contacts in the community (contests, encounters,...) on the basis of a calendar, recruit new members, get the community integrated into the world of consumption, legitimate and validate through expertise
	Local Events Organizers	Partnerships allowing face-to-face encounters among the members (stands for the brand during events), collaboration in contests,...
	C2C Sewing Communities	Reference the community (hypertext links), participate and contribute to the content, legitimate the community as a partner in the world of consumption

Secondly, the study of local community environments is prominent regarding the consumer communities belonging to a specific consumption universe. Actually, the priority of the countries to target and the specificities of the local approach (eg adaptation of the community frame) are defined on the basis of this analysis.

We can stress that the role of local actors (managers and ambassadors) is particularly important to integrate the B2C community into the existing community environment. The relationships with local partners such as C2C (real or virtual) groupings and event organizers are managed from this local level.

Even if Internet makes it possible to implement the virtual platform from the parent company, it is necessary to carry out local action in the local community environments. As far as local community environment analysis is concerned, it could be relevant to involve local managers.

Considering the importance of local actors, especially with respect to analyzing the local community environments that influence the selection of countries to prioritize, it would be advisable for Organza to involve local managers further upstream in the marketing process. Moreover, the necessity to define the community frame will be decided on the basis of the results of the analysis of these environments.

In other respects, if local adaptations are always made under the control of the European marketing director, the launching of Organzettes communities in other countries in Europe, may complicate the supervision of different local adaptations. Then it would be appropriate to inform local actors of their degree of freedom in adapting the community frame by clearly and precisely defining the elements that can be adapted and those that must absolutely remain unchanged. This precaution would make it possible to remedy the lack of clarity that sometimes characterizes decentralized decision-making structures (Quelch et Hoff, 1996).

CONCLUSIONS AND LIMITATIONS

Analyzing the implementation of Organzettes communities in France and the UK sheds new light on the managerial aspects of the creation and management of consumer communities. More particularly, this analysis makes it possible to highlight the particularities of these strategies on an international scale. Also, despite their international anchoring (based on being online on the Web and their accessibility to an international public), B2C virtual communities do not escape the principles of adaptation and standardization, characteristics of international strategies.

Our goal is not to propose a standardized model to be used as a recipe ready-made for managers, but to bring to light the tasks and the actors implicated in setting up B2C virtual communities. The managerial orientation of this research is certainly a valid contribution both for its theoretical and practical aspects.

Nevertheless, we must underline the fact that the results reported in this article have two major limitations. First, the typology is of an exploratory nature and its construction is mainly based on the observation of efforts set up by companies that do not make it possible to precisely define the strategic reflection that underlies their implementation. In this context, further study of the different international community strategies identified, could constitute an interesting contribution that would give managers and academics a more precise view of the different strategic options of international community approaches.

Secondly, the elements put forward in this research come from a single case study and may not be representative. The diagram presented could differ according to the structure of the company, the sector of activity or the environment in which the company operates. Other studies would enable us to refine our empirical analysis and bring to light possible differences. It would also be interesting to identify the implementation processes specific to other types of international B2C virtual communities in order to identify the differences they present with respect to the processes highlighted in our work.

REFERENCES

- Aaker, D. A., and Joachimsthaler, E. (1999), The Lure of Global Branding. *Harvard Business Review*, Nov-Dec., 137-144.
- Algesheimer, R., and Dholakia U. M. (2006), Do Customer Communities Pay Off ?. *Harvard Business Review*, Vol. 84 (11), 26-30.
- Algesheimer, R., Dholakia, U. M., and Herlann, A. (2005), Interplay Between Brand and Brand Community: Evidence from European Car Clubs. *Journal of Marketing*, 69 , 19-34.
- Armstrong, A., and Hagel, III J. (1996), The Real Value of On-Line Communities. *Harvard Business Review*, Vol. 74 (3), 134-141.

Bagozzi, R.P. and Dholakia, U. M. (2002), Intentional Social Action in Virtual Communities. *Journal of Interactive Marketing*, Vol. 16 (2), 2-21.

Ben Yahia, I. (2006), Non commercial B2C virtual communities: definition and classification. An Exploratory Qualitative Study. *IADIS International Journal*, Vol. 5, 1, 129-144.

Bille, J. (2003), La Mondialisation et l'Organisation Internationale de la Publicité, *Revue Française du Marketing*, May, 192-193, 17-23

Brodin, O. (2000), Les Communautés Virtuelles: Un Potentiel Marketing Encore Peu Exploré. *Décisions Marketing*, 21, 47-56.

Capon, N., and Hulbert, J. (1975), Decision Systems Analysis in Industrial Marketing. *Industrial Marketing Management*, 4, 143-160.

Casaló, L. V., Flavián, C. and Guinalíu, M. (2008), Promoting Consumer's Participation in Virtual Brand Communities: A New Paradigm in Branding Strategy. *Journal of Marketing Communications*, 14:1, 19-36.

Cova, V., and Cova, B. (2001), *Alternatives Marketing*, Paris, Dunod, 224p.

Cova, B., Mazet, F., and Salle, R. (1994), From Competitive Tendering to Strategic Marketing: An Inductive Approach for Theory Building. *Journal of Strategic Marketing*, 2 (1), 29-48.

Cova, B., Pace, S., and Park, D. J. (2007), Global Brand Communities Across Borders: The Warhammer Case. *International Marketing Review*, Vol. 24, 3, 313-329

Croué, C. (2006), *Marketing international: Un consommateur local dans un monde global*, De Boeck Université, 616p.

Daniels, J. D. (1986), European Regional Management by Large U.S. Multinational Firms, *Management International Review*, Vol. 26, No. 2, 27-42

Dholakia, U., Bagozzi, R. P., and Klein, L. R. (2004), A Social Influence Model of Consumer Participation in Network- and Small-Group-Based Virtual Communities. *International Journal of Research in Marketing*, n°21, 241-263.

Hofstede, F. T., Steenkamp, J.B., and Wedel, M. (1999), International Market Segmentation Based on Consumer-Product Relations, *Journal of Marketing Research*, Vol. 36, February, 1-17.

Harris, G. (1992), International Marketing Centralization : the Case for Balance, *European Business Journal*, Vol. 4, No. 3, 50-54

Kim, J.W., Choi, J., Qualls, W., and Han, K. (2008), It takes a marketplace community to raise brand commitment: the role of online communities. *The Journal of Marketing Management*, Vol. 24, No. 3-4, 409-431.

Kotler, P., Keller, K., Dubois, B., and Manceau, D. (2006), *Marketing Management*, 12th edition, Pearson Education, France.

- Kozinets, R. V. (1999), E-tribalized Marketing? The Strategic Implications of Virtual Communities of Consumption. *European Management Journal*, Vol. 17 (3), 252-264.
- Lewi, C. (1995), « Nouvelles Organisations Marketing Européennes : le Cas de Procter et Gamble », *Décisions Marketing*, No. 4, 79-86
- Li, C., and Bernoff, J. (2008), *Groundswell: Winning in a World Transformed by Social Technologies*. Harvard Business School Press, 224p.
- Mairinger, M. (2008), Branding 2.0 – Using Web 2.0 Principles to Build an Open Source Brand. *Electronic Markets*, Vol. 18 (2), 117-129.
- McWilliam, G. (2000), Building Stronger Brands through Online Communities. *Sloan Management Review*, Spring, 43-54.
- Muniz, A., and O’Guinn, T. (2001), Brand Community. *Journal of Consumer Research*, 27, 412-432.
- O’Dell, W. F. (1966), Theory or Research for the Marketing Decision-maker? *Journal of Marketing*, Vol. 30 (2), 52-53.
- Ozsomer, A., Bodur, M. and Cavusgil, S. T. (1991), Marketing Standardisation by Multinationals in an Emerging Market, *European Journal of Marketing*, Vol. 25, No. 12, 50-64
- Porter, E.C. (2004), A Typology of Virtual Communities: a Multi-Disciplinary Foundation for Future Research. *Journal of Computer Mediated Communication*, 10, Available at <http://jcmc.indiana.edu/vol10/issue1/porter.html>
- Raïes, K., and Gavard-Perret, M.L. (2006), Vers une Meilleure Compréhension des Besoins des Participants à une Communauté Virtuelle de Marque. *Actes du XXII^e Congrès de l’AFM*, Nantes.
- Rheingold, H. (1995), *Les Communautés Virtuelles*. Addison-Wesley France, Paris, 320p.
- Quelch, A., and Hoff, E. (1986), Customizing Global Marketing. *Harvard Business Review*, May-Jun, 2-12.
- Sitz, L. (2006), *Communauté de Marque. Rôle des Membres Centraux dans son Emergence, sa Structuration et les Liens avec son Environnement*. Thèse de doctorat en Sciences de Gestion, IRG, Université de Paris.
- Vrontis, D. (2003), Integrating Adaptation and Standardisation in International Marketing: The AdaptStand Modelling Process, *Journal of Marketing Management*, Vol. 19, 283-305.
- Yin, R. K. (1994), *Case Study Research: Design and Methods* (2nd ed.). Thousand Oaks, Sage Publications.

THE ECONOMIC CRISIS AND ITS EFFECTS IN THE EUROPEAN UNION

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ABSTRACT

The present economic and financial crisis seems to be different than any other crisis in the last half of the century. The economic recession has extended in the USA, Europe and Japan and it is outlined to be more painful than the economic collapse of 1981 - 1982. A massive drop in confidence in both business and consumer level, both responding to this by restricting expenses, is now in progress.

INTRODUCTION

Even though the effects of the American economic crisis could have been anticipated relatively easy in the economy of the European Union, many economic analysts have tried to tackle this phenomenon from different positions, both optimistic and pessimistic.

ECONOMIC CRISIS NEW CHALLENGES

If we take a look at the macroeconomic indicators of the European economy, we can ascertain the fact that in 2008 a 2% economic growth has been expected, and the foresights for 2009 show a 1, 8% growth, considering the fact that there was a 2, 8% economic growth in 2007. This data represent, of course, an average of the economies of the 27 member states, considering the fact that in the euro zone the economic growth represented 1.7% in 2008, while in 2007 the economic growth represented 2.6%, and the prospect for 2009 for the euro zone is approximately 1.5%, according to the foresights contained in the reports of the European *Commission*.

What are the factors that led to the slowing of the economic growth? In a contemporary vision this seems like a rhetorical question, but we can notice some aspects. The main disturbance is represented by the exacerbated disorders on the financial markets, caused on the one hand by the slowing of the U.S economic growth, and on the other hand by the strong increase of raw material prices, which cumulated lead directly to negative influences in the global economy.

Taking into consideration these negative aspects, it appears that in the economy of the European Union, based on solid foundations, for the immediately following period 2 million new working places will be created, considering the fact that in the period 2006-2007 7.5 million employments have been made. This aspect reflects the fact that the slowing of the economic growth is also affected by the substantial reduction of working places in the European Union.

Moreover, we also have to emphasize the elements that have in sight the increase in prices. We can ascertain the fact that in the European Union, in 2008, inflation has increased to approximately 3, 6%, but it is expected that this growth in inflation for consumer prices in 2009 to be 2, 4%. The cause of this increase in energy and food prices was the main factor that has determined, in fact, this increase in inflation.

Economic growth has slowed in the EU and in the euro zone, and the current imported inflationary pressures are concerning. While European economies have so far proved to be resistant to external shocks and we expect the further creation, but in a slower way, of new working places, we have to maintain solid macro-economic policies and to avoid carefully an inflationary spiral that would affect particularly

families with lower incomes (See Joaquín Almunia - European Commissioner for Economic and Monetary Affairs). The prolonged crises on the financial markets and the substantial slowing of the US economies have led to the deterioration of the global economic prospects and automatically to those of the European Union. The causes are multiple.

The deep cause of the financial crisis has been the abundant liquidity created by the major central banks around the world (EDF, BOJ) and by the desire of the countries that export oil and gas to limit currency appreciation. Also, there was a glut of savings, generated by the increasing integration into the global economy of some countries (China, South-Eastern Asia in general) with high accumulation rates, and by the global redistribution of wealth and income towards oil and gas exporters. The abundant liquidity and the glut of savings have created resources available for investments, including sophisticated financial instruments, not easily understood by some investors.

The consequences of the existence of abundant liquidity have been the very low rates of interest and their reduced volatility. Together, these consequences led to increase in appetite for assets with large gains. In addition, the reduced volatility existent in the market has created a tendency to underestimate risk and led to a real lack of vigilance of investors. Risk margins have also been very low and nondiscriminatory. Together, the low rates of interest, the appetite for assets with high gains, and the diminishing vigilance towards risk and low margins have covered the price signals on financial markets and led to the insufficient understanding of the risks involved (See Mugur Isărescu - International financial crisis and challenges for the monetary policy in Romania)

The main risks are related to the persistent disturbances that are in the financial markets that could exacerbate the slowing of the American economy. The uncertainty regarding the impact of the crisis in the real economy is still at a high level. A larger impact could outline the adjustment that is currently going on in some real estate markets, particularly those in the United States and European Union, risking submitting the balance sheets to increasing pressure. Risks related to imbalances in certain countries, with a current account deficit and/or a high external debt could be supplied by changes in risk preferences due to the deepening and/or extending the financial crisis.

Risks related to imbalances in certain countries, with a current account deficit and/or a high external debt could be supplied by changes in risk preferences due to the deepening and/or extending the financial crisis. Other risks refer to a disorderly correction of global imbalances in general, even if current prospects seem to notice an improvement in the current account deficit of the United States. The price evolution of raw materials could involve other surprises, both negative and positive.

Considering the fact that American banks have opened a gate to credit clients without a strict cover regarding the guarantee for the grant money, the result was disastrous. Customers have become incapable to pay due to the decrease in economic activity, working places reduction, and last but not least, due to the increased market supply. In these circumstances the American banks have been forced to sell a large part of the guarantees made to the buildings that were granted these credits. Taking into consideration the fact that the American economy was deteriorating from month to month, banks have decided to sell guarantees and mortgages to European banks. Together with the takeover of these guarantees negative effects have been transferred from the American economy. European banks found themselves suddenly deprived of liquidities, because the money was transferred for the payment of guarantees and mortgages for the buildings in the United States. In this case European banks have to confront with uncommon problems when they have to credit firms in Europe. It is known that lending is an engine of economic development. In these circumstances the European economy has been quite affected and European banks had to reconsider their crediting policies and their attitude towards their clients. The most affected have been the companies depending directly from liquidities or from a continuous cash flow.

According to the basic scenario of the Commission, the uncertainty regarding the size and location of credit losses will continue until the end of this year, before it will gradually vanish in the first half of 2010. The fact that the effects had not such a powerful influence could mean that contamination is either slower or the EU resistance has improved more than expected.

EU economy has still a relatively good position in order to withstand global turbulences because of its fundamental improvements, reflected for example in strong public finances and in the absence of macroeconomic imbalances. On average, both public deficit and current account position have been, in 2007 less than 1% of GDP, although the differences between Member States remain significant. It must however be noted the fact that for 2009 budget deficits of the European Union countries will exceed 1%, and for countries belonging to non-euro area this deficit will be even greater.

After recording the best result since 2000, namely 0.9% of GDP (0.6% in the euro area), in 2008 a new growth of the medium public deficit has been recorded, representing 1.2% of GDP in the EU (1.0% in the euro area) due to a more moderate activity as a whole, and some tax reductions in certain countries. In 2009, considering the maintenance of the existing policies, the deficit should stabilize at a global level. In structural terms, fiscal consolidation should also stagnate. The financial situations of households and the company's balance sheets have improved dramatically in recent years, and the unemployment rate in the EU and euro area is at its lowest level in the past 15 years.

However, the EU economy will not remain untouched. The investment growth decreases due to the stagnation of overvalued prices of real estate markets and a cyclical slowing down. Private consumption growth will also decrease with a slowdown, during the current year, together with increasing employment and real wage, as well as with a constant decrease in consumer confidence. Unfortunately the reduction of the economic activity has had negative effect on all levels. These effects should be noticed in the automotive industry, constructions, and light industry that are directly affected and have direct implications on the labor market and influences over the unemployment rate. Staff reductions and job instability represent real and potential problems that must be faced at this time by the European Union economy.

It should also be noted the fact that EU policies should be directed towards macroeconomic stability on the one hand, and towards encouraging and supporting companies at a microeconomic level, on the other hand. On this background have operated, as aggravating, some microeconomic causes: frenetic securitization, cracks in the business model of rating agencies, rational outsourcings from a private point of view but socially inefficient and, finally, increased international competition for deregulations.

After the significant improvement recorded in the period 2006-2007, the labor market became stagnant and a reduction by half of the increase in the number of jobs can be observed, from 1.7% in 2007 to 0.8% in 2008 and 0.5% in 2009. Despite the slowing down registered in the labor market, a wage growth acceleration is expected, from 2.9% in 2007 to 3.8% in 2008, stimulated momentarily by the recovery measures taken, for example by Germany, in order to not fall behind, before decreasing, again, to 3.5% in 2009. These wage increases have made their adjustment to inflation.

EU has devised a plan for economic recovery designed to cope with the current situation in all Member States, especially to restore confidence in the business domain. Firstly, EU wants to give an immediate impulse to the budget, and this would be around 200 billion euros (1.5% of EU GDP) and secondly, by using a package of ten priority actions based on the Lisbon Strategy, adapted to the long term economic challenges. EU has proposed to support Member States to invest in areas that create jobs and boost the demand for certain products and services.

Budget stimulus should be seen as a temporary measure for 2009. Regarding distribution, for countries outside the euro area, a budgetary policy should be created in order to correct imbalances in these countries.

CONCLUSIONS

What are the main challenges? In the short term the main challenge is to find solutions to restore the confidence of investors and consumers. In the long term, the main challenge is to adjust the principles that determine the reform of the international financial system, mainly in terms of transparency, improvement in regulations concerning title accountancy, providing the proper regulation of markets, companies and financial products, ensuring the integrity of financial markets (regarding market manipulation and fraud), and strengthening cooperation between financial institutions in the world (the modernization of the governance structures of the IMF and World Bank). Business ethics is not missing from this list of challenges for the future.

REFERENCES

Mugur Isărescu Academician, Governor of The National Bank of Romania - International financial crisis and challenges for the monetary policy in Romania
Joaquín Almunia - European Commissioner for Economic and Monetary Affairs
The report of the European Commission

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SPECIFICITY OF SMALL BUSINESS FINANCING IN PERIODS OF ECONOMIC CRISIS

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ABSTRACT

The article is devoted to questions of small business financing in times of economic depression. This sector plays miscellaneous roles in a general economic infrastructure, and it plays even more significant role in periods of financial crisis. Due to its flexibility, it can adapt fast to the permanently changing economic environment and solve many social and economic problems related to the crisis. At the same time, the small business suffers from the lack of financial resources. Usually it focuses on owners' funds and its own profit reinvestments as well as on the most natural source of funds – bank credits. However, usage of these sources is very limited in times of financial crisis. Various anti-crisis programs work out in different countries. These programs are targeted to help small businesses from different directions. However, government programs cannot completely satisfy all small business resources requirements. All these factors force the small business to move in the direction of the stock market more often than in a regular economic environment. The specificity of these processes is disclosed here.

INTRODUCTION

The functioning of the market is impossible without small business. The role of this sector in an economy is many-sided – it promotes fast a saturation of the market by goods and services, introduces achievements of the scientific and technical progress, and solves a problem of the employment and other social problems.

In times of economic crisis, its value is increasing in times. It demonstrates ability to adapt quickly for external conditions, to "revive" during a general economic recession and to "take up" a solving of many social and economic problems related to the economy depressions. During crises, characterized by curtailment of production and mass layoffs, the small business serves as an important base of social politics of a state, creating jobs. To a certain degree, problems of tax payments to a state budget, arising because of long stoppage of activity and insolvency of large enterprises, also can be solved by small business. Paying taxes, the small business can be a reliable source of state budget means, even in spite of the fact that it does this in not very large quantities.

SPECIAL FEATURES OF THE SMALL BUSINESS

The role of the small business mentioned above is due to a number of its features, which make possible to reduce a production costs, and, as a result, enable to increase a profit – a basic source of the further development. For example, the ability of the production expenses reduction can be reached because of narrow specialization as well as rational use of means of production and work force. The issue of the underused of production capacity and unused industrial spaces virtually does not exist for the small business. In addition, small enterprises have possibilities for a more complete usage of a raw and materials.

They can organize production based on processing of large enterprises' waste products and on relatively limited sources of raw material and energy. Being close territorially to consumers, small enterprises can sharply reduce transport charges. Besides this, the small business practically is not burdened by an auxiliary and by-product manufacture. As soon as small firms dealing with not capital-intensive branches of economy, their expenses related to functioning of fixed assets, do not play such significant role, as in

large corporations. That is why there is an opportunity to reduce expenses on a fixed capital, resorting to rent, lease and other kinds of a resources' mobilization not related to significant expenditures of enterprises' means.

Thus, small business is a necessary component of economy. It is reacting flexibly to changes of market environment. This is possible due to its abilities to reduce sharply production and administrative expenses, to use effectively its personnel and business capacities and to optimize extra-rationally the organization of production process.

SPECIFICITY OF FINANCIAL RESOURCES' MOBILIZATION FOR THE SMALL BUSINESS

However, the small business collides with a number of issues. A mobilization of financial resources is the most difficult task in this case. The most serious problem, obviously, is their deficiency.

Financial resources of the small business as a basis of their activity at the first phase of its functioning as well as during realization of a current activity, mobilize from different sources. Most used sources are:

- owners' personal funds and funds of their friends, families etc.,
- incomes as a result of business activity and other funds, appearing during activity,
- loans (bank credits in particular),
- resources received as a part of programs of state support,
- external investments,
- etc.

Usually the small business focuses on owners' funds as well as its own profit reinvestments. According to researches, the significant part of small firms has to count mainly on their own internal funds. In the world practice, the start-capital mostly forms at the cost of sources, the basic part of which consists of the personal savings of the enterprise's proprietor, and ones of his friends and relatives. This kind of financing sources is especially important for the beginning entrepreneurs. Then during realization of further activity and business growth, its own profit, amortization deductions, means from activity insurance and other funds become the basic sources of financial assets.

However, the more and more growing financial crisis seriously limits an opportunity of injections in activity of entrepreneurs' personal savings, on the one hand, and, complicates settlements with consumers, slows down strongly processes of means receiving from realization of the goods and services, on the other hand. In its turn it slows down proceeds taking, which are the basic source of formation of the profit and amortization fund – of two basic sources of reproduction of resources.

Second important source of financial means is resources of the specialized credit institutes. The credits from commercial banks are one of the basic sources of formation both starting capital, and satisfaction of needs in working capital resources during extension of activity. Current condition of state bank systems already hurt by expanding global financial crisis, has limited strongly an access to this most natural source of financial means.

GOVERNMENT PROGRAMMS TARGETED TO THE SMALL BUSINESS SUPPORT

In many countries, government realizes importance of the small business and its problems. Various anti-crisis programs are developed. These programs are targeted to the small business support from different directions. The small business expects the direct financial help by receiving loans on favorable conditions and grants for implementation of the projects, as well as indirect privileges, for example, by calling to pursuance of state orders', by granting of guarantees under the credits, by decrease of tax burden, etc.

Therefore, for example, in Russia the support of small business is included in the List of Prime Measures undertaken by Government of Russian Federation to struggle with consequences of the global financial crisis. This List was published on an official website of the Cabinet of Russian Government. The basic goal of the small business support is to use its potential for creation of new jobs.

The following measures directed to the small business support in conditions of financial crisis, are planned and undertaken by the Russian Government:

- the credit program of VnesheEconombank (one of the largest banks in Russia) for small business will be increased up to 30 billions of Russian roubles (it's approximately 910 millions of U.S. dollars);
- 10,5 billions of Russian roubles (approximately 320 millions of U.S. dollars) is allocated from the Federal Budget to form different favorable conditions of creation of new effective small enterprises (crediting, subsidizing of the interest rates, state guarantees, development of an infrastructure of small business, grants and training programs);
- the law, which gives privileges to a small business in a buying off rented state and municipal property, was passed;
- a payment for connection of small enterprises' machines to electrical networks was lowered;
- it is recommended to executive authorities in regions and municipalities to involve the small business in performance of state and municipal orders, and to remove administrative barriers to enterprise's activity, including restrictions of access to local markets.

The same situation is observed on the other continent. For example, largest banks of USA were supplied with means to finance a small business activity. Banks received U.S. government money to lend them to small businesses. This is a part of a broad package aimed at small business that was being unveiled by President Barack Obama and Treasury Secretary Timothy Geithner. The package also includes reduced small business lending fees and an increase on the guarantee to some Small Business Administration loans.

However, all these and similar measures of state support are not able to solve completely the major problem of the small business – its need in financial resources, and to ensure this need to the extent that it really requires to function normally and to give a prop to the economy in time of the global financial crisis.

EXTERNAL INVESTMENTS INTO THE SMALL BUSINESS

External investments are almost the last chance for a small business to attract required financial resources.

At first it is so-called "project investments" are implied here, which, despite the financial crisis, could still occur. For small businesses there is a time when the influx of their own funds is insufficient for the implementation of specific projects within the framework of their further activity. When an entrepreneur conceives to accomplish some investment-attraction projects that contribute to the further growth of his enterprise, he finds an investment company or individual investors who can provide funds for its implementation.

Small enterprises more often turns to so-called "contractual" or "project-focused" capital market. This can be explained by the fact that it is more isolated in relation to the external investors, than market of the joint-stock capital. It enables to entrepreneurs to reduce cost to perform operations related to the entry to an open capital market and information gathering, and to avoid difficulties of the low attractiveness of small enterprises' shares.

In this case, the entrepreneur provides information on projects of his activity only to restricted circle of the potential investors. Moreover, their opinions regarding the future of the business should coincide.

Otherwise, most often, such investors are in control and direct the business in favorable direction for them, no for the entrepreneur, through a substantial capital share. In addition, under the terms of the contract the small enterprise can provide for a possibility to keep an independence of functioning. The risk associated with a decrease for investors in control over the firm's activity, in this case, can be compensated by increase of their share in the projects' earnings up to the size of indemnification for the limited control.

It is necessary to say, that the project-investment has also lowered development's paces in conditions of the recession of economy, as the global financial crisis has affected practically all types of capitals markets. On the other hand, some characteristics of the "contractual" capital are its short-term usage and absence of investors' incentive in the development and growth of the enterprise in general, beyond the invested project. This situation forces small business to apply to the use of tools of the stock market. Usually it is non-characteristic for small business, in periods of the economic stability these tools are applied very limited.

SPECIFICITY OF A SMALL BUSINESS'S TRANSITION TO A JOINT-STOCK COMPANY FORM

The expansion of industrial base usually requires usage of long-term types of financial resources' investments. Thus, the development of the small enterprise is impossible without a calling of a wider range of investors, in particular, when the cost of production assets required for the business organization is high. A solution can be found in a transition of the enterprise to a joint-stock company form.

Mobilization of financial resources on a share or joint-stock basis is a convenient form of raising funds. This form of resources mobilization can be used not only for organization of the new enterprise, when there is not enough funds of one or several entrepreneurs for effective organization of business, but also for the further development of the enterprise, for reproduction of the capital and investment activity. It is necessary to note, that the use of various ways of financing have an influence on structure and organizational forms of the small enterprises.

The transformation of a private enterprise into joint-stock occurs, when businessman offers to other economic agents some part of his own company. The subsequent capital inflow, related to this process, gives him financial resources for maintenance of its industrial projects, and at the same time, stocks, circulated in the market, are rather liquid investment tool for the external investors. Hence, potentially the company can have the greater access to the capital markets in the future and more objective assessment by external players of its activity importance.

To enter the open capital market, small firms need to prepare the certain package of the information regarding their functioning. In USA, for example, the small company usually required to show steady incomes during a minimum of three years, maintenance's security of debts and payments, and the total amount of debts should not exceed the enterprise's joint-stock capital more than three times. Taking into account the requirements to reporting to shareholders, as well as relatively high number of the shareholders and as a result, charges, connected to its maintenance, businessman have to estimate carefully all advantages and disadvantages of his enterprise's transformation into a joint-stock before starting this process.

Nevertheless, stock issue is often the best way for the small enterprise to get financial resources required to replenish / to form working and fixed assets capitals on enough favorable conditions.

In addition, the public company is usually easier to attract additional capital, especially extra capital and loans, on terms that are more favorable. If there is a steady tendency of growth of shares' value, efforts to

obtain not only borrowed, but also an additional joint-stock capital, reduced. Moreover, a prestige of the company is increased as it becomes be more known in business environment. It could facilitate an access to suppliers, as well as receive other benefits related to the core activities of the enterprise.

On the other hand, the undeniable advantage of such type of investments for shareholders is the security of their responsibility for enterprise's debts. The corporation limits the liability of owners. Those assets that are invested to this venture limit their losses. Creditors of the company do not have a right to require the compensation of their loans at the expense of other assets of shareholders.

Legal independence and the limited liability make a joint-stock company an attractive for little investors as well. Their investments into the joint-stock capital can start to be a source of significant funds.

However, the most important advantage of the joint-stock form of business is its so-called "unlimited viability", if the shareholder leaves business, the business continues to exist. Besides it, the joint-stock company can increase the capital more easily than an enterprise, which belongs to a one proprietor or a partnership.

DISADVANTAGES IN THE PROCESS OF TRANSITION TO A JOINT-STOCK COMPANY

Nevertheless at the preset time in Russia, for example, and possibly in other countries transformation into joint-stock companies, as the form of mobilization of financial resources in small business, is little or no spread. There is a set of the reasons of this.

While the benefits of transformation in the joint-stock company for small enterprises, undoubtedly, are important, they need to be weighed carefully and compared with all numerous shortages, related with this process.

One of the major disadvantages in this process is information disclosure and potential lost of a control of the company that became public. If the majority of the small enterprises cannot receive the right on stock issue, ones that can reach this target, not always want to do it. Not every entrepreneur who has created the business and raised it up to a possibility of introduction of joint-stock financing, probably, wants to share results of his work, as soon as the invitation of the investor means a transfer to him rights to a part of the enterprise. There is also threat of the rather fast purchase of a control package of the shares of the small enterprise by the external investors.

Another disadvantage of use of the joint-stock capital, as source of financing, also is that fact, that this way often is complicated for the majority of the entrepreneurs because of high organizational costs. With reduction of size of the enterprises a price of the information gathering and the costs for stock issue, become "unbearably" high, as they cannot be distributed between large number of the shares. Expenses related to transformation of the enterprise, makes such form of financing an almost unsuitable for many small firms. As a whole, the large-scale capital market becomes if not inaccessible, than, at least, limited for firms that are smaller than a certain size. Size of the small enterprise defines borders to its access to large capital markets, such as the stock market.

Other negative moment of process making a small business public is also its not obvious attractiveness to the investors - stock market players. It is difficult to small firms to find a wide enough circle of the investors interested in their development and ready to invest their capitals. The investors, scared by unpredictability of small firm position, do not hurry to put the capitals in their business, as the small enterprises often manage to avoid influence of the most general tendencies of development of economy. The potential buyers of securities of the enterprises are more inclined to buy the stocks of large companies widely known in a business world by stability of functioning. There is a reorientation of a

demand from stocks of companies, which differ by high rates of growth, to stocks of companies especially highly listed on the securities market.

Thus, frequently, insufficient scale of activity prevents the small business to use such source of the capital, as stock issue.

At last, a significant negative factor, describing functioning of any public companies, is the double taxation of incomes in some countries (incomes of corporation on the one hand and distributed incomes of the shareholders on the other).

WHAT TO DO TO MAKE STOCK ISSUE FOR THE SMALL BUSINESS AN EFFECTIVE PROCESS

Nevertheless, using stock issue for realization of financing of the small business enterprises has the future nowadays – in the period, when the financial crisis essentially has limited access of the small business to other most habitual sources of financial assets, it becomes most important and goes almost to the fore.

Certainly, the development of interaction of small business and potential purchasers of their stocks in many respects will depend, at first, from general economic situation in the concrete country and on the attitude there toward the small business. However, in conditions of crisis it is necessary to draw attention of the potential investors to an opportunity of investments in small business and to connect, thus, their interests.

In connection with this it is necessary on a state level to adopt policies that promote this process and to develop programs to attract financial resources in this sector of economy in the form of public issue of shares.

In the countries interested in development of this phenomenon, it is offered, to create conditions, in which factors breaking this process and lowering interest to it of its potential participants from both sides will be reduced as much as possible. In particular, it is necessary to develop measures directed on:

- a simplification of procedures of a small enterprises' entry into the stock-market, a help in an organization of this process with the purpose of minimization of organizational costs;
- a creation of information centers for the potential investors, where they can get the information about small enterprises which would be ready and wished to involve investors' means for their further development, i.e. a creation of some kind of intermediary structures between small business and potential investors-shareholders;
- a development of laws, which can protect rights of initial owners of business (its founders) from a deliberate capture of a control package of shares;
- an elimination of the above mentioned double taxation of incomes;
- etc.

It is necessary also to put an attention on a fact, that investments into the small business can become attractive, and accessible not only for usual participants of the stock-market, but also for a much wider circle of the private persons.

With this purpose, it would be desirable to repeat, that it is necessary to raise on a state level a popularity of this kind of investments, and all participants of such relations can benefit, including state – in connection with revival of economy as a whole due to this process.

As known, crises open new opportunities.

DIVERGENT LEADERSHIP CONCEPTS IN THE TEAM STRUCTURES OF AMERICAN MULTINATIONAL ENTERPRISES

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ABSTRACT

In multinational enterprises, the effectiveness of teams composed of participants from different cultures is limited by these participants' divergent concepts of leadership and the resultant differences in role expectations for team members and team leaders. This paper identifies some of the major differences between American assumptions about what leadership is and the leadership concepts of other countries and cultures.

INTRODUCTION

In his book *On Leadership*, John W. Gardner observes that leadership—a relationship of mutual influence among leaders and followers for the purpose of realizing goals—is only *one* of the mechanisms by which groups and organizations accomplish their goals and objectives (1990, p. xvi). With the development of global production facilities and global markets, and the evolution of the multinational enterprise (MNE) as a vehicle to avail both production and market opportunities worldwide, many global businesses have sought to realize their goals and objectives in foreign markets by organizing their overseas project operations in team structures. Such teams often are composed of participants from different global origins, ethnicities, and cultural backgrounds. At the same time, the internal dynamics of these teams typically take the form of a standard leadership model that has become common among American MNEs.

One variant of this model includes a company-appointed leader with formal position and legitimate authority within the command structure of the organization. This formal leader represents the organization's interests in team activities and deliberations and coordinates team initiatives and resource needs with the larger organization. The other major variant involves the use of a self-directed team structure in which formal authority and responsibility for coordination with other organizational elements reside collectively in the team itself. In both cases, the basic components of the standard leadership model are four: Team members (1) share the same goals and objectives for team accomplishment, based on (2) a foundation of shared values; team members come to agree on shared operational goals ("ends") and the methods of goal attainment ("means") through (3) a process of mutual influence; and (4) leadership within the group migrates around the team, from member to member, depending on the team's intentions and circumstances, and the particular knowledge or functional expertise required.

The "mutual influence" process denominated as (3) in the paragraph above, whereby team members come to agree on ends and means, is a decision process that resembles scenario planning. The process involves individual team members (a) offering competing attempts to define the situation that the group inhabits; (b) recognizing the goal implications of each of these competing situation definitions for the team's future actions ("Given that our situation looks like this, this is what I think we should do about it"); (c) developing a consensual preference within the group for one definition of the situation and one action plan over the others proposed; and (d) articulating a group commitment to implement and execute the plan in order to accomplish the agreed-upon operational goals.

The common leadership model fits well with, and is validated by, the free-market, purposive, individualistic, and profit-valORIZING predispositions of North-American-based MNEs. American MNEs, especially, privilege this leadership model (largely because it derives from American scholarship on how

leadership works in America), and adherence to the model has overshadowed and blocked recognition of the existence within the MNE of divergent leadership concepts that are characteristic of other world regions and that derive from other cultural values. These divergent concepts typically occur in host-country operations where indigenous employees are a major element of the workforce. Unreflective championing of the common leadership model by senior management has prevented divergent and disruptive leadership concepts from being identified, challenged, considered, and rejected or accommodated on their own merits. “Flying below the radar,” these divergent concepts have remained operative and surprisingly robust within multinational organizations—often to the surprise and consternation of manager-practitioners seeking more single-purposed, integrated, focused, and responsive teams, and more productive and effective team efforts and outcomes.

Drawing principally on examples from East and Central Asia, this paper identifies several of the major divergent leadership concepts and explores how they differ from typical American assumptions about what leadership is and how it works.

“LEADERSHIP UNIVERSALS”

From the end of World War 2, Americans or foreign scholars living and working in North America have conducted most of the scholarship focused on leadership. As a result, much of what we know about leadership *anywhere* in recent times is based on what American leadership scholars have discovered about leadership in America. Although leadership studies are now conducted in many countries, and often with regional, cross-country, and cross-cultural comparisons, there is still, as GLOBE Project researchers Deanne Den Hartog and Marcus W. Dickson observe, “a strong North American bias in the leadership theories, models, and measures that are used and published in mainstream social science literature” (2004, p. 253).

A principal reason for the lack of portability of many of these American-derived leadership “universals” is that they come from a political, economic, legal, cultural, and social context that is almost unique in the world’s history. Leadership in America takes place in a societal context comprised of several related factors:

- a *democratic political system* with a balanced, three-branch governmental structure that includes a popularly elected bi-cameral legislature
- a largely *market-driven economic system* with a *level of economic development* till now unrivaled in the modern world
- a *transparent legal system* which accords everyone equal rights under the law
- a *liberal social system* that emphasizes the primacy of *individual freedom over individual responsibility* to society, and
- a system of *cultural values* that shapes American attitudes toward leaders and leadership.

Of course, not all of these attributes characteristic of America are uniformly present in other parts of the world, and where they *do* appear, they appear to differing degrees and in different configurations.

In general, scholars in the field of leadership have been careful about the more obvious dangers of over-generalizing: At their most parsimonious, they have said, “Well, so long as it involves leaders, followers, and shared goals, we’ll call it leadership—*wherever* it takes place” (Wills, 1994, p. 13). On the other hand, at their most ambitious, leadership scholars have argued for the universal application of a more ideological and more refined definition that embraces both descriptive and prescriptive elements. For example, a well-respected leadership scholar, the late Joseph Rost, offered a definition of leadership that asks us to judge whether leadership indeed is taking place by distinguishing a group’s intentions for “real” changes from intentions for nominal or everyday changes; by ascertaining that the influence taking place

in the group is occurring “among” leaders and followers and, therefore, is appropriately multi-directional; and by ensuring that the purposes of those engaged in said influence processes toward ‘real’ changes are also mutual—neither exclusively those of the leader nor exclusively those of the other group members the leader serves (1991, pp. 105-106).

Table 1 shows seven conditions that typically are considered by leadership scholars to be universally characteristic of leadership under all circumstances. The ordering of the items in this list is not random but a deliberate concatenation wherein each successive item devolves from the item that precedes it. Of these seven supposed leadership universals, it is the contention here that at least six of them (Item 1 through Item 5, and Item 7 in the figure) require reassessment based on relevant disconfirming evidence found in cultures outside of the United States.

Table 1: Seven Supposed Leadership Universals

1. Leadership is a social or *group* phenomenon (not the possession by an individual of particular personal traits or behaviors)
2. Leadership is a *process* or dynamic (not a static condition or positional arrangement)
3. Leadership is *purposive* or goal-oriented (not based on preserving the status quo; or on clan membership, kinship, or relational commitments)
4. Seeking to accomplish group goals derives from *influence* (as distinguished from coercion)
5. The use of influence involves at least one person (an “agent”) attempting to *affect the thinking and enlist the will* of one or more others (a “target”)
6. The ability of an agent to influence a target depends on *controlling and dispensing power resources*
7. The primary power resource in enacting leadership in contemporary societies is *persuasion*—the ability to communicate persuasively, orally and in writing.

This table shows the supposed leadership universals that are the central focus of the paper.

The terminology of “agent” and “target,” in Supposed Leadership Universal #5, comes from Gary Yukl’s *Leadership in Organizations* (2002, p. 142) but can be found in a number of sources. This terminology is not in dispute; what is dubious about this item when applied to world locations beyond the U.S. is the contention that, in the context of leadership, influence attempts universally intend to “affect the thinking and enlist the will” of their targets. Supposed Universal #6 is related to #5, and seems beyond dispute when framed by an appropriately broad definition of what constitutes a power resource. The idea that the ability to influence depends on power resources is well supported in the leadership and social sciences literature generally. If we define influence conventionally as “power enacted by an agent to affect the behavior of one or more targets,” as Yukl does (2002, p. 142), then it is apparent that sources of power—power resources—are indispensable for influence to occur. With these qualifications in mind, let us examine, in turn, each of the six contested items in Table 1.

LEADERSHIP ADHERES IN GROUP ACTION, NOT LEADER BEHAVIORS

Supposed Leadership Universal #1 suggests that leadership is a social or group phenomenon, and not the behavioral outcomes that result from an individual leader’s traits. This is uncontested to the extent that leaders, whether charismatic or positional, do indeed need followers for leadership to occur. For example, Garry Wills pointed out in *Certain Trumpets* (1994, p. 13) that if you want to lead, the one thing you can’t do without is followers; consequently, merely possessing the personal traits of a leader, or performing certain behaviors associated with such traits, doesn’t constitute leadership in itself.

—Or does it? Recently, researchers who are part of an ambitious multinational research effort called the GLOBE Project (an acronym for Global Leadership and Organizational Behavior Effectiveness) sought to identify what constitutes effective leadership around the world. These researchers used more than 160 investigators to study the responses of 17 thousand managers in more than 950 organizations in 62 societies worldwide (House *et al.*, 2004). Their methodology led them to consolidate 21 “first-order” dimensions of effective leadership into the six “second-order” dimensions shown in Table 2.

Although the GLOBE researchers refer to these six variously as global leadership “dimensions,” “attributes,” or “behaviors” (House *et al.*, 2004, pp. 14, 41-42), it is clear from their accompanying descriptions that most of the six are *imputed traits of group leaders that manifest as effective leader behavior*. GLOBE Project researchers found that some sets of leader traits were seen to lead to effective leadership in all cultures; in other words, they were universally effective. Some of the sets of traits were seen as universally ineffective in all cultures; and in some cases, particular sets of leader traits were seen as effective in some cultures and ineffective in others; in other words, these latter sets of leader traits were culture-dependent or context-specific (House *et al.*, 2004, p. 39-40) .

Table 2: The GLOBE Project’s Six Global Leadership Dimensions (House *et al.*, 2004)

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- | | |
|----|---|
| 1. | Charismatic/Value-Based Leadership (e.g., being visionary, inspirational, having integrity and decisive elements) |
| 2. | Team-oriented Leadership (e.g., acting collaborative, integrating, and diplomatic) |
| 3. | Participative Leadership (e.g., being non-autocratic and allowing participation in decision-making) |
| 4. | Autonomous Leadership (e.g., being individualistic, independent, and unique) |
| 5. | Humane Leadership (e.g., modesty, tolerance, and sensitivity) [“paternalistic” in some cultures] |
| 6. | Self-Protective Leadership (e.g., being self-centered, status conscious, and a face-saver) |
-

This table supplements the discussion of the GLOBE Project’s results with regard to global leadership dimensions.

In observing the characteristics of the six second-order sets it is easy to see that they are defined principally in terms of leader traits and leader behaviors, and offer very little to suggest the importance of group dynamics involving follower traits or behaviors, or group goals. If we were to take the one set of the six that does seem to at least imply a group interaction—Item #3, Participative Leadership—we find Participative Leadership involves leaders who are non-autocratic and encouraging participation in decision-making (“involving others in making and implementing decisions”) (House *et al.*, 2004, p. 14). GLOBE researchers found that this type of leadership was not enthusiastically endorsed by respondents in East Asia, South Asia, the Middle East, and Eastern Europe—that is, four of the ten groups of “culture clusters” that comprise the universe of the GLOBE study (House, *et al.*, 2004, pp. 42-43, 683). In the Confucian Asian and South Asian culture clusters, participative leadership is viewed positively but as not so effective as other forms of effective leadership (House *et al.* 2004, p. 688).

In many societies studied by the GLOBE Project scholars, the type of leadership that looks most like a group phenomenon is less in evidence than one might expect, and indeed, leadership as defined by the behaviors of paternalistic leaders, autocratic leaders, and even “self-protective” leaders, is very much in evidence in the GLOBE project results. These styles of leader behaviors very much define the form that leadership takes in many of the GLOBE project culture clusters.

One of the chief arguments offered for viewing leadership as a social or group phenomenon under all circumstances is the idea that the activities of a group “doing” leadership is not just an extension of the

will of the leader or the larger organization: group members are imagined as being required to commit their own individual wills to the activity. Prominent scholars and writers in leadership studies such as James McGregor Burns (1978, pp. 18-21), Joseph Rost (1991, pp. 105-106), and Garry Wills (1994, p. 18), all have ruled out the use of coercion to carry out the plans or desires of the leader. If coercion—the act of compelling others to act in response to an aversive stimulus (force or the threat of force)—is used, Burns, Rost, and Wills are unwilling to call that type of social interaction leadership.

And yet, the strong, charismatic leader who sweeps followers off—or onto—their feet by force of personality is clearly documented by research. Indeed, as any reputable newspaper with a foreign desk testifies, the autocratic and paternalistic model of leader is alive and well and directing human traffic in Caracas, Kolkata, Kinshasa, and Kunming. The point is not that these writers in American leadership studies—Burns, Rost, and Wills—are wrong; they simply are writing with an American leadership context in mind. The point is, rather, that, in seeking to impose a single model on operations in other parts of the world, it is inevitable that local indigenous models would “push back.”

LEADERSHIP IS A DYNAMIC, NOT A RELATIONSHIP

Supposed Leadership Universal #2 states that leadership is a process or dynamic, not a static condition or positional arrangement. One implication of this supposed universal is that leaders can be followers, and followers can be leaders: simply having a superior position or formal title doesn’t automatically make one the leader of group activities, nor does a subordinate status or job description rule out the possibility of leading.

The idea of leadership as a dynamic that empowers all group members is found in a number of related leadership concepts: “roving leadership”—in which the role of group leader is conceived to move around the group depending on what leader abilities are required at the time (De Pree, 1989, p. 48); John Gardner’s idea of the Janus-like “leader-follower,” who, depending on the context, follows or leads (1990, p. 4); and the conception of leadership as a “mutually determinative” activity on the part of leaders and followers delineated by Wills, in which leaders and followers negotiate with each other to determine the goals the group will pursue (1994, p. 14).

But these ideas also ignore the important relationships between hereditary or hierarchical position and the ability to act as leader in more traditional societies, such as those of South, Central, and East Asia, in which organizational position or hereditary role are often the chief enablers for leadership to occur. Geert Hofstede points out that, in societies such as Japan, China, and Korea, where there is a high degree of power distance—that is, large and accepted differentials in power between superiors and subordinates (1997, p. 28)—“there is a norm that less powerful people should be dependent on the more powerful, subordinates expect to be told what to do, and the ideal boss is a benevolent autocrat or good father” (1997, p. 37).

Hofstede’s observation is germane: In Bagshaw’s research on managers in multinational corporations operating in China in the opening years of the 21st century, indigenous Chinese middle managers typically did not consult with their subordinates before issuing directives (partly from the desire not to be perceived as requiring advice or appearing to be uncertain), and subordinates did not expect to offer advice to their superiors unless specifically asked (partly from fear of causing the superior to lose face). Managers expected to make decisions autocratically and paternalistically for the good of all. Subordinates were often reluctant to disagree with their superiors for fear of reprisals, and were reluctant to trust their opinions and ideas with each other. Leadership based on position or hierarchy was also a source of harmony and stability in these organizations. In traditional Chinese culture, to have everyone in a group attempting to influence each other, and attempting to lead, would be to invite conflict and chaos (*luan*) (Bagshaw, 2002, 2004, 2005, 2006).

LEADERSHIP IS ABOUT ACCOMPLISHMENT, NOT PRESERVING THE STATUS QUO

According to Supposed Leadership Universal #3, the group process articulated in Supposed Universal #2 is purposive, focused on goal accomplishment, and not focused on preserving the status quo; nor is the group process invested in enforcing or reinforcing kinship or other relational commitments and configurations.

If purposiveness in attaining goals is indeed the operative model for all cases of leadership, it seems fair to ask who gets to set the goals the group pursues? The American model says, “The group sets the goals—based on their shared values.” John W. Gardner, one of the most insightful writers on the nuances of leadership, suggested that “shared values are the bedrock on which leaders build the edifice of group achievement” (1990, p.xvi). Although the American model allows the “vision” of one group member to frame the purposive activities of the whole group, the model also requires that other group members embrace that vision in a consensual manner—by sharing values—before effective leadership, and effective pursuit of the vision’s implied goals, can occur. As Smircich and Morgan put it, “Leadership is defining a reality that can gain a consensual following” (1982, p. 259).

In the context of the American model, any attempt at leading requires accreting enough support and agreement from the group for a leader-candidate’s vision to be pursued. If the group agrees with the reality that the would-be leader defines through his or her vision, then the leadership game is afoot; otherwise, more caucusing, more campaigning, and more attempts at defining the reality that the group inhabits, are called for. In many East Asian societies, less openly democratic approaches—some closer to the notion that ‘silence gives consent’—appear to be the rule, rather than the exception.

The idea that it isn’t leadership if it doesn’t involve purposiveness — the pursuit of goals— is at the heart of the American leadership model generally and the business leadership model specifically. The American model says that leadership, in its essence, is all about change: First, we scan the environment looking for problems and opportunities, and when we perceive a match between our group, our organization, and some issue in our environment, we try to articulate the nature of the issue, how it will affect us, and what we should do about it—how we should change. If that change is a rather large, ambitious thing, we call what we should do about our situation “the vision.” And then we try to sell the vision to our fellow group members as a vision of change: “For us to avail the opportunity or ward off the problem, we will have to change what we do, in the following ways, in order to arrive at the improved future state that I envision and will now go on to describe.” That’s how the American model says we see leadership.

Elsewhere in the world, however, people say and see differently. Diverse examples abound of prominent persons who in other respects appear to be leaders, but whose vision is *not* about change, but about preserving harmonious relations and/or preserving the status quo. In some group contexts in Central, South, and East Asia, change is seen as an invitation to entropy, a falling off from goodness, the enemy of a group’s stability and peace. (Consider, as an example, the views held by mullahs in Iran at the time the Shah was deposed on the relative desirability of Westernization.) In China today, despite greater exposure to Western influence, there is still strong support for the idea that the leader is not so much a dramatic doer as the embodiment of the stable center, the *zhongyang*. The father of modern China, Dr. Sun Yatsen, was known in China by the honorific title *Zhongshan*—“Central Mountain.” *Zhongshan* captures the idea of a source of stability at the center of social action, around which a society that preserves harmony and stability can be ordered and developed.

LEADERS DO NOT USE COERCION TO INFLUENCE OTHERS

Supposed Leadership Universal #4 says that the purposive group process we call leadership involves influence, influence free from the taint of coercion. As noted earlier, the contemporary American model delimits influence to non-coercive means. According to Burns (1978, p. 18), those who hold power are of two types: power-wielders and leaders. Power-wielders are motivated to achieve their own goals by marshaling resources to influence the behaviors of persons who respond to their influence efforts; these influence efforts may include any means (including coercion) that causes these target persons to respond. Leaders, on the other hand, are motivated to realize goals held in concert with their followers, and leaders do this by mobilizing resources to “arouse, engage, and satisfy” the motives of followers—the phrase Burns used in his influential book *Leadership* in 1978 to contrast the effect of influence on followers to the effect of power-wielding on respondents—causing followers to commit their wills (not simply yielding their compliant behaviors) and thus excluding the use of coercion.

But is commitment of the follower’s will necessary? Is compliance not enough? Burns’ analysis makes sense when applied to American leadership, with its individualistic and empowered group members clamoring to participate in group decision-making and to “own” their individual contributions to group achievement. However, the analysis falls short of accounting for situations in other cultures (for example, in China or Russia) where characteristically strong autocratic leaders marshal resources to achieve *their own* goals (which may be intended, ultimately, to benefit followers), but where followers seem more like respondents to stimulus than followers being “aroused, engaged, and motivated.” Interestingly, in Japan, it is *leaders* who often appear to be no more than respondents to the consensually derived desires of other group members, and who appear to have no goals of their own, and little impetus to action, other than standing in front of the group and representing the group will. Outside of North America, the prescription of a coercion-free influence process lacks efficacy.

INFLUENCE SEEKS ENLIGHTENED COMMITMENT, NOT JUST COMPLIANCE

Supposed Leadership Universal #5 states that when an agent influences a target, this action is an attempt to “affect the thinking and enlist the will” of the target. Clearly, if shared goals are the result of “mutually determinative activity” as Garry Wills argues in *Certain Trumpets* (1994, p. 14), or if intended “real changes” are the reflection of “mutual purposes” as Joseph Rost argues in *Leadership for the Twenty-first Century* (1991, pp. 118-123), then this idea of enlisting or engaging the wills of group members makes sense. Nevertheless, although goals mutually shared by leaders and followers is critical in America, it is not so in East Asia: one manifestation of this lack of universal mutuality is that cultural differences frequently preclude mutuality by the way power is distributed and wielded in decision-making. For example, Lucian Pye observes that

“Harold Laswell’s definition of power— ‘Participation in the making of significant decisions’—rings true in American culture...[but] in no traditional Asian culture would such a definition of power have been acceptable.... [In China,] leaders tend to see themselves as all-powerful, and the Chinese people continue to crave leaders who can solve all their problems” (1985, p. 21).

Thus, in the traditional model of Chinese decision-making, there is minimal mutuality, and little need or effort to ‘affect the thinking’ of followers, or to ‘enlist their wills’. Similarly, in reporting on the apparent conformity of Chinese subordinates to the wishes of their superiors in decision-making contexts, Michael Bond & Kwang-Kuo Hwang cite several studies that suggests Chinese subordinates subordinate their own views on decision choices to protect the face of their superiors, and to avoid interpersonal disharmony by sidestepping open disagreement (1986, pp. 246-248, p.256).

Similarly, in Korea, the concepts of *kibun* (“personal mood”) and *chemyon* (“public image”) are closely related to social intuition, group harmony, and face (Oak & Martin, 2000, p. 28). Collectivism and repression of ideas and emotions is central to preserving the sense of well-being and harmony among Koreans, and this attitude influences behaviors in decision-making situations; at the same time, as in many other matters, Korea stands between China and Japan in including contradictory views about legitimacy in decision-making. As Lucian Pye puts it, Koreans “create [a] problem for themselves by simultaneously wanting their leaders to be supermen and insisting...that everyone has a right to assert his or her views and to be treated with respect” (1985, p. 215).

In Japan, decision-making that involves a strong central leader is uncommon. To underscore the point that Japan does not favor strong leaders, Lucian Pye asks his readers how many names of Japanese prime ministers they can recall (1985: p. 183). The presumed paucity of relevant names that comes to mind supports Pye’s assertion that the Japanese “have never had an ideal of leadership comparable to the American concept of chief executive” (Pye, 1985: 171). The contrasting Chinese model of a central powerful leader who serves the needs of the group for harmony and stability, and whose authority obviates the need for much cognitive processing in decision-making by followers, is an authoritarian approach characterized by the Japanese as *Zentaishugi* (“Centralized Collectivism”) and rejected by Japanese culture in favor of *Shudanshugi* (“Decentralized Collectivism” or “Groupism”)—a model in which, as required, some person is elevated or pushed forward by the group to represent its consensus to others. In the Japanese situation there also is little mutuality in decision-making, but here it is characteristically the leader who is the target of discreet influence attempts by the group that make minimal demands on the leader to think independently, and these attempts have little resemblance to efforts to “arouse” or “engage” the leader’s will, as in Burns’ conception of influence.

The mechanisms by which the Japanese group conveys its consensus to its Japanese leaders are subtle. At one time, the *ringi seido* or *ringi sho* was endemic in large business organizations and was characteristic of the diffused use of power by the group. *Ringi* involves a proposal for a particular decision outcome that is circulated in document form by a person or persons at a lower level in an organization to various people at higher levels, in order to develop group consensus in favor of the particular decision outcome desired and ultimately to be enacted at the highest executive level. *Ringi* is not only a group-consensus-seeking device, but it is also a method of communication: many people who are directly or indirectly affected by the proposal learn about it informally before it is implemented (Misumi, 1984). Although the contemporary Japanese bureaucracy has adopted more Western ideas of businesslike behavior, *ringi*-like group behaviors—such as *sake* parties (after-work drinking sessions), *nemawashi* (informal opinion surfacing), and *jyomukai* (executive meetings)—continue to be used to achieve consensus and avoid decisive, authoritarian-style decision-making (Pye, 1985:172).

Note that in the case of both Chinese followers and Japanese leaders as ‘targets’ the purpose is not for agents to convince targets by rational argument that will ‘enlist their wills’ but to apprise them of the direction that the Chinese leader and the Japanese followership, respectively, wishes to proceed—a more political than intellectual process. The interactions between Korean followers and their leaders are somewhat more problematic. These interactions, typically are characterized by strong appeals for authoritarian action, which, when taken by the leader, is frequently undercut by outspoken criticism and resentment (*han*), which is subsequently offset by the recognition (*nunchi*) of strong group ties (*chong*), requiring compensatory emotional demonstrations of loyalty to the group and its leadership, as a matter of principle. These efforts restore the precarious nonverbal atmosphere (*bunuiki*) of the situation, saving the face of the leader and the group, with the result that dignity and social appearances (*chemyon*) are restored.

VERBAL COMMUNICATION TRUMPS OTHER FORMS OF SUASION

As noted earlier, the terminological aspects of Supposed Leadership Universal #5, and Universal #6—the mechanics of how influence works, and that an agent's ability to influence depends on the perception that the agent controls power resources (broadly defined) which the agent has the power to dispense—are concepts whose universal application is not in dispute. This leaves us, then, to address Supposed Leadership Universal #7: the idea that a primary source of the leader's ability to influence others lies in his or her ability to use verbal communications—written or oral—to persuade others to give their will to a proposed group purpose.

Typical U.S.-derived descriptions of leadership, such as Smircich & Morgan's "defining a reality that can gain a consensual following" (1982, p. 259) and Wills' "mutually determinative activity" among leaders and followers, based on shared values and goals (1994, p. 14), lend support to the view that persuasion of group members is essential for leadership to take place. Acts of persuasion implicitly involve convincing followers—either through one's compellingly articulated vision of reality or one's persuasive skills in argument—to join in defining and then pursuing a particular course of action. At the very least, we are hard pressed to imagine, with either of these definitions, a contemporary American leadership context that would not, as a practical matter, principally involve persuasion through verbal communication.

However, the importance attached to verbal communication in precipitating the event of leadership is not so great elsewhere. The anthropologist Edward T. Hall—first in *Beyond Culture* (1976), and later with Mildred D. Hall, in *Understanding Cultural Differences* (1990)—has noted that in high-context societies such as Japan, China, or Korea, verbal communication frequently is not required or heavily used, nor is verbal communication necessary, for meanings to be understood and acted on. As often as not, persuasive influence is brought to bear in these cultures by non-verbal means: Culturally embedded understandings, hierarchical position, a sense of deference to the will of the leader or the will of the group that removes the need for explanation, or a sense of reciprocal obligation—all may be potent, albeit mute, sources of persuasion.

If we look at countries outside the 30 member states of the Organization for Economic Cooperation and Development, those usually labeled "developing" countries, we find that in such countries organizational communication patterns are often indirect, non-assertive, non-confrontational, and one-directional—invariably, from the top of the hierarchy downward. Negative feedback is avoided or given indirectly to avoid seeming personally destructive and disruptive to group harmony. Disrupting group harmony would result in a loss of face for individuals and groups (Den Hartog & Dickson, 2004, p. 266). Further, as observed in discussing China and Japan earlier, extensive communication may be seen as a sign of weakness or uncertainty on the part of the leader (as is the case in China) or lack of confidence or consensus in the group (as is the case in Japan).

Although persuasive communication through the spoken and written word is the central influence tool in the American model of leadership, in other cultures verbal communication frequently is supplanted by culturally embedded understandings of appropriate behavioral patterns that do not arise from seeking, as in the American model, to persuade others to create change or achieve goals. Indeed, in many Asian cultures, persuasion efforts channeled principally through verbal communication are perceived as so much "white noise."

CONCLUSION

Much remains to be done to rationalize the American model of leadership with the divergent, culturally derived expectations for leaders and followers held by diverse team participants in the operations of American multinational enterprises. Given the extent and persistence of these differences, research

studies addressed to the question of how to integrate divergent leadership conceptions have been rudimentary and few. In research on managers and subordinates working in China for multinational companies from Europe, North America, and elsewhere in Asia, Bagshaw piloted a program in which expat and indigenous operations managers and their subordinates attempted to come up with a cross-cultural leadership model and learn leadership skills from each other (Bagshaw, 2009). This situation created, in effect, in-house “leadership entrepôts”—trading centers—where organizational participants from different countries and cultures had the opportunity to learn and “appropriate” useful elements of each other’s leadership theory and practice to create a common model. This model, based on cultural accommodation at the expense of potentially greater team efficiency, showed significant improvement in team effectiveness. To date, however, practitioners have had only limited experience using the program.

Similarly, Graen and his colleagues (2006, 2004, 1994) have articulated what they call “Third Culture Bonding” (TCB). TCB is another accommodative model for integrating and rationalizing interactions among employees in organizations characterized by two “strong” cultures, such as might occur when a company employs indigenous managers or workers in a host country and also employs ex-patriate employees from another country and culture at the same location (Graen, Hui, & Gu, 2004; Graen & Wakabayashi, 1994). Under these circumstances, Graen reports,

TCB minimizes offense to both cultures in its operation and encourages both cultures to accept and commit to it as their preferred way of dealing with the foreign culture. It involves almost everything done in the company’s relevant processes and must be built carefully through cross-cultural and cross-functional team efforts. Its hallmark is that in a Sino-American venture employees agree that their way of doing things is not like a Chinese company in China or an American company in America, but a third way—like the best Sino-American partnership company (Graen, 2006, p. 99).

The TCB model has not been tested extensively and has been criticized by House (House et al., 2006) on theoretical grounds.

These two examples of “accommodative” strategies suggest that one way to rationalize the American leadership model with divergent culturally derived leadership concepts in team situations is to engineer some kind of “negotiated settlement” that may compromise without destroying organizational or team goals and align the MNE’s interests with elements of divergent but “strong” leadership cultures. Several anecdotal reports have circulated of MNE managers encouraging indigenous employees to embrace elements of organizational culture that are not present or validated by their home cultures, by ad hoc programs that seek to surface and “disarm” divergent concepts by requiring and modeling more adaptive behaviors on the part of participants whose behaviors reflect these divergent concepts. It is reasonable to think that the opportunity to coopt, assimilate, or extinguish the leadership views of a “weak” culture would be greater than when the divergent views of a “strong” culture are encountered within the organization. However, the effects of such efforts have not been broadly tested in MNEs or reported in the scholarly literature. Such an approach would hold out the promise of achieving both greater efficiency and greater effectiveness in team processes and outcomes, particularly where divergent concepts are weakly held or less attractive to participants than the common leadership model.

REFERENCES

Bagshaw, Mark (2002) “Leading Your Way to Competitive Advantage in China: Some Cultural Impediments.” In P. Thistlewaite (Ed.), *Emerging Issues in Business & Technology 2002*, p. 288-295, Macomb, IL: Western Illinois University

Bagshaw, Mark (2004) "The Art of Mediation: Transferring a Foreign Company's Cultural Values to the Suzhou Industrial Park in the PRC." In R. Bauerley & S. Meixner (Eds.), *Emerging Issues in Business & Technology 2004*, p.434-443, Macomb, IL: Western Illinois University

Bagshaw, Mark (2005) "Chinese Middle Managers as Leaders and Followers in the Lower Yangtze River Delta." In R. Bauerley & S. Meixner (Eds.), *Emerging Issues in Business & Technology 2005*, p. 137-146, Macomb, IL: Western Illinois University

Bagshaw, Mark (2006) "Managerial Initiative and Innovation in the Lower Yangtze Delta." In R. Wahlers (Ed.), *Proceedings of the Academy of Business Disciplines 2006*, p. 15-25, Ft. Myers Beach, FL: Academy of Business Disciplines

Bagshaw, Mark (2009). Leadership Entrepôts in Multinational Operations in China. Unpublished manuscript

Bond, Michael.H. & Hwang, Kuang-Kuo (1986) "The Social Psychology of the Chinese People." In M.H. Bond (Ed.), *The Psychology of the Chinese People*, p. 213-266, Hong Kong: Oxford University Press

Burns, James M. (1978). *Leadership*. New York: Harper & Row

Den Hartog, Deanne. & Dickson, M.W. (2004) "Leadership and Culture. In J. Antonakis, A.T. Cianciolo, and R.J. Sternberg (Eds.), *The Nature of Leadership*, p. 249-278, Thousand Oaks, CA: Sage

De Pree, Max (1989). *Leadership Is an Art*. New York: Doubleday

French, J.R.P., & Raven, Bertram. (1959) "The Basis of Social Power." In D. Cartwright (Ed.), *Studies in Social Power*, p. 150-167, Ann Arbor, MI: Institute for Social Research, University of Michigan

Gardner, John W. (1990). *On Leadership*. New York: The Free Press

Graen, George B. & Wakabayashi, M. (1994) "Cross-cultural Leadership Making: Bridging American and Japanese Diversity for Team Advantage." In H.C. Triandis, M.D. Dunnette, & L.M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology*, p. 414-446, Chicago, IL: Rand-McNally

Graen, George B., Hui, C., & Gu, Q.L. (2004) "A New Approach to Intercultural Cooperation." In G.B. Graen (Ed.), *New Frontiers of Leadership, LMX Leadership: The Series*, vol. 2, p. 225-246, Greenwich, CT: Information Age Publishing

Graen, George B. (2006) "In the Eye of the Beholder: Cross-Cultural Lesson in Leadership from Project GLOBE," *The Academy of Management Perspectives*, vol. 20 (4), p. 95-101

Hall, Edward T. (1976). *Beyond Culture*. Garden City, NY: Doubleday

Hall, Edward T., & Hall, Mildred D. (1990). *Understanding Cultural Differences*. Yarmouth, ME: Intercultural Press

Heifetz, Ronald. A. (1994). *Leadership Without Easy Answers*. Cambridge, MA: Belknap Press

Hofstede, Geert (1997). *Cultures and Organizations: Software of the Mind*. New York: McGraw-Hill

- House, Robert J., Javidan, M., Dorfman, P.W., & Sully de Luque, M. (2006) "A Failure of Scholarship: Response to George Graen's Critique of GLOBE," *The Academy of Management Perspectives*, Vol. 20 (4), p. 102-114.
- House, Robert J., Hanges, P.J., Javidian, M., Dorfman, P.W., & Gupta, V. (Eds.) (2004). *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*. Thousand Oaks, CA: Sage
- Jaffe, G. "Tribal Connections: How Courting Sheiks Slowed Violence in Iraq," *The Wall Street Journal* (August 8, 2007), p. A1
- Misumi, J. (1984) "Decision-making in Japanese Groups and Organizations." In B. Wilpert & A. Sorge (Eds.), *International Perspectives on Organizational Democracy*, p. 525-539, New York: John Wiley
- Oak, Susan, & Martin, V. (2000). *American/Korean contrasts: Patterns and expectations in the U.S. and Korea*. Elizabeth, NJ: Hollym
- Pye, Lucian (1985). *Asian Power and Politics: The Cultural Dimensions of Authority*. Cambridge, MA: Belknap Press
- Rost, Joseph C. (1991). *Leadership in the Twenty-First Century*. Westport, CT: Praeger Publications
- Smircich, Linda, & Morgan, Gareth (1982) "Leadership: The Management of Meaning," *Journal of Applied Behavioral Sciences*, vol. 18, p. 257-273
- Wills, Garry (1994). *Certain Trumpets: The Nature of Leadership*. New York: Simon & Schuster
- Yukl, Gary (2002). *Leadership in Organizations* (5th ed.). Upper Saddle River, NJ: Prentice Hall

CLUSTERS AND NATIONAL COMPETITIVENESS - SOME EVIDENCE FROM EUROPEAN UNION

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ABSTRACT

The importance of regional clusters for the competitiveness of nations was explained and popularized by well known economists like Michael E. Porter or Paul Krugman. They argued that a strong domestic competition between rival firms generates an increased productivity, more efficient and innovative firms. The evidence on the economic benefits of clusters shows that we should focus on policies that create or support clusters. In this paper we focus on linkages between clusters and competitiveness, and we are presenting some examples from European Union countries. Our main conclusion is that countries can elaborate a cluster based strategy of economic development, appropriate for their stage of development and their development goals, by learning how clusters can be a constructive tool in order to enhance their competitiveness.

JEL: F1, O1, R1

KEYWORDS: competitiveness, cluster, economic development

INTRODUCTION

After almost 30 years of research about clusters, cluster mapping, cluster initiatives and cluster policies, economists accept the idea of cluster contribution to national competitiveness. Recent contributions to this field emphasize the necessity and opportunity of a cluster based development, appropriate for every stage of economic development.

CLUSTERS: DEFINITIONS AND TYPOLOGIES

Clusters are groups of companies and institutions co-located in a specific geographic region and linked by interdependencies in providing a related group of products and/or services (Porter, 1990). The definition of clusters builds on three pillars (Ketels, C.H.M. and Memedovic, O, 2008): geography, creating value and business environment. Geography refers to the fact that clusters are driven by proximity and are often concentrated in a region within a larger nation, and sometimes in one town. Creating value refers to the fact that clusters include companies in different industries that are related to each other in the production of goods and services valued by customers. The third pillar, business environment is related to the effects of cluster – specific business environment conditions resulting from individual actions as well as cooperation of companies, government agencies, universities and other institutions on economic performance of clusters.

Clusters differ in many dimensions and we can say that there are different types of clusters appropriate for every stage of development. Christian Ketels (Ketels, 2003) mentions the example of Claas van der Linde from Harvard Business School: in the industry of footwear, Northern Italy is home to a very successful, high wage cluster, serving the world market and focusing on design, brand building and high value production. Portugal is home to another cluster, focused on footwear manufacturing and short production runs serving fashion – conscious markets in Europe. Timisoara, Romania is another cluster, functioning as an offspring of the Italian cluster focused on production in the low to medium value product range. And there are major clusters in Asia, focused on high – volume contract manufacturing of

low value footwear products. All of these are presented as types of clusters differentiated by what they are specialized on in a particular stage of their field's value chain, by their focus on specific geographic areas, or by targeting selected customer needs or market segments. We also can classify clusters by the type of local dynamics of their constituent industries. We can distinguish industries tied to their location by the need to be close to their customers – “local industries”, other industries are tied to their location by the need to be close to the natural resources – “natural resource-dependent industries”, and there are industries free to choose their location – “traded industries”. Clusters can be classified by the stage of development they have reached. Like in the example with Italy, Portugal, Romania and China, we can say that they are specific forms of clusters, depending on the country level of development and on the development of the clusters themselves. We also can describe clusters along four key dimensions (Solvell, O. 2009): type of agglomeration, level of dynamism, stage in the life cycle, and level of political involvement.

The benefits of clusters come in three dimensions (Ketels, C.H.M, 2003): (1) companies can operate with a higher level of efficiency drawing on more specialized assets and suppliers with shorter reaction times than they could in isolation; (2) companies and research institutions can achieve higher levels of innovation; knowledge spillovers and the close interaction with customers and other companies create more new ideas and provide intense pressure to innovate while the cluster environment lowers the cost of experimenting; (3) the level of business formation tends to be higher in clusters; start-ups are more reliant on external suppliers and partners, all of which they find in a cluster. Clusters also reduce the cost of failure, as entrepreneurs can fall back on local employment opportunities in many other companies in the same field.

The list of advantages of clusters development previously mentioned is sustained by many theoretical and empirical studies. However, in certain circumstances, clusters might become an impediment to the members, and, sometimes, even exacerbate the decline of a whole region. The main reasons for this evolution are (European Commission, 2002): (1) in a context of rapidly changing technology, cluster firms become more vulnerable if they are locked in old technologies and if they do not develop enough flexibility to adapt themselves to those changes; (2) when cluster firms rely on few buyers or on the activity of one large or a limited number of companies, they may fail if these latter move or disappear, even if they themselves are still competitive; (3) at regional level, the force of attraction of a region should not be over-estimated, as only a few clusters are internationally recognized. Disadvantages can be more visible in a recession period, when cyclical unemployment can be higher in clusters.

CLUSTERS AND COMPETITIVENESS

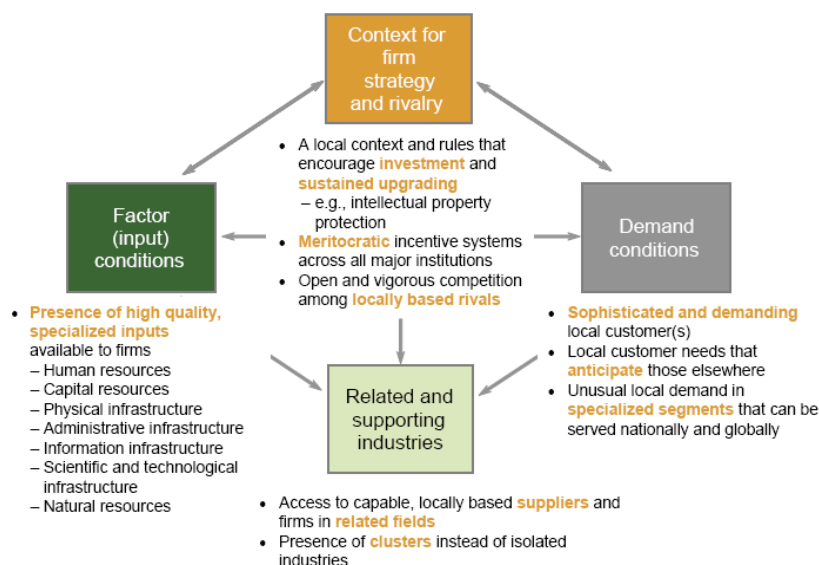
Companies in clusters are collaborating and competing in the same time. They are geographically concentrated, specialized in a particular field, linked by common technologies and skills. In Porter's view (Porter, 1990) the cluster has a positive influence on innovation and competitiveness, skill formation and information, growth and long – term business dynamics. All of these aspects are quantified and measured now by Business Competitiveness Index and Global Competitiveness Index (GCI). GCI is based on 12 pillars (Schwab, K. and Porter, M.E., 2008): a. institutions, infrastructure, macroeconomic stability, health and primary education; b. higher education and training, goods market efficiency, labor market efficiency, financial market sophistication, technological readiness, market size; c. business sophistication, innovation.

According to Global Competitiveness Index, in the first stage of development, the economic growth is factor – driven, countries are competing based on their factor endowments; in the second stage – efficiency – driven economies – they begin to develop more efficient production processes and increased product quality; in the innovation – driven stage of development economies are able to sustain higher wages and the associated standard of living only if their business is able to compete with new and unique

products. The concept of stages of development is integrated into GCI by attributing higher relative rates to those pillars that are relatively more relevant for a country given its particular stage of development.

The greatest contribution of Michael Porter to the cluster theory can be considered his “diamond”, a useful analytical tool for analyzing the business environment and its complexity. The “diamond” was introduced in 1990, and for almost 20 years was the main instrument for business environment analyses. In a recent article published in Harvard Business Review (M. Porter, 2008 – b), Porter reevaluates this tool. The “diamond” was used by Christian Ketels and Orjan Solvell in one of the most recent studies on transition countries’ clusters.

Figure 1: The role of clusters in the “diamond” of competitiveness



Source: M. Porter (2004) in Christian Ketels, Orjan Solvell, "Clusters in the EU – 10 new member countries"

In one of the most recent papers M. Porter (M. Porter, 2008 - a) identifies three main linkages between clusters and competitiveness: (1) clusters increase productivity / efficiency; clusters stimulate and enable innovation; (3) clusters facilitate commercialization and new business formation. The advantages of clusters are: (1) efficient access to specialized inputs, services, employees, information, institutions, training programs, and other public goods; (2) perceived innovation opportunities, presence of multiple suppliers and institutions to assist in knowledge creation, ease of experimentation given local resources; (3) opportunities for new companies and new products; startups are encouraged by the presence of other companies, commercial relationships, and concentrated demand; commercializing new products and starting new businesses is easier because of the available skills, suppliers, etc. As consequence, we can say that clusters reflect the fundamental linkages and spill-overs across firms and institutions.

EUROPEAN UNION: CLUSTERS AND COMPETITIVENESS

We sustain the idea of the existing link between clusters and competitiveness in EU countries beginning with the example of Romania and Bulgaria. They formally became EU members in January 2007. One of the most important objective for them can be considered the catching-up process and economic development. The economic gap between Romania, Bulgaria and other EU members is pretty consistent, both of them being the only countries situated in the second stage of development - efficiency driven competitiveness – according to The Global Competitiveness Report 2008 – 2009. In transition from stage 2 to stage 3 we can find six EU members (Estonia, Hungary, Latvia, Lithuania, Poland and The Slovak

Republic) and all the other EU members are in the third stage – innovation driven development. Romania and Bulgaria are ranked on 68 and 75 from 134 countries, considering Global Competitiveness Index. In both cases the big problems are institutions and infrastructure, two of the pillars from basic requirements category.

In this paper we try to emphasize the idea that clusters and cluster initiatives are a possible solution for competitiveness gains. Regarding the data from European Cluster Observatory we can see that Romania has 22 three stars clusters (6 in apparel with very strong export activity, 4 in textiles with strong export activity, 2 in oil and gas with weak export activity, 4 in building fixture with very strong export activity, and only 1 in communication). Bulgaria has 5 three stars clusters, 3 in apparel, 1 in textile and 1 in furniture.

In comparison to the other EU members, with better performances in competitiveness, we can say that clusters in innovative activities and industries, like IT, communication, research and development, education are a common thing for the most competitive countries. For example, countries like Denmark, Sweden, Finland, Germany and Netherlands, ranked on the top 10 based on GCI have clusters in IT, finance, education, etc. with high level of innovation.

Are the clusters the cause or the effect of particular stages of economic development? Are they the right direction for these countries? Real convergence inside EU countries means complementarities, but also the same pattern of development. Cluster initiatives and policies can use the particularities of every location to change it in competitive advantage.

CONCLUSION

Clusters are an increasingly recognized feature in global economy. Empirical studies show that they are a key factor for national competitiveness. EU countries are heterogeneous from both criteria: competitiveness - economic performance, and cluster development. Romania and Bulgaria are the two EU member countries which can choose to improve their economic efficiency by a cluster based development strategy, but all of the 27 member states can use this kind of approach.

REFERENCES

European Commission, (2003), Final Report of the Expert Group on Enterprise Clusters and Networks, *European Commission: Brussels*

Ghemawat, P. and Rivkin, J.W., (2006), Creating Competitive Advantage. *Harvard Business School Publishing*, 9-798-062, February 25, 2006

Ketels, C.H.M, (2003), The Development of the Cluster Concept – Present experiences and further developments. *Prepared for NRW conference on clusters, Duisburg, Germany, 2003*

Ketels, C.H.M and Memedovic, O., (2008), From clusters to cluster – based economic development. *Int. J. Technological Learning, Innovation and Development*, vol.1, No.3, pp. 375-392

Porter, M.E., (2008 - a), Clusters, Innovation, and Competitiveness: New Findings and Implications for Policy. Stockholm, Sweden, 22 January 2008

Porter, M.E., (2008 - b), The Five Competitive Forces That Shape Strategy, *Harvard Business Review*, January 2008

Schwab, K. and Porter, M.E., (2008), The Global Competitiveness Report 2008 – 2009. *World Economic Forum*, Geneva, Switzerland, 2008

Solvell, O., (2009), Clusters. Balancing Evolutionary and Constructive Forces. *Danagards Grafiska*, Odesog, 2009

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DIFFUSION OF INNOVATION PROJECT IN FINNISH PREVENTIVE HEALTH EDUCATION– UNSUCCESSFUL LAUNCH OF DIFFUSION

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ABSTRACT

The purpose of this paper is to investigate the launch of the preventive innovation diffusion of health education. The phenomenon is studied with theory of Diffusion of Innovations. Empirical data is gathered with qualitative method utilizing action research; researchers participated on launch project in years 2007-2009. It was found that on the launching phase there are several elements in social systems that may cause the rejection. The launch may confront critical difficulties when being exposed to unpredictable influence of the actors of social system. Thus, researching launching in preventive innovation the theory of diffusion of innovation should be integrated with the theories of business networks. To overcome from the rejection managers can utilize KAP-research and theories of networks to identify the needs of the potential adopters and redesign a suitable diffusion strategy for the new launch. The paper is significant for two reasons. First, it identifies a theoretical gap in theory of diffusion of innovations. Second, it creates new understanding on management how to overcome from the unsuccessful launch of diffusion.

KEYWORDS: networks, marketing, preventive innovation, health, education.

THE GOVERNMENT'S ROLE IN PROMOTING THE ADOPTION AND EFFECTIVE USE OF HEALTH IT IN THE U.S.

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ABSTRACT

The fiscal stimulus of 2009 allocated about \$19 billion to advance the country's push for nationwide adoption and effective use of information technology in the health care sector. This study reviews empirical studies relating to health IT to distinguish different levels of IT applications in the health care industry, to identify and quantify the benefits and costs of such applications, and to determine the extent and determinants of adoption among hospitals and physicians. From the evidence suggested by past studies, we determined that government intervention is justified based on economies of scale, externalities, and network effects. Many of the interventions implied by the health IT provisions of the fiscal stimulus are appropriate, but efficient use of taxpayer's money requires that the government focus its efforts on providing subsidies and technical assistance to physicians, hospitals, and other health care providers for adoption of interoperable systems, and awarding financial incentives for submission of electronic data that public health agencies require to meet the goals of reducing public health threats, increasing public access to measures of provider quality, and track cost-effective, health care best practices.

JEL: I18

KEYWORDS: electronic health records, electronic medical records, national health IT infrastructure, government intervention to promote adoption of health IT

INTRODUCTION

The concept of using electronic health records in the United States is the direct result of increased concern regarding the quality of patient care. A landmark study published by the Institute of Medicine (IOM) eight years ago reported that more people die in hospitals each year due to medical errors than from breast cancer or AIDS or highway accidents, and more people die due to medication errors than from work-related injuries (IOM, 2001). The IOM's report pointed directly to an increased use of information technology to reduce fatalities stemming from human error. In 2004, the Bush administration set a goal of having an electronic health record for each person in the United States by the year 2014. To that end, the administration established the Office of National Coordinator of Health Information Technology in the Department of Health and Human Services (HHS). That office and the American Health Information Community formed work groups, involving health care providers, software vendors, academic institutions, federal health agencies, and health plans, to formulate a national health IT policy and strategy (HHS 2008). In September 2005, HHS also funded the formation of a Certification Commission for Health Information Technology from the merger of three leading private sector health IT associations, and gave it the charge of developing national certification standards for functionality, interoperability, and data security of electronic health systems. This year, the Obama administration allocated about \$19 billion for health IT in the American Recovery and Reinvestment Act (ARRA) of 2009 to advance the country's push for nationwide adoption and effective use of health IT.

At its health information technology website, HHS (2009) states its vision that “Health IT can help to improve public health one individual at a time by building partnerships between health care consumers and providers across the country”. According to HHS, the secure exchange of health information between health care consumers and providers can improve health care quality as well as expand access to affordable care because of cost savings from reductions in paperwork, administrative inefficiencies, and medical errors. Beyond that, the integration of electronic health systems of various health care providers, health plans, and public health agencies into a national health IT infrastructure can mean many public health benefits. Such benefits include early detection of infectious disease outbreaks around the country, improved tracking of chronic disease management, and comparison of quality and cost effectiveness of health care enabled by the collection of pre-identified price and quality information (HHS 2009).

This study reviews empirical studies relating to health IT to determine the market failures that justify government intervention, and attempt to evaluate the appropriateness of the interventions implied by the health IT provisions in the ARRA of 2009.

LITERATURE REVIEW

The literature reviewed in this section is organized into those that (a) distinguish different levels of IT applications in health care, (b) identify and quantify the benefits and costs of such applications, and (c) survey adoption rates and determinants of adoption and effective implementation among hospitals and physicians.

Levels of IT Applications in Health Care

The use of information technology in the health care industry can range from the basic electronic medical record (EMR) to an enterprise-wide, comprehensive electronic health record (EHR) system, to a national health IT infrastructure. An EMR is a patient-focused electronic data storage facility designed for physicians practice groups. It replaces the traditional patient's file containing patient's contact information, date of birth, insurance information, medical history, drug allergies, adverse reactions to certain treatment, documentation of physician encounters (symptoms, diagnosis, treatment, and outcome), and billing code cross references. Unlike paper files, an EMR enables real-time data access and electronic search capabilities (Amatayakul 2007). An electronic health record (EHR) system is designed for use by an integrated network of health management organization, hospitals and providers like the University of Pittsburgh Medical Center (UPMC) System in Pittsburgh, or a large federal health program like the Veteran's Administration or Medicare. It allows multiple healthcare providers (physician's offices, laboratories, hospitals, pharmacies, home care, rehabilitation and long-term care facilities) access to patients' electronic health information for the purpose of coordination of care, and collection of data for cost control (Hartley and Jones 2005). As described in Stead and Lin (2009), the most comprehensive EHR system can include:

- a) *Computerized Physician Order Entry (CPOE)* for e-prescribing, orders for diagnostic tests, and reminders for corollary orders and diagnostic tests intended to improve compliance with preventive care and chronic disease management guidelines, and reduce errors of omission;
- b) *Picture Archiving Communication System (PACs)* for storage and transfer of radiology tests results;
- c) *Computerized Decision Support Systems (CDSS)* for evidence-based, best practice diagnosis and treatment databases that physicians can access to arrive at prompt, reliable, and optimal diagnoses and treatment options.

Since 2006, over a hundred EMRs and EHRs have passed national standards set by the national Certification Commission for Health IT. Among the certified EHRs, are VistA and WorldVistA developed and used by the Veterans Administration, Epic Systems, NextGen, and NOVO. Among the certified EMRs are AssistMed and ITelagen (CCHIT 2008).

When EMR and EHR systems can communicate with each other (i.e. interoperable), and integrated into health IT systems of public health agencies like the Center for Disease Control and Homeland Security, a national health IT infrastructure is formed. Through it, physicians can quickly transmit data on the occurrence of a set of predetermined symptoms to public health agencies, enabling them to see aggregate patterns or identify disease clusters, and quickly deliver geographically targeted warnings (Scanlon, 2009) about outbreaks of infectious diseases, food poisoning, or bioterrorist incidents. Interconnected EMRs and EHR systems can also generate electronic data on health outcomes and cost of care, which can aid public and private health plans in identifying cost-effective treatments, efficiently allocate resources, and design performance incentives accordingly (ONCHIT 2009).

Benefits and Costs

According to the Organization for Economic Cooperation and Development (OECD 2008), a national health IT infrastructure could cost the U.S. about \$156 billion over five years with annual operating costs of \$48 billion. For the hospital industry alone, an American Hospital Association survey estimates a one-time acquisition and installation cost for an EHR system of \$70~\$100 billion or 15% of average capital spending, plus annual operating cost of \$1.7 billion or 2% of average operating cost in the industry (Stead and Lin 2009). For a three-doctor practice, installing an EMR could cost \$70,000 to \$80,000 plus annual operating cost of \$8,000 to \$10,000 (King 2009a).

Compared to the costs, the potential benefits are significantly higher. The Office of National Coordinator for Health IT estimates that health care cost in the country can be reduced by \$200~300 billion per year (ONCHIT, 2008). Improvements in health care quality and patient safety are not easy to quantify but we do have some indicators of some of the quantifiable benefits. For example, it is estimated that 30% of health care spending in the U.S. goes to ineffective or redundant care (Fisher and Wennberg, 2009). Coordination of care among hospitals, physicians, pharmacies, and laboratories through an EHR system can prevent duplication of expensive diagnostic scans, improve ambulatory care to reduce preventable hospitalizations, and reduce medical errors to prevent rehospitalizations. Moreover, a national health IT infrastructure can, among other benefits, reduce the cost of food-borne illnesses, which is estimated to take up 6% of the country's health care spending (Scanlon 2009). A study funded by the Rand Corporation in 2005 estimated that annual savings from efficiency alone (i.e. same services are performed with fewer resources) could be \$77 billion or more assuming adoption by 90% of hospitals(those with 100 beds or more) and doctors' offices over 15 years (Hillestad et al. 2005). Adoption of Computerized Physician Order Entry systems for medications by such hospitals could also eliminate around 200,000 adverse drug events each year for an additional annual savings of about \$1 billion. The Rand team also the number of deaths that can be avoided from the use of health IT to scan patient records for risk factors and generate prompts for two types of vaccination and three types of screening (see Table 1 below).

Table 1 Estimated Annual Benefits and Costs of Preventive Vaccinations and Screenings

Service (in millions/year)	Annual Cost (\$Million)	Deaths Avoided/year
Influenza vaccination	\$134 – \$327	5,200–11,700
Pneumonia vaccination	\$90	15,000–27,000
Colorectal cancer screening	\$1,700 – \$7,200	17,000–38,000
Breast cancer screening	\$1,000 – \$3,000	2,200 - 6,600
Cervical cancer screening	\$152 – \$456	533

Source: Hillestad et al (2005)

Increased utilization of preventive services through prompts generated by Computerized Physician Order Entry systems could save many lives at a relatively modest cost.

Empirical studies that formally quantify the benefits and costs experienced by early adopters of EMRs or EHR systems are often limited as far as sample size and geographic representation, but they nonetheless offer us some evidence of the sources of realized cost savings and improved patient outcomes through the application of IT to the health care industry. Among a small sample of hospitals that have comprehensive EHR systems in place, Simon et al (2005) reported that prompts generated by Computerized Decision Support Systems (CDSS) resulted in a 5.8% increase in Pap test alerts, and 18.3% improvement in flu vaccine alerts. The CDSS also improved drug dosing, preventive care, diagnosis, and patient outcomes in two of every three hospitals studied. In addition, a combination of the CDSS and Computerized Physician Order Entry (CPOE) systems reduced medication errors and increased adherence to medication ordering guidelines in nine of 12 hospitals studied.

Two of the often-cited success stories are the enterprise-wide EHR systems of the Veterans Administration (VA) and Kaiser Permanente. The VA developed its own system - the Veterans Health Information Systems and Technology Architecture (VistA) 25 years ago, which is now used by over 1,400 VA hospitals and health facilities. It allows clinicians to access patient EHRs from other VA facilities. When records at the VA Medical Center in Gulfport Mississippi were destroyed during Hurricane Katrina, for example, VA hospitals in other states were able to retrieve records for nearly 40,000 veterans (Hill, 2007). Use of the VistA system has transformed the VA from a provider of sub-standard care to an institution that outperformed most private hospitals in 14 out of 15 quality assurance areas (Hill 2007). Because of its proven benefits, the Military Health System of the Defense Department and the Indian Health Services has adopted VistA. The open source version, WorldVistA, is freely available to the public and private sector through the Freedom of Information Act (FOIA), and has been adopted overseas by the *Instituto Mexicano del Seguro Social*, the Berlin Heart Institute, the National Cancer Institute of Cairo, and other health care organizations in Finland, Nigeria, and American Samoa (WorldVistA.org).

Kaiser Permanente, an integrated health network, is currently using a commercial EHR system by Epic Systems in all of its medical clinics, pharmacies, laboratories, and two-thirds of its hospitals, and 14,000 salaried physicians, which access EMRs for 8.7 million patients in California, where it is headquartered, eight other states, and Washington, D.C. Its efforts at going paperless began over 40 years ago, and along the way, Kaiser spent \$4 billion, suffered temporary productivity loss due to system outages, disruption of workflow among providers, and numerous detours, including a \$400 million in-house system developed with IBM that was scrapped six years ago (King 2009a). The use of health IT at Kaiser is credited for making heart disease no longer the top cause of death in Northern California, while it remains so for the rest of the country. Kaiser officials also tell the story of a woman who was visiting an allergist when a nurse noticed an electronic prompt that the patient was overdue for a mammogram. As it turned out, the patient had breast cancer that was caught early (King 2009a).

As for physicians, a small sample study by Wang et al (2003), reported net benefits of full EMR implementation of about \$86,400 per physician, with most of the savings generated in the area of cost-effective drug prescriptions and reduced medication errors (33%), reduced personnel needed for chart pulling and filing (28%), and the rest from reduced duplication of radiology tests, billing errors, and incomplete documentation of services. However, the benefits of cost-effective drug prescriptions and reduced radiology test duplications accrue to the payor, and reduced medication errors accrue to the patients. Many studies do report that most physicians, in general, resist the adoption and/or use of IT applications because of not being rewarded for performance or for cost-savings passed on to payors, while suffering revenue reductions from reduced office visits and work disruption during the early phase of IT installation and implementation.

Extent of Adoption and its Determinants

The U.S. is in a relatively early stage of adopting health IT systems, lagging behind other Western countries (specifically, the United Kingdom, Germany, Australia, the Netherlands, and New Zealand) where rates of adoption of health IT systems among physicians were already at or above 80% in 2003 (Frost and Sullivan 2004). As of 2008, only 4% of physicians in the U.S. have a comprehensive system in place, with another 13% using basic systems, such as electronic physician's notes, or reports of laboratory test results (Hartzband and Groopman 2008). Another recent survey of more than 2,900 hospitals funded by the government and the R.W. Johnson Foundation, found that only 1.5% of acute care hospitals have a comprehensive, enterprise-wide EHR system in place, with another 7.6% of hospitals using basic systems (Goldstein 2009). This study also reported that 74% of hospitals surveyed cite the high cost as the biggest deterrent of adoption, while over a third cited resistance from physicians who argue that it takes away from patient care.

A study conducted by the Rand Corp. estimated that the probability of EMR adoption among physician groups was negatively correlated with the size of the practice, and location in rural or underserved communities (Fonkych and Taylor 2005). Among hospitals, it estimated that adoption of an EHR system was also negatively correlated with location in rural or underserved communities. It also found smaller hospitals (not belonging to a health care network or hospital system), those with low quality-orientation, that are contract managed, or have a high share of Medicare patients were less likely to have an EHR system in place.

As for implementation, a study funded by the National Research Council (Stead and Lin 2009), in which thought leaders from Intel, Google, and five universities shadowed clinicians at nationally recognized medical centers while they were using EMR or EHR software, discovered the following problems:

1. Implementation timelines are long and actual implementation for enterprise-wide functionality commonly exceed a decade;
2. The systems result in rigid work flow not suitable for a dynamic environment;
3. Charting is inefficient and inaccurate;
4. Clinicians waste time retrieving information in the form they want to use;
5. The systems cause inefficient workflow, misinterpretation of information due to incomplete or inaccurate data entry;
6. Clinicians spend more time entering data than using data;
7. Benefits are significantly less than anticipated;
8. Meaningful interoperability is almost non-existent;
9. Support for evidence-based medicine and computer-based advice is rare;
10. Data security is inadequate.

Studies that corroborate some of these findings include a study published in the New England Journal of Medicine (Hartzband and Groopman 2008) which cites renowned physicians' observations that EMR technology diverts their attention from the patient and creates chart notes in a way that is seriously flawed. Office visits reportedly fall by half in the first two weeks of implementation, and the practice does not go back to a full schedule until two to three months later (King 2009a). Another study by Gans et al (2005) quantified the decrease in physician productivity of up to 15% usually lasting a year or more.

ANALYSIS

Acquisition of technology for building a national health IT infrastructure is one of the top priorities of health IT policy and strategy. A nationwide network, which allows private sector providers to feed data on a predetermined set of symptoms linked to food-borne illnesses, contagious diseases, and bioterrorism into electronic health systems, which can be accessed in real time by the Center for Disease Control or

Homeland Security is immensely valuable. On their own, private sector providers have no incentive to invest in interoperable EHR systems since they do not internalize the benefits to society as a whole of early detection of threats to public safety. Moreover, the public benefits from information on how different hospitals and physicians compare in terms of reliable quality measures of health care services. Providers who perform well on these measures have the incentives to publicize this information, but those who underperform do not have such incentive. Lastly, society as whole benefits from health care cost savings that can make health insurance more affordable. The number of uninsured people will be reduced and the country can break free of the adverse selection problem that causes the cost of health insurance to spiral upward. In the absence of national health insurance, the insured population inevitably bears the cost of health care for the uninsured. Due to increased utilization of emergency care, hospitals pass on the cost to state Medicaid programs funded by taxpayers, or to private health plans that then raise the premium or cost-share for the insured. The adverse selection problem implies that as lower-risk insured people give up their insurance, insurance companies are bound to raise the premium or cost-share to the remaining higher risk pool. Health care cost reduction through effective use of health IT can get the country out of this dilemma. A national health IT infrastructure is more worthwhile the more providers that participate, i.e. there are network effects involved. However, it is not necessary for the government to subsidize all participants, as there is evidence that integrated health care network like Kaiser Permanente, large health systems like the VA, and large hospital systems have enough incentives to use EHR systems. The government can focus its efforts to providing subsidies for adopting interoperable systems and providing financial incentives so physicians, hospitals, and other health care providers would submit the data that public health agencies require to meet the goals of reducing public health threats, increasing public access to health care quality measures, and making private health insurance affordable.

The huge investment in a comprehensive health IT system puts independent hospitals and smaller physician practices at a disadvantage relative to their larger counterparts. In addition, physicians' resistance to the adoption and/or use of EHR systems can be explained by their inability to internalize, if not share in, the benefits of improved patient outcomes, cost savings from reducing redundant tests, prompts for preventive care, cost-effective medications, among others, that accrue to hospitals, and health insurers. Physician's revenues actually suffer due to workflow disruption in the early stages of implementation, and later, due to reduced need for office visits by patients. Thus, rather than subsidizing smaller hospitals and physician practices directly, it may be more effective for the government to mandate the payers to adopt EHR systems or pay into a pool of funds that can be invested in shared facilities either at the city, state or regional level. The ARRA of 2009 falls short of doing this. It mandates all health care providers who participate in Federal health programs (Medicare, Medicaid, SCHIP, Indian Health Services) to adopt health IT systems, but makes it voluntary for participants of private health plans. Making it mandatory for private health plans would push them to bear the cost of investing in EHR systems as the benefits of cost savings would accrue to them anyway.

The ARRA of 2009 also provides for matching grants to states and Indian tribes to plan and implement EHR diffusion from 2011 to 2013. A state can use the grant to extend loans to health care providers for purchase and/or improvement of health IT systems. Loans to providers who are participants of Federal health programs make sense, but for nonparticipants, loans can be more cost-effectively channeled to private health plans that can then provide EHR technology to their participating providers with a cost share proportionate to the benefits that accrue to them. States will also be able to establish regional extension centers (nonprofit organizations that will receive 50% Federal subsidy) to disseminate best practices and provide technical assistance for adoption, implementation, upgrade, ongoing maintenance, and effective use of EHRs and other HIT components. This provision will not only enable the realization of economies of scale, but will also ease the shortage of health care providers with HIT knowledge and experience. Matching grants will also be awarded on a competitive basis to academic institutions who integrate multidisciplinary health informatics and IT courses into clinical curricula. As there are many such programs in place already, perhaps, grants could have been directed to scholarships for unemployed

people who want to go back to school and obtain this skill. In addition to providing for extension of technical assistance, the Stimulus provides for incentive payments to physicians and hospitals under Federal health programs for effective use of health IT. Effective use is specified as the use of e-prescribing, of Federal standardized billing codes, reporting on predetermined health care quality measures, and providing evidence of coordinating care with other health care providers. The amount awarded will decline from 2010 to 2015 to incentivize early adoption.

Last but not the least, there is a need to overcome concerns about privacy among the public, and data security among providers. Currently, pharmacies are able to sell detailed records of patient medications to clearing houses, which then create profiles on individuals and sell that information to interested parties such as insurance companies for underwriting purposes (King 2009b). In the absence of a single-payer system in this country or a law that prevents private health plans from denying insurance coverage to someone with pre-existing condition or genetic susceptibility, concern about the privacy of medical records is understandable. This problem remains to be addressed through the legal system and with improvements in the certification standards pertaining to data security and privacy.

CONCLUSION

We are now about midway in the timeline originally set by the Bush administration in 2004 for each citizen to have an electronic health record by 2014. The market left mostly on its own will not make the country reach this goal because of the presence of economies of scale, positive externalities, network effects, and public concerns about data security. This study suggests that efficient use of taxpayer's money requires developing a national network of interoperable health IT systems that can generate data for three target goals: (1) reducing public health threats, (2) public reporting of standardized quality measures of health care services, and (3) creation of a database of evidence-based best practice health care services. Participation in submission of this data must be mandated not only of providers under Federal Health programs, but those under private health plans as well. Other necessary elements for reaching the three goals include improving existing national certification standards to incorporate streamlined and uniform measures of performance or health care quality, predetermined set of symptoms linked to different public health threats, and billing codes to track cost-effective treatments, and evidence-based best practices. Mandatory reporting of health care quality measures and costs generated through health IT will provide the public with valuable information they can use in choosing health care providers. With the ARRA of 2009 as a point of departure, there must be Federal targeting of incentives to private sector providers to increase adoption and effective use of health IT. The benefits, medical and economic, from health IT sought by the Department of Health and Human Services and others are only possible with an effective national health IT infrastructure.

REFERENCES

- Amatayakul, M. (2007). *Electronic Health Records: a Practical Guide for Professionals and Organizations*. Chicago, IL: American Health Information Management Association.
- Certification Commission for Health Information Technology (2009). *Certification Standards for Electronic Health Record Systems*. Retrieved Jan. 12, 2009, from the CCHIT Website: <http://www.cchit.org>
- Dept. of Veterans Affairs (2008). *VistA Monograph*. Retrieved Oct. 12, 2008, from <http://www.va.gov>
- Fisher, E. and J. Wennberg, cited in King (2009) "How Kaiser Permanente Went Paperless," *Business Week*, April 7.

Fonkych K. and R. Taylor (2005). The State and Pattern of Health Information Technology Adoption, RAND MG-409-HLTH. Retrieved Dec. 12, 2008 from http://www.rand.org/pubs/research_briefs/RB9136/index1.html

Frost and Sullivan (2004) "The European Electronic Medical Records Markets," *Health Informatics Europe*. June 8. Retrieved October 20, 2008, from <http://www.hi-europe.info/files/2004/9979.htm>

Gans, David, J. Kralewski, and B. Dowd (2005). "Medical Groups' Adoption of Electronic Health Records and Information Systems," *Health Affairs*, Sept/Oct. issue. Retrieved November 5, 2008 from SRS Software Website: http://www.srssoft.com/pdf/MGMA_Landmark_Study.pdf

Goldstein, Jacob (2009). U.S. Hospitals Slow to Adopt E-Records. Retrieved March 26, 2009 from the Wall Street Journal Website: <http://online.wsj.com/article/SB123802378615142099.html>

Hartley, C. and E. Jones (2005). EHR Implementation. Retrieved Oct. 16, 2008 from <http://www.ama.org>

Hatzband, P. and J. Groopman (2008) "Off the Record-Avoiding the Pitfalls of Going Electronic," *New England Journal of Medicine*, vol.358(16), pp. 1656-7.

Health and Human Services (HHS) Department, Health Information Technology Website: <http://www.hhs.gov/healthit/>

Hill, E.G. (2007). Promoting Health Information Technology in California: A State Policy Approach. Legislative Analyst's Office. Retrieved September 12, 2008 from California's Legislative Analyst's Office Website: http://www.lao.ca.gov/2007/health_info_tech/health_info_tech_021307.pdf

Hillestad R, J. Bigelow, et al (2005), "Can Electronic Medical Record Systems Transform Healthcare? An Assessment of Potential Health Benefits, Savings, and Costs," *Health Affairs*, Vol.(24)5, Sept. 14.

Institute of Medicine (2001). Crossing the Quality Chasm: A New Health System for the 21st Century. National Academy Press, Washington, D.C.

Kaiser Permanente (2009) "KP's Electronic Health Record System, FAQs," *KP HealthConnect*. Retrieved October 10, 2008 from KP's Website: <http://www.kphealthconnect4update.org/facts.html>

King, Rachel (2009a) "How Kaiser Permanente Went Paperless," *Business Week*, April 7.

____ (2009b) "Putting Patient Privacy in Peril?" *Business Week*, April 6.

Office of the National Coordinator for Health Information Technology (2008). Coordinated Federal Health IT Strategic Plan: 2008-2012. Washington, D.C., 2008. Retrieved January 10, 2009 from ONCHIT Website <http://www.hhs.gov/healthit/resources/HITStrategicPlan.pdf>

Scanlon, Jessie (2009) "GE Healthcare Unveils a Plan to Stop Epidemics," *Business Week*, April 6.

Stead, W. and H. Lin, eds (2009) "Computational Technology for Effective Health Care: Immediate Steps and Strategic Directions," January 9. National Academies Press, Washington, D.C.

Wang, S., B. Middleton et al (2003) "A Cost-Benefit Analysis of Electronic Medical Records in Primary Care," *American Journal of Medicine*. Vol. 4(5):397-403.

White House (2009). American Recovery and Reinvestment Act of 2009. Retrieved Feb. 15, 2009, from the White House Website: <http://whitehouse.gov>

WorldVistA (2008). About WorldVistA. Retrieved Sept. 29, 2008, from <http://worldvista.org>

INTANGIBLE ASSETS FINANCIAL REPORTING – A CONSTRUCTIVIST AND AN ANALYTICAL APPROACH

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ABSTRACT

In elaboration of this paper, we started from the idea of increasing the stakeholders' need of being informed. However, the only intangibles recognized by the accounting standards, are the ones acquired in a business combination. Therefore, the questions we try to answer are: If the internally generated intangibles are not registered can we determine a fair value of an organization? Can these be assessed and recognized through the added value it creates, as intangible assets in the financial statements? Can there be developed an evaluation pattern, which allows the comparability of the commercial partnerships?

JEL: M21; M41

KEYWORDS: Intangible assets, internally generated assets, added value, accounting information

INTRODUCTION

In recent decades, we see a major transformation of human society as a whole, as expressed by changes both in the social and the economical levels, which led in fact to emergence practice of a new economy - knowledge-based economy. In this economy the accounting information, along with the intellectual capital of a company, is the most valuable assets they can have. It notes that the resources allocated by the company for the development of intangible investment which contributes to the maintenance and development of the company potential, such as investment in human capital.

Both the European accounting regulations (IASB) and the U.S. (U.S. GAAP) defines intangible assets as “identifiable non-monetary asset without physical substance held in the purpose of using for the production of goods or services to be leased to third parties or to be used for administrative purposes”.

A category is represented by those intangible assets whose existence is legally protected, such as those on the nature of intellectual property: patents, innovation, recipes, projects, models, software, know-how, trade marks, brand and product, copyright, contracts and franchise license etc. Its recognition and legal protection signify a competitive advantage for businesses that it holds, the analysis of value creation for shareholders of company being achieved from this perspective. These assets are generally the result of research and development programs carried out by the company. However, not all costs of R & D performed by business have as a main goal the generation of purposeful future benefits.

THE LEGAL FRAMEWORK FOR RECOGNITION, ASSESSMENT AND REPORTING THE INTANGIBLE ASSETS IN ROMANIA

In time the Romanian accounting has been more directed towards the provision of information for state financial and tax bodies. The evolution of the Romanian accounting regulations is closely linked to changes in economical, social and political environment (Bertoni, Cristea, De Rosa, 2007). Currently, in Romania is applied OMF no. 1752/2005 as regards the preparation of individual financial statements of commercial companies. This rule implements the fourth Directive of Accounting, the 7th directive with all

subsequent amendments, Directive 2004/25/EEC related on acquisition opportunities and determine the conditions under which a company must prepare consolidated financial statements in accordance with IAS/IFRS.

Next, we try to identify the accounting treatments (see Table 1) regarding to intangible assets depending on a sort of financial situations the companies have to prepare (individual financial statements or consolidated financial statements).

Table 1: Rules on the recognition, evaluation and reporting intangible assets in Romania

OMF no. 1752/2005	- prescribe the accounting treatment in the purpose of recognizing intangible assets recognized in the individual financial statements for the companies in Romania
IAS 38 – Intangible assets	- prescribe the accounting treatment in the purpose of recognizing of intangible assets in the individual financial statements for the Group companies in Romania
IFRS 3	- prescribe the accounting treatment for intangible assets that can be recognized separately, resulted from contractual rights and other legal rights, but also intangible assets which respect the character of being separable provided by the definition
GN 4 - Evaluarea activelor necorporale	- refers both to the evaluation of assets presented in IFRS 3 - the combination of companies and of the other elements encountered in a commercial society.

This table shows the accounting treatments regarding to intangible assets depending on a sort of financial situations the companies have to prepare (individual financial statements or consolidated financial statements).

According to OMF 1752/2005, intangible assets represent identifiable assets, non-monetary, non-material supports, held for using in the production process or for providing goods or services to be hired to third parties.

In IAS 38 - Intangible assets we meet the following definition - an intangible asset is an identifiable non-monetary restraint without physical substance.

The International Standard of Evaluation Practice in GN4 - Evaluation intangible assets, treats the intangible assets measurement problem from the perspective of different approaches, principles, types, methods and assessment procedures in accordance with the market reality. Intangible assets have no physical substance, granting rights and privileges to its owner and usually produce income for their owners.

INTANGIBLE ASSETS - CORE ASSETS OF BALANCE SHEET OF THE FUTURE

New started challenges to companies' management have led to awareness of information necessity and importance in order to ensure the survival, performance and lastingness groups. The difficulties reflections of operations arising from the phenomenon of continuous development of companies led to reconsideration of financial information systems and were generated new terms as innovative companies, perimeter of consolidation, consolidation methods, and consolidated financial statements (consolidated accounts). The continuous development of large companies and industrial groups, have generated the increasing complexity of information (Potecea, Gabroveau, Radneantu, 2008).

A particular importance to the decision making process is to understand the way in which the individuals evolve and process information. It also need to be considered the possibility of forming and decision-making models that have to take into account the variable information and to process them, at lower cost and with greater relevance information for users.

Due to the fact that in the financial statements are not recorded intangible elements generating added value (e.g. alliances, intellectual capital, knowledge, etc.) can be talk about the real value (fair value), it is

possible that the market value of some companies to be greater than its accounting value. Can we talk about a real value of financial situations in these circumstances?

The Romanian economic mechanisms present from this point of view a high rigidity in the implementing the concepts and principles of accounting. For us, the most acute problem has to be the application of international standards and EU regulations as they are, but obviously with the minimum necessary adjustments arising from legislative requirements and progress. Concrete applications in large companies, especially banks and insurance companies, and gained successes prove that this is possible and beneficial. It follows then similar applications in public institutions where the process is “difficult and slow” - at least as categorized by the Accounting College Board's. In a next step, we will need to develop our own standards and norms, relevant needs, and specificity of the Romanian economy (Dragan, 2007).

By analyzing the difficulties regarding recognition, evaluation and reporting the intangible assets both in at the Romanian and at the international level, we suggest the following balance-sheet structure (see Table 2):

Table 2: Balance Sheet of the Future

Active					Liabilities		
Tangible assets	Tangible Current	Long	Term	Assets	Fixed owned capitals Provisions Debts Passive incomes for regularization and similar	Sources of funding for tangible assets and intangible assets recognized and recorded in the annual financial reports	
	• • • • the cash Active for regularization and similar income			assets stocks receivables liquidities equivalent			
Intangible assets	Intangible assets recognized and registered situations in the annual financial reports				Reserves for evaluating intangible assets Differences in the assessment / reassessment of the intangible assets Debts arising from internally generated intangible assets	Sources of financing for unrecognized and unregistered intangible assets in the annual financial reports	
	• Expenses of incorporation • Patents, licenses, trademarks and other similar rights • Concessions • Expenditure on research and development Responsible marketing						
Intangible assets	Unrecognized and unregistered intangible assets in the annual financial reports				Reserves for evaluating intangible assets Differences in the assessment / reassessment of the intangible assets Debts arising from internally generated intangible assets	Sources of financing for unrecognized and unregistered intangible assets in the annual financial reports	
	• Knowledge and skills of employees • Experience of employees • Skills training • Customers loyalty • Alliances • Company image • Emotional Intelligence • Formal relations • Informal relations • Social Networks • Partnerships						

This figure shows the structure of a balance sheet, in which are recognized the internally generated intangible assets that create future benefits for the organizations

CONCLUSION

As a conclusion of what we presented above, we can say in the purpose of achieving a major improvement of the information provided by accounting that is necessary a volume of important work to

build the concepts and methods of evaluation. We really took a step forward in understanding the place of information in the life of enterprises by making a revision of traditional approaches concerning accounting and by accepting that a change in the principles and accounting practices must be made. In the future it will be required a more precise framing of accounting information as being the intangible economic assets. In the case of internally generated intangible assets recognition is raised a matter of evaluation, the redemption and/or depreciation. Therefore, it will be necessary to be realized a model for evaluating or adapting an already existing model for assessing the financial and accounting information. However an important step towards has been made through understanding the importance of accounting information in managerial process. One such model is nevertheless necessary to serve as a foundation for standardization and future research.

REFERENCES

Bertoni M, Cristea S, De Rosa B, (2007) “Challenges in the harmonization process in Romania and Italy, Accountancy”, *Expertise And Audit Affairs Review*, Nr. 3, CECCAR Publishing, p. 36

Brooking A., (1998), “Intellectual capital core asset for the third millennium”, Thomson Business Press, Londra

Drăgan C. M. (2007), “Reguli și politici europene de contabilitate și posibilitatea aplicării lor în instituțiile publice românești”, Studiu aflat în curs de finalizare în cadrul "Asociației europene de studii - Clubul de la Buzău", <http://ro.wikipedia.org/wiki/Contabilitate>.

Epingard. P. (1999), “The intangible investment: the core of the knowledge based economy”, Paris: CNRS Editions

Felega N., Manciu L. (2004), “Provocarile contabilității internationale la cumpana dintre milenii”, Bucuresti, Ed. Economica

Potecea, O. Gabroveanu E, Radneantu N (2008), “Accounting Information - Power Instrument for Advanced Management. In: Knowledge Based Organizations”, *The Journal of the Faculty of Economics - Economic Science Series*, Volume: VOL_III, tom XVII, p. 1463-1469.

Rădneanțu N., (2007), “The Corporate Reporting Today and Tomorrow – Where It Might Be Placed?” *Review of Management and Economical Engineering*, Vol. 6, no 5

Reilly, R.F.; Schweihs R.P., (1998), “Valuing Intangibles Assets”, McGraw-Hill, New York

*** Ernest & Young (2009) “US GAAP vs. IFRS” [http://webapp01.ey.com.pl/EYP/WEB/eycom_download.nsf/resources/US_GAAP_vs_IFRS.pdf/\\$FILE/US_GAAP_vs_IFRS.pdf](http://webapp01.ey.com.pl/EYP/WEB/eycom_download.nsf/resources/US_GAAP_vs_IFRS.pdf/$FILE/US_GAAP_vs_IFRS.pdf)

***International Assessment Standards - NG 4, Paragraph 3.14, p. 204, IROVAL Publishing, 2007

*** Ministerul Finanțelor Publice, O.M.F.P. nr. 1752/2005 pentru aprobarea reglementărilor contabile conforme cu directivele europene, publicat în MO nr. 1080/30.11.2005

*** IAS – available at <http://www.iasb.org/>

IN A NEW MILLENNIUM, ARE WE STILL DOING IT THE OLD WAY?

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ABSTRACT

Diversity is an important concept in business and marketing and is utilized in campaigns to attract consumers. This study examines the level of diversity in print media that targets the niche market of gays and lesbians. Race and gender are examined to determine if, in fact, marketers are being innovative in reaching this target market, or are we still using an old paradigm. This study, which examined over 3000 models used in gay and lesbian targeted media proves that we still use the old paradigm of white male models in the advertisements that we used in the 1960s.

KEYWORDS: Content analysis, diversity, GLBT, gay, lesbian, print media, niche market

INTERPLAY OF “CULTURAL IMPERIALISM” AND “CULTURAL NATIONALISM” IN MULTINATIONALS’ ADVERTISING STRATEGIES IN CHINA

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ABSTRACT

This paper explores the interplay of the motifs of cultural imperialism and cultural nationalism in the advertising strategies of multinational enterprises selling consumer goods in Chinese markets. On the one hand, the “cultural imperialism” motif seeks to appeal to the Chinese consumer’s desire to be modern and fashionable by offering the opportunity to participate in a new global identity, based on cosmopolitan purchases. On the other hand, the “cultural nationalism” motif honors and appeals to the Chinese sense of national pride and identity, such as by hosting the 2008 Summer Olympics.

“IT’S CALLED THE FORBIDDEN CITY FOR A REASON”

In January 2007, Rui Chenggang, a news anchor for China Central Television, China’s major network television, wrote a post on his blog about a Starbucks café sitting inside the Forbidden City, an imperial palace of China’s emperors during the Ming (1368-1644) and Qing (1644-1911) dynasties, condemning it as “an erosion of Chinese culture” and demanding that the café be shut down (Fowler, 19 January 2007). The café, first opened in the Forbidden City in 2000, had caused critical attention to Starbucks’ alleged “cultural invasion.” In his email response to Rui Chenggang, Starbucks Corporation’s then chief executive Jim Donald, proclaimed that Starbucks had shown “and [would] continue to show” the company’s respect for local history, culture, and social customs. Despite the company’s reiteration of its efforts to fit within the environment, Chinese bloggers saw Starbucks as a symbol of Western popular culture, and Starbucks’ invasion of the Forbidden City as a transgression against Chinese culture and history. In the space of a week, Rui’s post was viewed more than half a million times and more than 2,500 fellow-bloggers posted comments. Six months later, under the pressure of the criticisms, Starbucks Corporation closed the coffeehouse on July 16, 2007, ending its seven-year operation inside the Forbidden City (Fowler, 19 January 2007).

The ouster of the Starbucks café from the Forbidden City in Beijing was perhaps one of the most sensational cultural incidents that occurred in China after capitalist commercialism was embraced in the country’s economic reforms in the late 1970s. This incident had attracted heated debates on culture, commercialism, and national identity in the face of globalization. The concerns expressed by the Chinese bloggers on the “cultural invasion” of Starbucks café represented “the issue in cultural debates of how local people can absorb and embrace the Western world without the identity of the local culture being lost,” as asserted by Rui Chenggang (Fowler, 19 January 2007). As a commentator has acutely pointed out: “[The incident of the Forbidden City] Starbucks café is ... living proof that you can take the coffee shop out of the West, but you cannot take the West—and its ubiquitous presence—out of the coffee shop.” (Chan, 2007, p. 48)

ADVERTISING IN CONTEMPORARY CHINA

As China is rapidly turned into a consumerist society, advertising is omnipresent. Today, China is home to one of the world’s fastest-growing advertising industries, expected to surpass Japan as the second largest in advertising spending (after the U.S.), by the end of the decade. Since China opened its door in the late 1970s, with the inflow of capitalist ideas of consumption and lifestyle, Western media, such as advertising, magazines, and television programs, became increasing influential in Chinese people’s life.

Only three decades ago, many Chinese did not know what a commercial advertisement was like, or its function. There had been a ban on commercial advertising for almost 30 years after the Chinese Communist Party took over the nation in 1949. Commercial advertising was seen as a symbol of capitalism and a perversion of public communication for decadent commercial purposes. Products at that time showed Mao's faces and the faces of other political leaders in Mao's regime. In the economic reforms, consumerism increasingly was seen by the Chinese government as benefiting the country's economy. To accelerate the speed of the country's economic development and to broaden the open-door policy, a "socialist commercial advertising" was welcomed back shortly after the party's Eleventh Party Congress in December 1978.

With a changing attitude on the part of the pragmatic-minded leaders toward individual consumption, the advertising industry in China has been flourishing. It has grown from practically nothing in 1979 to a multi-billion-dollar business in China today. The Summer Beijing Olympics in 2008 contributed a surge in the growth of China's advertising market, to a total current value of UD\$35 billion. Drawn by China's booming market, the world's major advertising agencies rushed into the Chinese market during the past decades, gleaming annual billing growth of up to 400 percent. Dentsu, the market-dominant Japanese advertising firm, was the first transnational ad agency to enter the Chinese market, opening offices in Beijing and Shanghai soon after commercial advertising was resumed in 1979 (Lai Sao, 2002, p. 36). Foreign advertising companies first opened advertising boutiques and then full-service outlets in China's large cities in late 1980s. By 1996, there were over 180 Chinese-foreign joint-venture advertising agencies in China. Now almost all multinational advertising corporations have operations in China. They represent about 30 percent of all the money spent on advertising in China, according to a *Wall Street Journal* report (Fowler, 23 September 2005).

Today's Chinese advertising market, as accurately described by Jian Wang, author of *Foreign Advertising in China*, is "vibrant" and "chaotic." (Wang, 2000, p. 112) Advertising appears in government-controlled media like television and radio programs, newspapers, and magazines. Billboards with socialist slogans and other publicly displayed political propaganda images, popular during the Cultural Revolution (1966-1976), have largely been replaced by commercial advertising for foreign liquors, sports products, and seductive women in luxurious outfits. Portraits of political figures are still displayed in stores and at tourist centers, but they are used to promote tourism and sale of products. A huge-sized billboard at the entrance of the Yellow Mountain Scenic Center in Anhui Province draws a picture of Deng Xiaoping smiling and waving to tourists. At the entrance of Mao's memorial hall on Tiananmen Square, artificial flowers from admirers are collected and re-sold. Admirers zigzag their way out through vendors selling "Mao's products," from cigarette lights to good-luck charms, Mao's "little red books," hats, and--more incongruously-- T-shirts.

Many say that Deng Xiaoping's economic reform in 1979 opened a Pandora's Box of Western temptation to over one billion people. The unraveling of the "Maoist cocoon" has exposed the Chinese people to a whirlwind of Western ideas and practices (McEwen, et. al., p. 74). With the introduction of a market-oriented economy, the Chinese government is determined to eliminate the economic losses for subsidizing media. Since 2000, the government has pressed China's more than 1,000 television channels to commercialize, even though the government still tightly controls media content. Television stations, like other media, either go broke or "contribute" to the country's GDP by relying on the market and attracting more advertising (*The Economist*, 2004, p. 63). An interview conducted by the author of this paper showed that in 2005, an average of over 80 percent of the revenue for a television station is generated by advertising. With the commercialization of media, cheesy game shows have mushroomed as television programs, across the nation. For example, the 2005 "Super-Winner" game show was a talent variety show, broadcast by the state-owned Anhui Satellite Television Station. On the show, there were bright neon signs and flashing lights all over the stage. It turned out the bright signs had nothing to do with the actual program; they were simply advertisements. Not only were the advertisements featured behind the

hosts of the show, but the audience members were even involved in the advertising. Three sections of audience members were lined up on one side of the set, and each section wore a different colored shirt. These different shirts each had names of different sponsors of the program. So whenever a camera would show a crowd reaction or pan across the faces, they would see the names and colors of the advertisers. Of course, the audience members would cheer and look happy after the host's jokes and performances. They were being paid to. Here, the line between the show and the advertising is blurred. This program appeared to be one big advertisement. It had not existed without the signs, flashing lights, and paid audience members.

Glamorous signs and flashing lights are not just seen on television screens. When cruising down the Huangpu River in Shanghai, the Bund gives way to bright neon signs. Flashing lights of the brands of world-famous products and the names of multinational companies adorn high buildings. Pepsi came to the Chinese market in 1981 and has since fought the so-called "Cola Wars" with Coca Cola in China. On Nanjing Road, one of the most popular shopping streets in Shanghai, every night when the sun begins to set, the streetlights come on. Instead of the standard white or yellows lights that adorn most streets around the world, these lights give off a deep blue. This is because every light that lines both sides of the road is an advertisement for Pepsi, with its signature blue coloring. Being surrounded by so many logos of an American company, it is easy to forget where you are.

Foreign advertising opens a window on the world of capitalism for Chinese consumers. Through it, Chinese consumers are afforded a glimpse of modern consumer goods and a look at the idealized ways of life, and invest them in their own imagined ideal lifestyles. Emotions and attitudes of men and women surged to embrace capitalist notions of a "good life" as China's possible alternative future.

CULTURAL IMPERIALISM

The decade of the 1990s witnessed in China a new era in which cultural changes took place. China's new elites liked to gather on the Bund in Shanghai for Western food and at outdoor cafés, bistros, and boutiques that transmit a foreign cachet, and did not hesitate to show off their newly acquired Western brand-name products, such as Armani designer clothing and Louis Vuitton cuff-links. Capitalist domination in contemporary China's consumerism is further evidenced in such expressions such as "the Venice of the Orient," "China's Wall Street," "China's Pierre Cardin," "European-Style apartment houses," "the Seacoast Paris." (Guo, 2004, p. 112)

In the explosive growth of consumption, 400 million Chinese teenagers and young adults—aged 16 to 24—have been targeted for world marketers. Marketing feeds on the eagerness of Chinese youth to "stand out," by associating commodities with feelings and emotions that the Chinese consumer finds attractive. Selling the idea that consumption can make one's dream come true, multinationals create in their brands meanings and values that are hard to replicate. In anticipation of emerging customer needs, smart marketers search for the soul of Chinese new consumers to sell their products through an interplay of the actual and the imagined. Products are invested with the value of wealth and status, and evoke power and self-worth. One would see individuality stressed in such catchy marketing slogans as McDonalds' "I just like it," and that of the leading Chinese sportswear products company Li Ning Corporation, "It's better to be yourself than to be someone else." Ambition is inspired by Nike's "Just do it," Adidas' "Impossible is nothing," and PepsiCo's "Dare for more." Free spirit is called for in the theme song of "Super Girls," a Chinese television reality show, "Sing whenever you want to"; and freedom is evoked in the slogan "There is no boundary between you and freedom" seen in ads for IBM ThinkPad T40. Nokia outperformed its competitors Motorola and Ericsson in its cell phone sales in China, by emphasizing fashion over function. An Audi television advertisement reflects leadership spirit and glory by depicting a sartorially splendid man striding down an endless red carpet surrounded by applause (*BusinessWeek*, 2006, pp. 7-11; Doctoroff, 2005, p. 28-29).

In response to the Chinese appetite for Western commodities, the *San Francisco Chronicle* report “Madison Avenue in China” predicted that advertising could be used as a secret weapon to win the Chinese over from communism to American consumer culture (1997). Confident about the power of advertising, global ad industry leaders have asserted that the creative ideas of Western-style advertising would be extended into every corner of the country. Unlike the cannons and guns the Western powers used in the nineteenth century to force open the Chinese market, Western advertising in the post-Mao economic reform was welcomed to the Chinese market and, once there, aroused the desire of the Chinese masses to move to the psychic haven of Western consumerism. With the blizzard of foreign advertising and goods sweeping across China, there have been broad-based concerns that such media and advertising expansion signifies reincarnation of Western cultural colonialism. The concern was best exemplified in the controversy of the Starbucks café in the Forbidden City. The froth over Starbucks at the 587-year-old Forbidden City had highlighted Chinese sensitivity about cultural symbols and unease over an influx of foreign pop culture. The concerns expressed by the Chinese bloggers represented the issue in cultural debate in globalization (Fowler, 19 January 2007).

Cultural imperialism has been a controversial topic among critics of various disciplines, such as international relations, anthropology, education, history, and literature. Cultural imperialism theory states that multinational corporations and media that are controlled by developed countries have a powerful effect on developing countries. With the help of media, capitalist views and values are artificially injected into under-developed countries, thus destroying the native cultures of the developing countries.

In the mode of preserving “Chinese-ness,” critics warn against a “colonial culture” phenomenon in China due to the overwhelming presence of Western products. Many Chinese have expressed worries about the soaring individualism and consumption among Chinese youth, seeing these qualities as indicative of the declining collective morality. Major critical concerns are that with Western media expansion, advertising imperialism displaces local values and traditions, leading to moral degeneration. “Having been bombarded with Western consumer culture for over two decades, contemporary Chinese youth are lost in the darkness of night,” Fan Jianwen, a young scholar of advertising studies, said pessimistically (2005, p. 32). Other critics associate issues of consumerism and individualism with ideological struggles between Chinese and Western values. Huang Ping, a sociologist at the Chinese Academy of Social Science, criticized Chinese youth’s excessive consumption: “People in general, and urban youth in particular ... tend to identify more with consumer goods than with values,” and expressed a concern that there was a risk of “precious traditional values” being lost (1995). According to a survey conducted by the author in 2006, the awareness of Confucius has declined markedly in the recent past. While concepts such as filial piety and respect for authority are still prevalent in Chinese society, young students no longer know, or care to know, who Confucius is, or about his teachings. Confucian ideas are followed simply because they are part of China’s heritage and are ways of life with which people are familiar.

GLOCALIZATION

However, in recent years, the concept of “cultural imperialism” has been challenged by other critics, arguing that advertising is a site where the local meets the foreign in an “intricate process of cultural contact, function, and disjunction,” revealing an interesting cultural phenomenon in which “the local becomes global, and the global becomes local.” (Wang, 2000, pp. 19, 104). Foreign advertising is one component of the “cultural mix.” Globalization and localization are inextricably bound together. As more and more international businesses enter the Chinese market, the importance of understanding Chinese culture increases. This is particularly true in the field of advertising because advertising is inherently personal and requires considerable understanding of the target audience. This makes successful advertising a challenge for foreign companies that enter China. As C. K. Prahalad and K. Lieberthal have pointed out, “Success [of multinationals] will require more than simply developing cultural sensitivity. ...

Multinational companies will have to rethink and reconfigure every element of their business models.” (1998, p. 70). Close “readings” of advertisements in contemporary China, their content, images, and words show that the local and the global interpenetrate and complement each other, thus yielding a hybrid culture—a cultural phenomenon that embraces values and “norms” from a diverse cultural traditions. It is interesting to see how advertising, a quintessentially Western institution, has been recreated in the Chinese setting and how the roles of the global and the local are negotiated in the process.

The ad for *Feichang kele*, or “Future Cola” is one example. “Future Cola” a local soft drink product (Wahaha Company in Hangzhou, capital city of Zhejiang Province) uses the world-familiar Coke image to boost its sale. At the same time the ad contains the features that are appealing to Chinese. The label on the bottle says “Jinji bal xiao, caidao fudao” (“Gold cock crows, fortune arrives”), and “Zhongguoren ziji de kele” (“a cola just for Chinese”). The slogan on the bottle “the future will be better” is an obvious play with the drink’s brand name and the nationalist idea “the future belongs to China” used as the title of the report in the May 2005 issue of *Newsweek*.

The phenomenon of a global product that has been modified to fit a local culture prevails in China. For example, Pizza Hut has come out with a Peking Duck pizza. Most Americans would have little interest in a Peking Duck pizza, but local cuisine and traditions in China make such a product marketable. Disney provided another example of localization. In the construction of the Hong Kong park, *feng shui* was an important consideration because the Hong Kong marketplace demanded a product that accounted for local needs and desires. Shanghai GM was created in 1997 by a combined General Motors Corporation and Shanghai Automotive joint venture. Shanghai GM manufactures GM’s brand Buick and employs running horse and temple dragons for Buick’s brand images. These images not only have created a local feel, but helped enhance Buick’s reputation in the Chinese market. In the ads for Buick posted on the company’s website one image shows Buick’s commitment to Chinese culture by using the tradition color red and the classic carp representing balance. Nature is also used in the imagery of the Buick advertisements. On the same website, a picture shows Buick connecting its brand to traditional spirituality. The comma in the image represents half of the traditional Chinese symbol of *yin* and *yang*. The comma also shows the sun and crescent moon, two powerful symbols in Chinese society. PepsiCo also uses a similar strategy to assert its presence by “immersing” in the environment. A Pepsi billboard with a dragon clinging to Pepsi’s signature blue brand spreads at the entrance to the Yu Garden, a popular shopping area and garden known for its architecture.

CULTURAL NATIONALISM

With the country’s increasing power in the world economy and world politics, Chinese consumers have become very confident about their influence in the world and their identity, and desire to see their own country win on the world stage. In China’s new nationalism and rising national pride, more and more Chinese question the presence of Western culture and its influence in China to defend what they believe to be in the interest of Chinese and of the nation. Chinese consumers have a pervasive sensitivity to China’s “National Face.” Roughly definable as a combination of public image, social standing, and respect, face is much more important to Chinese culture than to Western cultures. Partly due to their troubled history with foreigners in modern history, the Chinese have a great awareness of self-image and public. This awareness is reflected in the country’s advertising policies. Any advertisements that are believed to have shown a “bad national image” of China or the Chinese would “hurt the Chinese people’s feelings,” and are effectively banned under Chinese ad law.

One illustration for the concern of the nation’s image is the ill-fated ads by Toyota Motor Company. Toyota ran a commercial showing a Land Cruiser SUV towing what appeared to be a Chinese military truck, and another featuring stone lions, a traditional symbol of power in China, bowing down to Toyota’s Prado GX. Chinese consumers balked at the perceived insult to their armed forces and at the notion of

bowing to anything—even a car—representing Japan. The problem comes back to the issue of China's uneasy relationship with Japan, and the fact that Toyota is a Japanese car. Because of the edgy relationship between the two countries, the ad was deemed offensive and a loss of face to have a Chinese lion to salute a Japanese car. Nike had a similar experience. The ad campaign "Chamber of Fear" by Nike Inc. featured LeBron James of the NBA's Cleveland Cavaliers battling—and defeating—a computer-generated Kung Fu master (*BusinessWeek*, 2005, p. 50-51). A McDonald's television commercial was taken off the air because it showed a Chinese man on his knees begging for a discount. Although there was nothing inherently offensive in the eyes of Westerners, Chinese consumers found the concept insulting, and the Chinese government felt that publicly acknowledging foreign goods in such a manner was unnecessary and offensive. So the ads were blocked. In April 2006, Yum Brands Inc.'s KFC had to replace an ad that Chinese bloggers complained insulted Chinese students (Fowler, 19 January 2007).

The 2008 Summer Olympics in Beijing intensified Chinese citizens' sensation of patriotism. To many Chinese, hosting the Games was the realization of the nation's 100-year-long dream. China had come a long way: from being a humiliated and weak nation that had been repeatedly defeated by the West and Japan in the past century and a half, to hosting—for the first time—an Olympic Game. The 2008 Beijing Games is a life-time opportunity for China to show to the world the restoration of China's greatness and to announce China's global position in sports, culture, and economics. Yet, the crackdown on the violent anti-government riots in Tibet in March 2008 caused criticism and protests world-wide against Beijing's policies in Tibet and China's human rights record. The Olympic torch, a symbol of China's triumphant achievements in recent years in global affairs, was beset by protests in places in the world against its records of human rights and freedom of speech. The scrutiny of China's image by Western media and the foreign protests enraged many patriotic Chinese, particularly young students. The protests were viewed by many Chinese as foreign interference with China's internal affairs and as efforts to diminish China's achievements and to sabotage China's hosting of the Olympics. Students rallied to attack foreign businesses for their alleged support of the Tibetan riots. Chinese consumers launched a boycott of France's Carrefour SA, one of China's biggest foreign-owned supermarket chains. It is reported that a twenty-three-year-old Beijing Internet entrepreneur, Rao Jin, set up an "anti.cnn.com" web site to document what he saw as inaccurate foreign coverage of unrest in Tibet. His web site was reportedly visited by 100,000 people within a month, and he had collected more than a dozen inaccuracies or exaggerations by the Western press, including CNN, Time Warner, Inc., Cable News Channel, and News Corp's Fox News. Mr. Rao told reporters that his site was not targeting CNN in particular, but he picked CNN for the name of his site because it "stands for the voice of mainstream Western media." (Fowler, 26 March 2008)

In explaining why the Games matter so much, a young woman told the National Public Radio's Morning Edition that the "...Olympics is a way to cast off that sense of humiliation, to change China's international image as 'the sick man of Asia'." (Lim, 25 July 2008) Infused with national pride and love of sports, thousands of Beijing students joined the army of hundreds of thousands of volunteers to help with logistics for the Beijing Olympics, vigorously practicing English and learning the etiquette of how to welcome Olympics guests properly. Young people welcomed the passing of the Olympic torch with stickers of the China flag pasted on their cheeks, while others put a China flag on their T-shirts or Olympics tattoos on their backs. Hosting the 2008 Beijing Olympics made many Chinese feel proud to be Chinese and confident about China's future. A survey by the Pew Research Center shows a high level of satisfaction (82 percent) among urban Chinese toward the country's economy and the direction the government is taking the country (Leow, 23 July 2008).

It is interesting to note that China's rising patriotism was further evoked and nurtured by global multinational corporations' marketing strategies to use Chinese nationalist sentiments as a way to be connected to Chinese consumers. In the frenzy of the 2008 Olympic Games, roughly three-quarters of Chinese consumers said they would give preference to products they associated with the Olympics,

according to the Beijing consultancy R3 report (*BusinessWeek*, 2008, p. 54-55). Inspired by national pride, more and more products had Chinese themes cheering “China wins,” contrasting to the newly rich in the early 1990s who anxiously had showed off their Western brand names. According to a *Wall Street Journal* report, a twenty-three-year-old showed off pictures of his US\$ 84 red jacket from Nike’s 1984 Chinese Olympics line. He said that “I wasn’t able to witness China’s first gold medal, but the 1984 series gives me a chance to experience the history. It’s suitable for our post-1980 generation.” (Canvaes, 20 March 2008). In order to woo Chinese consumers, multinationals used the Games as a springboard for larger market shares by evoking Chinese pride and patriotism. Sportswear makers tried to use icons of the Chinese sports stars to pitch products to China’s rapidly growing consumer class. NBA basketball superstar Yao Ming and Olympic hurdler Liu Xiang are familiar faces in commercials, endorsing world-famous brands from sportswear to electronics. Realizing the importance of the growing Chinese market, Nike Inc. and Adidas AG both race to promote their shoes and apparel with “designs incorporating Chinese elements such as clouds, dragons, fans, and bright colors to evoke tradition and allow young Chinese to express their identity.” (Canaves, 20 March 2008)

Having learned a lesson from Carrefour, sponsors stood firmly behind the Beijing Games. *The Wall Street Journal* reported that Coca-Cola Co. played with the idea that Coke was appealing specifically to a Chinese sense of nationalism as red was both the color of China and of its own brand. Its Olympics song “Red Around the World” chants “We have been waiting for this moment for a long time.” Since being unveiled late March, the song had been downloaded more than 24 million times from Coke’s Chinese web site by mid year. At its annual shareholders meeting, the company fended off criticism from Tibetan and free-speech groups and expressed that “stopping the torch relay is in any way over the long run not going to be the right thing to do.” McDonald’s Corporation was asking customers to chant its Olympics refrain: “I’m loving China wins!” The company had had more than 1.3 million people register to become part of the cheering team in a nationwide contest to select cheerleaders for China’s team during the Games. PepsiCo recruited 160 million online votes from mainlanders in a contest ranking mug shots sent in by fans; the winning entries would be printed on cans cheering on Team China (Fowler, 18 April 2008). In pitching the Chinese, “the key thing to avoid is the ‘American Dream’ idea,” says Tom Doctoroff, the North Asia CEO of WPP Group’s JWT ad agency, “Dream, yes—American, no. There has been no example of a product that has built success in China on an American identity alone.” (Fowler, 16 June 2005)

In conclusion, as demonstrated in this paper, in order to sell consumer goods in Chinese markets, particularly during the period leading up to the 2008 Beijing Olympics, multinational enterprises integrate the motifs of (Western) cultural expansion and (Chinese) cultural nationalism in their advertising strategies. On the one hand, the companies have played on the sensation of “cultural superiority” to appeal to the Chinese consumer’s desire to be modern and fashionable, and offer the consumer the opportunity to participate in a new global identity based on cosmopolitan purchases. On the other hand, the companies respond to, as well as evoke, the Chinese consumer’s feelings of national pride. It is anticipated that global multinational corporations will continue to create connections with the Chinese consumers, convincing them not only of their desirability of the products, but also of the importance of these products as means of expressing national identity and national pride.

REFERENCES

BusinessWeek (2008) “Ad Agencies Unchained,” 25 April, p. 54-55

BusinessWeek (2008) “Ambush in Beijing,” 24 March, p. 54-55

BusinessWeek (2006) “ZIBA Design’s Search for the Soul of the Chinese Consumer,” September, p. 7-10

- Canvaes, Sky (2008) "Stylish Sportswear With Designs on China," *The Wall Street Journal*, 20 March 2008
- Chan, Jeremy (2007) "Starbuck's Invasion," *Beijing Review*, 10 May, p. 48
- Doctoroff, Tom (2005) *Billions: Selling to the New Chinese Consumer*, New York: Palgrave Macmillan Press
- The Economist* (2004) "Chinese Media: Please Adjust Your Set," 20 November, p. 63
- Fan Jianwen (2005) "Tongguo baozhi guanggao kan duoyuan wenhua zai Zhongguo de fazhan, 1981-2000" (The development of cultural diversity in China through the analysis of advertisements in newspapers, 1981-2000), (master's thesis), Shanghai, China: Shanghai University
- Fowler, Geoffery A (2005) "Ad Spending in China Grew 20% in the First Half," *The Wall Street Journal*, 23 September
- Fowler, Geoffrey (2008) "Cheering for China Before the Games Even Start," *The Wall Street Journal*, 18 April
- Fowler, Geoffery A (2006) "China's Marketing Groups Lure Heaveyweights," *The Wall Street Journal*, 30 March
- Fowler, Geoffrey A (2008) "Chinese Taking Aim at Media Over Tibet," *The Wall Street Journal*, 26 March
- Fowler, Geoffrey A and Merissa Marr (2005) "Disney's China Play," *Wall Street Journal*, 16 June
- Fowler, Geoffery A (2007) "It's Called the Forbidden City for a Reason," *The Wall Street Journal*, 19 January
- Guo, Yingjie (2004) *Cultural Nationalism in Contemporary China: The search for national identity under reform*, New York: Routledge Curzon
- Huang Ping (1995) "New Dilemmas About Consumerism," *China Daily*, 12 October
- Lai Sao, Stella (2002) "Advertising in China." In Ingomar Kloss (Ed.), *More Advertising Worldwide*. p. 32-63, New York: Springer
- Leow, Jason (2008) "Chinese Students Rally, but Often in Support of Government," *The Wall Street Journal*, 4 June
- Leow, Jason (2008) "Optimism Grows Among China's Urban Dwellers," *The Wall Street Journal*, 23 July
- Lim, Louisa (2008) "China Trains Cheerleaders to Rally the Masses," *National Public Radio* (Morning Edition), 25 July
- McEwen, William et. al. (2006) "Inside the Mind of the Chinese Consumer," *Harvard Business Review*, March 2006

Prahalad, C. K. and K. Lieberthal (1998) "The End of Corporate Imperialism," *Harvard Business Review*, July-August, p. 69-79

San Francisco Chronicle (1997) "Madison Avenue in China," 25 March

Wang, Jian (2000) *Foreign Advertising in China: Becoming Global, Becoming Local*. Iowa: Iowa State University

TOURIST SATISFACTION WITH A SMALL ISLAND DESTINATION

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ABSTRACT

Tourist satisfaction is one of the most important concerns of competitive destinations as it considerably impacts on the tourist's choice of the holiday destination, and the decision to visit the destination in the future. As a result, tourist satisfaction is one of the most investigated topics in the field of tourism due to its role in the survival of a destination. Several studies have researched tourist satisfaction, however, there has been limited investigation of tourist satisfaction with small island holiday destinations. This paper reports the findings of a study carried out to determine tourist satisfaction with the destination Mauritius, a small island situated in the Indian Ocean. The method used consisted of a questionnaire distributed at the international airport among 400 departing international tourists. Findings are analyzed and the implications are discussed.

INTRODUCTION

Mauritius, a small isolated island is performing relatively well as a tourism destination. Tourism has grown into one of the main pillars of the Mauritian economy. In 1973, international tourist arrivals amounted to 67, 994 and the figure rose by more than 10 times to reach 702, 818 in 2003 (Central Statistical Office, 2008). In February 2007, the number of visitors to the island was 72, 358 while in February 2008, a 7.5% increase was recorded representing 77, 763 visitors. In 2007, 906, 971 tourists visited the island and tourism receipts amounted to 40, 687 million rupees (approx. USD 1265 million) and provided direct employment to 26, 322 individuals (Central Statistical Office, 2008). However, due to the increasing number of existing and emerging destinations, it is important for Mauritius to remain competitive. Additionally, the economical conditions prevailing due to the current global financial crisis may impede on the growth of the industry. In order to maintain its competitive edge and continue to attract visitors, there is an increasing urgency for the destination to ensure that tourists are satisfied with the overall holiday experience as well as the specific range of products, services, events and activities available at the tourism destination. It is important to assess tourist satisfaction since various studies have shown the relationship between satisfaction and future purchase behavior (Juaneda, 1996; Kozak and Rimmington, 2000). Additionally, satisfied customers spread positive word-of-mouth recommendations about the destination to friends and relatives. Although several studies have measured customer satisfaction with tourism destinations, no studies were found on customer satisfaction with the destination Mauritius. Hence, this study aims to investigate tourists' satisfaction with this small island destination. Based on the analysis, the intention is to discuss if tourists are satisfied with the specific destination attributes as well as with their overall satisfaction with the destination. As a result, the destination can choose to redress the weak attributes to remain competitive on the international tourism map.

TOURIST SATISFACTION

Customer satisfaction is one of the most investigated topics in the tourism and hospitality due to its role in the survival and future of any tourism products and services (Gursoy *et al.*, 2003, 2007). Customer satisfaction is defined as a psychological concept that involves the feeling of well-being and pleasure that results from obtaining what one hopes for and expects from an appealing product and/or service (WTO,

1985). Consumer satisfaction is therefore a post-consumption evaluation (Tse and Wilton, 1988) of the product or service received. According to Kozak and Rimmington (2000), it considerably impacts on the tourist's choice of the holiday destination, the consumption of products and services, and the decision to visit the destination in the future. Researchers have studied components of experiences which contribute to tourist satisfaction such as destination services, recreational facilities, cultural tours, hotel services, restaurant services and host culture (Yuksel, 2001). Other attributes such as the destination's natural environment, local culture and climate also affect tourist satisfaction (Pizam *et al.*, 1978). According to Echtner and Ritchie (1993), a destination consists of a combination of tangible and intangible attributes. Yuksel and Yuksel (2001: 337) argue that 'various positive and negative experiences may occur as a result of interactions with these components [attributes], and it is the cumulative effect that will ultimately determine the tourists' overall evaluation of the experience'. Hence it is important to measure tourists' satisfaction with individual destination attributes as well as tourists' overall satisfaction with the holiday destination. Assessing individual attributes will help detect areas of strengths or shortfalls within the destination.

A review of the literature depicts that several studies have used the expectation-disconfirmation model (Oliver 1980) to measure tourist satisfaction. After using the service, consumers compare the actual performance with their expectations (Neal and Gursoy, 2008). Consumers are likely to have a positive confirmation if the performance is superior to their expectations, implying that consumers are highly satisfied and will be more willing to purchase the same service in the future. On the other hand, if the actual performance is worse than expectations, consumers are likely to have a negative disconfirmation, where consumers will be dissatisfied. In this situation, consumers will not become loyal to the organisation and are likely to look for alternative products for their next purchase (Neal and Gursoy, 2008). Previous studies on tourist satisfaction indicate that there is no agreement on when to measure satisfaction (Kozak and Rimmington, 2000). Some researchers have compared pre-holiday expectations with post-holiday perceptions (Duke and Persia, 1996) and others have collected data during the holiday (Gyte and Phelps, 1989). The present study measures tourist satisfaction before the departure of tourist by assessing their opinions at the departure lounge of the airport.

METHODOLOGY

The quantitative method was selected for the study though the use of a questionnaire as it was a suitable way to reach a geographically dispersed audience at a relatively low cost. A one sheet survey was administered to a sample of 400 international tourists. The convenience sampling method was used where customers were approached at the departure lounge of the international airport during the period of March to April 2008. A pilot test was carried out among 30 tourists in well known tourist spots in the capital city and on public beaches. Following this exercise, the layout of the questionnaire was changed from three A4 pages to one A4 sheet questionnaire as the appearance of the instrument discouraged respondents as length was an issue. The questionnaire was therefore printed on both sides of an A4 paper. It also comprised of a short covering letter, and directions on how to fill the questionnaire. Questions 1-5 related to the background of tourists, questions 6-7 enquired about the expectations and the performance of the destination attributes. A list of 18 destination attributes was provided to tourists where they were asked to provide ratings on a 5-point Likert Scale. The last question was open-ended and sought to gather data regarding improvements to be made to enhance the satisfaction of tourists with the destination.

RESULTS

Out of the 400 questionnaires distributed, 339 were found usable for the study representing a response rate of 85%. Table 1 depicts the nationalities of the respondents. It can be noted that the largest segment

came from the United Kingdom (37.4%), followed by South Africa (26.4%), Australia (21.4%) and France (12.1%) and this is primarily due the high frequency of flights departing for these countries at the time the survey was carried out.

Table 1: Characteristics of Respondents (n=339)

		Frequency	Percentage
Country of Respondents	United Kingdom	126	37.4
	South Africa	89	26.2
	Australia	73	21.4
	France	41	12.1
	Switzerland	5	1.4
	China	2	0.6
	Italy	1	0.3
	Malaysia	1	0.3
	Germany	1	0.3
Accommodation	3-star hotel	20	5.9
	4-star hotel	148	43.7
	5-star hotel	126	37.2
	Non-hotel	45	13.2
Length of Stay	Less than 5 days	26	7.6
	5-10 days	126	37.1
	11-15 days	92	27.3
	More than 15 days	95	28
Purpose of Travel	Leisure	259	76.4
	Visiting Friends & Relatives	69	20.3
	Business	11	3.3
Number of Visits	1	203	59.9
	2	32	9.5
	3-5	60	17.8
	6-10	30	8.7
	More than 10	14	4.1

Table 1 depicted tourists' characteristics with regard to their country of residence, accommodations, length of stay, purpose of travel and number of visits. It is observed that the majority of the tourists were from United Kingdom, most of the tourists stayed in 4-star hotel, their stay was for a period of 5-10 days, their purpose of visit for was leisure and most of the tourists surveyed visited Mauritius for the first time.

43.7% of the respondents stayed in 4-star hotels and 37.2 % in 5-star hotels while only 5.9% resided in 3-star hotels. 13.2% of respondents stayed in non-hotel accommodation such as bungalows and flats. Among the nine different nationalities surveyed, it was found that most of the Australians, South Africans, and British tourists preferred 4-star and 5-star hotels whereas most of the French tourists stayed in 3-star and non-hotel accommodation. This could be because the French tourists have close cultural ties with Mauritius including language. Due to these factors, French tourists feel comfortable to visit the destination as independent tourists and do not require the extensive facilities offered on the premises of luxurious hotels.

The length of stay for the majority of tourists (37.1%) was 5-10 days, followed by 28% who stayed for more than 15 days, 27.3 % stayed for 11-15 days and 7.6% visited the destination for less than 5 days. Since Mauritius is a long-haul destination and the prices of airline tickets are relatively expensive, most tourists stay for more than 5 days as a shorter vacation would not be worth the trip. Additionally, it was found that 76.4 % of the visitors were motivated to travel for leisure purposes, 20.3 % travelled to visit friends and relatives (VFR) while 3.3% travelled for business. It can be noted that none of the

respondents travelled for health purposes although Mauritius promotes Medical Tourism. 59.9% of tourists were on their first visit to Mauritius while 40.1 % were repeat visitors.

Tourists were asked to rate the expectations of the destination attributes on a Likert Scale (1 *strongly disagree* - 5 *strongly agree*). The highest mean value related to “quality of hotels”, “peaceful environment”, “attractive beaches”, “reasonable price” with mean expectations values of 4.99, 4.76, 4.74 and 4.7 respectively (Table 2). These were followed by “sunny and warm weather” and “friendliness of locals” with mean values of 4.64 and 3.91. The lowest score for expectations was obtained by “medical facilities” (2.02).

Table 2: Importance Mean, Perception Mean and Gap Scores

Destination Attributes	Performance Mean (P)	Expectations Mean (E)	Gap Scores
Cultural and historical sites	3.63	2.22	1.41
Ecotourism and nature trails	3.74	2.66	1.08
Sunny and warm weather	4.55	4.64	-0.09
Family activities	4.05	2.73	1.32
Attractive beaches	4.39	4.74	-0.35
Friendliness of Locals	4.40	3.91	0.49
Gastronomy	4.21	3.89	0.32
Festivals, events and handicrafts	3.63	2.14	1.49
Medical facilities	3.00	2.02	0.98
Nightlife entertainment	4.05	2.96	1.09
Peaceful Environment	4.55	4.76	-0.21
Quality of hotels	4.55	4.99	-0.44
Reasonable price	4.40	4.70	-0.3
Safety and security	4.23	3.65	0.58
Shopping facilities	4.10	2.35	1.75
Spa facilities	4.12	2.40	1.72
Mix of cultures	4.27	3.13	1.14
Sports facilities	4.09	2.29	1.8
Total	73.96	60.18	13.78
Overall Mean Scores	4.11	3.34	0.77

Table 2 showed the mean scores for the actual performance, expectations and the difference between the performance and expectations, known as gap, for the 18 attributes used to assess tourist satisfaction in a small island destination.

Table 2 also reveals the performance of the destination attributes as perceived by the customers during their visit. Respondents found that the following attributes performed better than others: “sunny and warm weather”, “peaceful environment” and “quality of hotels” with scores of 4.55 each. Other attributes which were well perceived by tourists were “reasonable price”, “friendliness of locals” and “attractive beaches” with performance scores of 4.4, 4.4 and 4.39 respectively. Attributes such as “spa facilities”, “shopping facilities”, “sports facilities”, “family activities”, “nightlife entertainment” and “festivals, events and handicrafts” were rated with mean scores between 4.12 and 3.63. “Medical facilities” had the lowest mean of 3.00.

The gap score for each of the 18 destination attributes was calculated by subtracting the expectations scores from the performance scores (P-E). The largest positive gap was identified for “shopping facilities” (1.75), “spa facilities” (1.72), “cultural and historical sites” (1.41) which reveal that tourists are satisfied to a higher extent with these attributes. Among the 18 destination attributes, 5 attributes obtained negative gap scores showing that these features of the destination are performing below expectations: “quality of hotels” (-0.44), “reasonable price” (-0.3), “peaceful environment” (-0.21), “attractive beaches” (-0.35) and “sunny and warm weather” (-0.09). The study also investigated tourist overall satisfaction with the destination by subtracting the overall mean score for expectations (3.34) from the overall mean score of performance (4.11). The overall tourist satisfaction with the destination was positive as the overall gap score was 0.77.

The open-ended questions probed into factors which affected the overall satisfaction of tourists during their visit. It was found that an important factor concerned the state of physical environment as tourists found that the destination was not performing well in terms of preserving this asset. For example, hawkers based around the market in the capital city leave the remains of their food product and packaging which spoil the appearance of the area. Tourists also found that there was litter on public beaches. Repeated visitors mentioned that the lagoons are not well preserved as they found that the corals and amount of fish have deteriorated as compared to their previous visits. The interaction of tourists and locals was a factor which affected tourist satisfaction with the destination. For example, a few tourists claimed that hawkers were sometimes aggressive and forced them to purchase items that they did not wish to buy. Additionally, prices of products were perceived as expensive, including the tariff charged by taxis. In terms of infrastructure, it was found that tourists did not appreciate the congested roads. Mauritian drivers were found to be impolite and the speed limit was not respected. The road signage along connecting roads was not clear and independent visitors could easily get lost. Tourists also commented that some museums were old and not very interesting. Finally, tourists did not appreciate rainy days as they were compelled to undertake indoor activities at the hotels and thus could not visit the attractions as per their plans.

CONCLUSIONS

The study reveals that both first time and repeat tourists are satisfied with the destination and this includes those travelling for leisure, VFR and business. The data collected provides important information regarding tourist satisfaction at the destination under scrutiny. The expectancy-disconfirmation model (Oliver, 1980) used in the study has investigated tourist satisfaction across 18 destination attributes as well as overall satisfaction with the destination. Positive disconfirmation arises with the destination because the outcomes are superior to the expectations of tourists. Tourists' satisfaction with individual destination attributes reveal that 13 attributes are positively disconfirmed. The highest positive disconfirmation occurs with “shopping facilities”, “spa facilities” and “cultural and historical sites”. It is believed that tourists are satisfied with these attributes as the gap scores are positive. However, these results could be explained by lower expectations scores obtained for these attributes as they have only been promoted during recent years. Hence, customers are more likely to have lower expectations as these are not core attributes which position the destination and which impact on tourists' expectations. On the other hand, 5 destination attributes are negatively disconfirmed as they fall below the expectations of tourists. These attributes are “quality of hotels”, “reasonable price”, “peaceful environment”, “attractive beaches” and “sunny and warm weather”. Although negative disconfirmation occurs, it is important to note that these attributes fall below expectations of consumers (<0.5) to a little extent indicating that tourists are only slightly dissatisfied. Tourists' dissatisfaction could be further explained by the open-ended answers where they stated that the environment of the destination is unclear including the beaches and the destination is lagging behind with regards to protecting the environment. Additionally the traffic and congested road may spoil the “peaceful environment” of the destination. A few tourists also mentioned that on some occasions, they were charged high prices which may explain the dissatisfaction

with “quality of hotels” and “reasonable price”. Furthermore, since tourist brochures and advertising always portray a “sunny and warm climate”, this is likely to raise the expectations of customers. Therefore, when tourists encountered rainy days, the outcome associated with the attribute “sunny and warm climate” was lower than their enhanced expectations. This study has helped to identify the weak attributes of the destination. Particular attention should be paid to improve the destination and satisfy tourists so that they are motivated to travel long distances to visit this small island destination despite of the existence of competing destinations as well the threat of the global financial crisis. Future studies could investigate the impacts of tourist satisfaction on their behavioral intentions.

REFERENCES

- Central Statistical Office (2008). “Central Statistics Office”, from : <<http://www.gov.mu> > (Accessed 25 April, 2008).
- Duke, Charles, R. and Margaret A. Persia (1994). “Foreign and domestic escorted tour expectations of American travelers.” In *Global Tourist Behaviour*, edited by Muzaffer Uysal. New York: International Business Press, pp. 61-78.
- Echtner C. M. and Ritchie B (1993). “The measurement of destination image: an empirical assessment.” *Journal of Travel Research*, 31 (3), 3-13.
- Gursoy, D., K. W. McCleary, and L. R. Lepsito (2003). “Segmenting Dissatisfied Restaurant Customers Based on Their Complaining Response Styles.” *Journal of Food Service Business Research*, 6 (1), 25-44.
- Gursoy, D., K. W. McCleary, and L. R. Lepsito (2007). “Propensity to Complain: Affects of Personality and Behavioral Factors.” *Journal of Hospitality & Tourism Research*, 31 (3), 358-386.
- Gyte, Douglas, M. and Angela Phelps (1989). “Patterns of destination repeat business: British tourists in Mallorca, Spain.” *Journal of Travel Research*, 28 (summer), 24-28.
- Juaneda, C. (1996). “Estimating the probability of return visits using a survey of tourist expenditure in the Balearic Islands.”, *Tourism Economics*, 2(4), 339-352.
- Kozak, K. and Rimmington, M. (2000). “Tourist satisfaction with Mallorca Spain, as an off-season holiday destination.” *Journal of Travel Research*, 38, February, 260-269.
- Neal, J. D. and Gursoy, D. (2008). “A multifaceted analysis of tourism satisfaction.” *Journal of Travel Research*, 47, August, 53-62.
- Oliver, R. L. (1980). “A Cognitive Model for the Antecedents and Consequences of satisfaction Decisions.” *Journal of Marketing Research*, 27 (4), 460-469.
- Pizam, A., Neumann, Y. and Reichel, A. (1978). “Dimensions of tourist satisfaction with a destination area.” *Annals of Tourism Research*, July/September, 314-322.
- Tse, D.K, Wilton, P.C (1988). “Model of Consumer Satisfaction Formation: An extension.” *Journal of Marketing Research*, Vol. 25 pp.204-12..
- WTO (1985). Improving your measurement of customer satisfaction: a guide to creating, conducting, analysing, and reporting customer satisfaction measurement programs, ASQ Quality Press.

Yuksel, Atila (2001). "Managing customer satisfaction and retention: a case of tourist destinations, Turkey." *Journal of Vacation Marketing*, 7 (2), 153-168.

Yuksel, Atila and Yuksel Fisun (2001). "Comparative performance analysis: tourist's perceptions of Turkey relative to other tourist destinations." *Journal of Vacation Marketing*, 7 (4), 333-355.

AN ASSESSMENT OF THE EFFECTIVENESS AND EFFICIENCY OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THE DEVELOPMENT OF THE SMALL AND MEDIUM SIZED ENTERPRISES (SMES)

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ABSTRACT

The purpose of this study is to gather information about the use of ICTs among SMEs by firm size and industry sector and to determine the factors which are related to the development created by the effective and efficient use of ICTs. In order to study the wide range of ICTs, they were separated in five main categories (Information systems, Enterprise systems, Electronic Business & Commerce, Telecommunications networks and Identification, Data Capture & Telematics Technologies). The empirical analysis is based on a joint methodology of fully structured questionnaires and personal interviews in 54 Greek SMEs at four different industrial Sectors (Other Services, Manufacturing, Trade and Hotels).

JEL: M1; O3

KEYWORDS: ICT, SMEs, effective-efficient use, strategic management, process planning

INTRODUCTION

It is commonly accepted that our era is characterized by the intense globalisation of markets and the constantly increasing competition. Within this global competitive environment the small and medium sized enterprises (SMEs) is required to wage their own fight, a fight for modernization, for survival and for distinction. The SMEs are a component element of the structure of all economies and societies of our planet. Quite a few studies, research institutions and, of course, researchers have come to the conclusion that small and medium sized enterprises significantly contribute to economic development, production, competitiveness, employment, as well as decentralization and social coherence. They also function as the seedbed of new enterprises, innovative products and applications, flexible business forms, servicing of local needs and a zoning plan for the distribution of employment and income (Storey, D.J. 1994, Singh, R. & Garg, S. 2008, Thomson, A. & Gray, C. 1999).

Most small and medium sized enterprises use information and communication technologies. Relevant research has shown that the use mainly of computers serves administrative and functional uses, such as the rendering of accounts, payroll, the drawing up of a budget, inventory, and other similar functions (Bridge & Peel, 1999). The basic condition that arises for the use of computers, but also of all technologies, old or new, electronic or not, is not only their acquisition by the SMEs, but also their correct and functional use (El Louadi, 1998).

In this particular study, what is examined on the first level is the use of Information and Communication Technologies (ICT) among SMEs regarding firm size and industry sector and on a second level, the factors on which the development created by the effective-efficient use of ICT is dependant. For the categorization of the SMEs, what was used was the definition provided by the European Committee

(2003). According to this new definition, in article 2 the complete definition of small and medium sized enterprises is given, after having determined that the basic condition for an enterprise to be recognized as a small and medium one is to respect the limits regarding Staff headcount and financial ceilings (annual turnover or annual balance sheet). The definition categorises SMEs in the following three categories:

Table 1: Definition of SMEs

Enterprise Category	Headcount (unchanged)	Annual Turnover	Annual Balance Sheet Total
Medium-sized	< 250	< 50 million €	< 43 million €
Small	< 50	< 10 million €	< 10 million €
Micro	< 10	< 2 million €	< 2 million €

This table shows the new definition, which introduces three different categories of enterprises. Each corresponds to a type of relationship which an enterprise might have with another. This distinction is necessary in order to establish a clear picture of an enterprise's economic situation and to exclude those that are not genuine SMEs.

The ICTs examined were classified into five main categories. Each category includes those technologies that are more frequently used. More specifically, the main categories of ICTs, as well as the technologies – systems included in each category are the following:

Table 2: ICT Classification

Main ICT Categories	Technologies - Systems
Enterprise Systems	Enterprise Resource Planning - ERP Customer Relationship Management - CRM Supply Chain Management - SCM
Information Systems	Transaction Processing Systems - TPS Management Information Systems - MIS Decision-Support Systems - DSS Executive Support Systems - ESS
E-Business & E-Commerce Technologies	E-Business (includes transactions of enterprise activities only) E-Commerce (includes transactions of commercial activities only)
Telecommunication Networks	Wired Wireless
Identification and Data Capture Technologies & Telematics Technologies	Portable Data Collection, Hand Held Readers, Magnetic & Smart Card Readers, RFID etc.

This table shows the main categories of ICT and the technologies-systems that are included in each ICT category.

The remainder of the paper is organized as follows. Section 2 briefly discusses the relevant literature. Data selection and research methodology are described in Section 3. Section 4 provides analysis and interpretations of the empirical results and Section 5 concludes the paper.

LITERATURE REVIEW

In today's competitive environment, there are three basic reasons which prove why the efficient use of information systems constitutes a primary condition in the competitiveness of SMEs. First of all, the competitive tension within each market entails that enterprises operate under pressure and therefore seek out cleverer and more innovative methods in relation to those of their competitors. Secondly, the basic flow of all enterprises is turning inflow into profitable outflow. This means that the producers are directly dependent on the collaboration with their suppliers, their customers and their distribution network. Thirdly, information technology is the one that shows the way towards the internationalization of an enterprise. Researchers such as Quelch and Klein (1996) predicted the significant benefits that stem from the adoption of ICTs in the internationalization effort of SMEs, and they actually came to the conclusion that the creation of the Internet overthrew the traditional methods and practices of global marketing even within the developing economies. Furthermore, they were led to the conclusion that, as distribution

channels tend to be less developed, direct and/or efficient in the emerging markets than in the American market, the Internet offers a unique opportunity to overthrow the present situation (Hamill, J.1997, Hamill, J. & Gregory, K. 1997, Poon, S. & Jevons, C. 1997, Bennett, R. 1997, Samiee, S. 1998).

The efficient- effective use of ICTs can contribute also in other ways to the development of the SMEs. The best known ways are microeconomic theory, the theory of transaction cost and the theory of representation. According to the microeconomic theory, the new technologies are considered to be the production factors which substitute capital and labour. The result is the requirement of less capital and labour for the production of the same result. According to the theory of transaction cost, enterprises exist because they can perform transactions internally in a cheaper way than with domestic enterprises in the market. The enterprise is profitable when it enters a market that it has not itself created. Information systems contribute to the reduction of the cost of participating in a market – that is the transaction cost- by making its active engagement within it more attractive. Traditionally, enterprises expand in size so as to reduce the transaction cost. Information systems reduce by definition the cost for a given size, providing at the same time the opportunity for the increase of income without a further increase in size, or even, in many cases, the opportunity for its reduction (Cordella. A. 2006, Cheung, Steven N. S. 1987, Niehans, J. 1987). Finally, as far as the theory of representation is concerned, the enterprise is a network of contracts among the interested individuals, and not a unified entity that seeks maximization of profit. The owner of the enterprise employs interested individuals by relinquishing authority and delegating responsibility. These individuals need to be managed, supervised and controlled, which entails a certain cost, the cost of representatives or interested individuals. As organizations grow, the cost of representatives or interested individuals grows. Information systems “put pressure” on the cost curve downwards, thus averting the expansion of organizations at the expense of the cost of representatives or interested individuals (Wickramasinghe, N. 2006).

One of the obstacles hindering the effective use of ICTs in the SMEs is the lack of official planning, programming and methodology. Most of the planning time is wasted on survival techniques that the SME will develop, and as a result, the time allocated to information technology projects is minimal or non-existent (Pollard & Hayne, 1998). This was also shown by the study conducted for the Technology and the Internet in the SMEs by Dandridge and Levenburg (2000), in which many small and medium sized enterprises are shown as having websites just because they have to. A second serious obstacle is lack of experience in ICTs, as well as in the possibilities offered in the intra-business procedures. Moreover, apart from the technical knowledge and possibilities, the bibliography focuses its attention on the importance of the use of these technologies (Chapman et al., 2000, Yap et al., 1992). The use includes in essence the strategic understanding of the opportunities in the market, provided by the new ICTs, their application in the enterprise and, of course, their ability to successfully lead to the creation of competitive advantages (Tetteh & Burns, 2001). A substantial obstacle to the successful use of ICTs for the SMEs is also the lacking understanding of the benefits offered.

On the other hand, neither do the investments on information technology alone suffice to render the enterprises and their executives more efficient, if they are not accompanied by supportive values, structures and attitudes within the organization, and by other complementary assets (K. Laudon & J. Laudon, 2006). Research has shown that the enterprises which invest in complementary assets, such as new business processes, executive behaviour, and the organizational culture – training, achieve better performances (Brynjolfsson, 2003, Brynjolfsson & Hitt, 2000, Davern & Kauffman, 2000).

RESEARCH METHODOLOGY

A joint methodology of fully-structured questionnaire and in-depth interviews was selected as the primary research instrument in order to gain as broad a view as possible of the issues surrounding application of ICT, amongst a spectrum of SMEs from 4 out to 51 Greek geographical areas (States/provinces) which

fulfilled the criteria of GDP-sharing, working population and total number of population. A total of 100 companies were selected and letters were sent out requesting an interview, while follow-up telephone calls by the researcher negotiated access to each business. Fifty four SMEs were positive responded. The main reason that the authors have attempted to use a combination of techniques was to minimize bias and error and overcome any ambiguities.

The survey questionnaire was divided into four parts. Part one deals with the adoption and use of ICTS and part two covers questions addressed to evaluate the degree of emphasis placed on strategic and operational planning of ICTs and whether the strategic process was systematic and formal. Part three covered the financial information and the last part was based on general information about each firm.

Personal interviews were conducted with the person deemed to be most knowledgeable on the ICTs developments within the firm. For that reason, the interviewees ranged from director or owner-manager and IT personnel to general managers. Only one interview per company was conducted. A mix of closed and open-ended questions was included to conduct the structured interviews. This provided a collection of quantitative and qualitative data, and enabled comparisons based on rating, ranking and individual contextual analysis. On average, the interviews lasted one hour and 15 minutes based on a fully structured questionnaire. Completed questionnaires were coded and analyzed using the SPSS 17.0 (Statistical Package for Social Sciences).

A stratified random sample of SMEs was drawn from four industry sectors according classification of economic activity by NACE (rev. 1.1). The criteria of total selection of industry sectors and SMEs according to their two-digit NACE code allocation were attendance index of SMEs in each industry sector, contribution index of each industry sector in Gross Value Added and E-Business Index. The data for two first indices were found by National Statistical Service of Greece and ICAP databases while the last Index was adopted by *European E-Business Report 2003* (Robinson, S. 2003). The final allocation of our sample (n=54) according to industry sector and firm size is illustrated as follows (Table 3):

Table 3: Distribution of Interviews by Firm Size and Sector

Industry Sector	Sub-sector – two digits allocation	Micro Firms (0-9)	Small Firms (10-49)	Medium Firms (50- 249)	Total
Other Services	K 70, K 72, K74	13	8	2	23
Manufacturing	D15, D 22	2	5	2	9
Wholesale Trade	G 52	7	3	3	13
Hotels	H 55	1	6	2	9
Total		23	22	9	54

This table shows the final allocation of our sample (n=54) according to industry sector and firm size.

It should be re-emphasized here that the research was conducted as part of a PhD research; therefore the survey sample size was necessarily limited, due to financial and time constraints but the authors believed that it would shed some light on the current perceptions of SMEs about the application of ICTs.

EMPIRICAL RESULTS

First, we examine the statistical information from the use of each ICT by Firm Size. Next, we investigate the significance of the differences between firm size, industry sector and each ICTs. Finally, we explore the development of SMEs which was created through the adoption – use of ICTs. The development was evaluated on the basis of the increase in income stemming from the ICTs after the adoption – use of - ICTs.

Statistical Information from the Use of Each ICT by each SME Categories

The application study of the information systems TPS, DSS, MIS and ESS produced the following results. First, the information system TPS is used by the 100% of the SMEs of all three categories. The general use of the TPS is totally justified because the specific information system supports the administrative executives in the monitoring of the basic activities and transactions of the enterprise (i.e.: sales, receipts, deposits, payroll, credit decisions and the flow of materials in a factory). Second, the DSS is used only by the small enterprises at a rate of 36,4% and not at all by the micro and the medium-sized ones. The low application of the system by the small firms and the absence of its application by the micro and medium-sized firms was justified by the interviewees through the use of the MIS. More specifically, they claimed that the DSS, as well as the MIS, both serve the administrative level of the firm, and therefore, they prefer to choose the MIS due to limited financial resources. It is true that the MIS is applied by the 34.8% of micro, the 50% of small and the 77.8% of medium firms. Finally, the Executive Support Systems – ESS are used only by the category (10-49) of the SMEs, and not at all by the small and medium firms. The micro firms are expected not to use the ESS because these systems serve the strategic level of decision making of the firm, and their creation is recommended to financially and operationally bigger firms. On the other hand, the absence of use of the ESS by the medium firms constitutes an element for further study because the firms of this size are usually interested in examining strategic matters and long term trends both in their internal and their external environment, which is not confirmed in the specific case.

The Enterprise Resource Planning system is applied at a small rate by the micro firms (13%), while its rate of use by the small firms (59.1%) and the medium ones (88.9%) increases dramatically. With the use of ERP applications, the SMEs achieve the complete and utterly programmed utilization of their resources, by having a complete picture of the people the firm deals with, their human resources, their inventory of products, machinery, storage rooms, etc. It is for these reasons that its wide use is observed especially in the two big categories where the needs for completion of information both horizontally and vertically are greater. The specialized use of the ERP and its adoption cost constitute constraints according to the answers given by the micro enterprises.

The enterprise system CRM is applied at a rate of 34.8% by the micro, of 45.5% by the small ones and of 55.6% by the medium firms. The use of CRM is deemed particularly low in all three categories of SMEs, especially if we take into account that the handling of customers is directly related to the development and the profitability of every enterprise. For the use of the CRM, what is required is the completion of business processes, changes in the organizational processes and in data management, so as to achieve inter-operational completion throughout the enterprise. Sales, marketing and customer service, which may be considered as separate operations, have to be completed. Employees, business partners and third service organizations must share the customers. Many SMEs underestimate the degree to which all company departments can contribute to customer relations, as well as the degree of the required completion. Technology cannot handle customer relations if these administrative and organizational matters are not resolved first. (Day, G. 2003).

For the analysis of the enterprise system for the supply chain management (SCM) the SMEs, which belong to the Sector “Other Services” were not included, as these do not use the specific system due to the nature of their business activity. The study, in the remaining three sectors (manufacturing, wholesale trade and hotels) showed that the SCM is used by the 40% of the micro, and the 28.6% of the small and the 28.6% of the medium firms, which of course surprises us because the micro firms use the SCM more than the small and medium ones, while we would expect the opposite. Even in this case, the application rates are particularly low because the specific enterprise system is not restricted simply to the execution of orders, but it is connected to strategic matters, such as the ability to create and deliver new products or to create and materialize new business models (Kopczak & Johnson, 2003).

In general, the SCM is used by the 32.3% of the SMEs, while the CRM by the 42.6% and the ERP by the 44.4%. From these three percentages arises the indication of low use of the enterprise systems by the SMEs despite their usefulness on both an operational and administrative level, as well as on a strategic one. For the Technologies of e-business and e-commerce high rates of use were observed. More specifically the technologies of e-Business are used by the 100% of SMEs of all three categories. This use of e-Business is justifiable because it provides the SMEs with the opportunity to conduct faster and with fewer mistakes their business activities. The technologies of e-commerce are used by the 73.9% of the micro, the 86.4% of the small and the 77.8% of the medium-sized firms. The rates are very high in all three categories, which prove the SMEs interest in approaching new markets and creating new commercial activities at a low cost.

As for the Telecommunication Networks Technologies, the SMEs were asked if they use wired networks and/or wireless networks or if they do not use Telecommunication Network Technologies at all. According to the given answers, the micro-firms at a rate of 52.2% do not use communication networks. This rate decreases to 18.2% in the small firms and to 22.2% in the medium firms. From the percentages in the three categories arises that one out of three SMEs (33.3%) does not use network technologies at all. This percentage is particularly high, especially if we take into account that information sharing in this day and age is considered to be of vital importance for the development and the competitiveness of enterprises.

Finally, as for the use of Identification and Data Capture Technologies & Telematics Technologies, an increase of application from category to category is observed, starting from 39.1% by the micro, 63.6% by the small and 77.8% for the Medium Sized ones. The increased use of these technologies is to be expected as they cover daily executive needs by simplifying processes, which in the past were time-consuming, and clerical errors.

From the personal interviews, we observed that the perception of SMEs of the use of ICTs has a dual character, which arises from the executive use of technology, that is that use which directly relates to project implementation and strategic use, that is that use which will lead the enterprise to a higher level of internal management, but also of external strategy. The adoption of ICTs starts, of course, from the executive use of every technology that is imported to the organization, and its results are tangible in the short run, while the strategic use of ICTs sets long-term goals, and for this reason, its results are tangible on the long run. It is only logical that the SMEs, particularly the micro ones, are more interested in technologies that offer immediate tangible results and less so in results which will require time to produce results, even if these results will elevate the entire enterprise to a higher business level.

Analysis of Association between ICT and SMEs

To test whether or not the use of each ICT depends on the firm size, we performed a chi-square test for independence between the two categorical variables. It was found that there is dependence between the two only in the following three cases.

- Firm size and ERP
- Firm size and wired networks
- Firm size and wireless networks

Table 5 tells us that the Pearson Chi-Square statistic equals 18.296 with 2 degrees of freedom (d.f.) and its related p-value is less than 0.0005 (0.000 on the output). It follows that we can reject H_0 : Firm size and ERP are statistically independent at the 0.05 level of significance, since the p-value is less than 0.05.

Table 4: Firm Size & ERP Contingency Table

Firm Size			ERP		Total
			Applied	Not Applied	
Firm Size	0-9	Count	3	20	23
		% within Firm Size	13.0%	87.0%	100.0%
		Adjusted Residual	-4.0	4.0	
	10-49	Count	13	9	22
		% within Firm Size	59.1%	40.9%	100.0%
		Adjusted Residual	1.8	-1.8	
	50-249	Count	8	1	9
		% within Firm Size	88.9%	11.1%	100.0%
		Adjusted Residual	2.9	-2.9	
Total		Count	24	30	54
		% within Firm Size	44.4%	55.6%	100.0%
		Adjusted Residual			

The chi-square test tells us that there is some departure from statistical independence, but it says nothing about the nature of this departure or how strong it is. Post hoc analyses of the contingency table cells are based on adjusted residuals that are calculated by dividing the residual (i.e., the difference between observed and expected cell frequency) by the standard error of the contingency table cell. The adjusted residuals (table 4) of the categories 0-9 and 50-249 are greater than 1.96 in their absolute magnitude, indicating significant deviations from the independency assumption. In addition, the sign of the adjusted residuals supports the association model since the micro firms that use ERP and medium-sized firms that do not use ERP are both fewer in number than would be expected by chance, as indicated by the negative sign, while the micro firms that do not use ERP and medium-sized firms that use ERP are both more than would be expected by chance, indicated by the positive sign.

Table 5: Chi-Square Statistic for Firm Size & ERP

Statistic	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.296(a)	2	.000
Likelihood Ratio	20.334	2	.000
Linear-by-Linear Association	17.645	1	.000
N of Valid Cases	54		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.00.

Looking at the data in Table 7, it appears that the Pearson Chi-Square statistic equals 6.523 with 2 d.f. and its related p-value is 0.038. It follows that we can reject H_0 : Firm size and Wired networks are statistically independent at the 0.05 level of significance, since the p-value is less than 0.05. The adjusted residuals of the category 0-9 are 2.6 (greater than 1.96) in their absolute magnitude, indicating significant deviations from the independency assumption.

Table 6: Firm Size & Wired Networks Contingency Table

Firm Size			Wired Networks		Total
			Applied	Not Applied	
	0-9	Count	10	13	23
		% within Firm Size	43.5%	56.5%	100.0%
		Adjusted Residual	-2.6	2.6	
	10-49	Count	17	5	22
		% within Firm Size	77.3%	22.7%	100.0%
		Adjusted Residual	1.8	-1.8	
	50-249	Count	7	2	9
		% within Firm Size	77.8%	22.2%	100.0%
		Adjusted Residuals	1.0	-1.0	
Total		Count	34	20	54
		% within Firm Size	63.0%	37.0%	100.0%
		Adjusted Residuals			

Table 7: Chi-Square Statistic for Firm Size & Wired Networks

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.523(a)	2	.038
Likelihood Ratio	6.579	2	.037
Linear-by-Linear Association	5.016	1	.025
N of Valid Cases	54		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.33.

Similarly, examining the data taken from Table 9 the Pearson Chi-Square statistic equals 7.021 with 2 d.f. and its related p-value is 0.030. It follows that we can reject H_0 : Firm size and Wireless networks are statistically independent at the 0.05 level of significance, since the p-value is less than 0.05. The absolute values of the adjusted residuals of the categories 0-9 and 10-49 are 2.6 and 2.2 (greater than 1.96), indicating significant deviations from the independency assumption.

Then, the four Industry sectors were examined as to the use, or absence thereof, of the ICTs. More specifically, we wanted to statistically examine the importance of the influence of the Industry sector in relation to the use of the ICTs. It was found that there is a statistically significant association only between Industry sector (by NACE) and wired networks.

For the examination between the four sectors and the wired networks, *Fisher's Exact Test* was used as an alternative to the Chi-square test. Recall, that when using Chi-square test, no cell in the contingency table should have an expected count less than 1, and no more than 20% of the cells should have an expected count of less than five; otherwise a Fisher exact test will be more appropriate.

Table 8: Firm Size & Wireless Networks Contingency Table

			<i>Wireless Networks</i>		<i>Total</i>
			Applied	Not Applied	
Firm Size	0-9	Count	9	14	23
		% within Firm Size	39.1%	60.9%	100.0%
		Adjusted Residual	-2.6	2.6	
	10-49	Count	17	5	22
		% within Firm Size	77.3%	22.7%	100.0%
		Adjusted Residual	2.2	-2.2	
	50-249	Count	6	3	9
		% within Firm Size	66.7%	33.3%	100.0%
		Adjusted Residuals	.5	-.5	
Total		Count		22	54
		% within Firm Size		40.7%	100.0%
		Adjusted Residuals			

Table 9: Chi-Square Statistic for Firm Size & Wireless Networks

	<i>Value</i>	<i>df</i>	<i>Asymp. Sig. (2-sided)</i>
Pearson Chi-Square	7.021(a)	2	.030
Likelihood Ratio	7.169	2	.028
Linear-by-Linear Association	4.020	1	.045
N of Valid Cases	54		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.67.

Looking at the data in Table 11, it appears that the Fisher's Exact Test statistic equals 8.359 and its related p-value is 0.036. It follows that we can reject H_0 : Industry sector and Wired networks are statistically independent at the 0.05 level of significance, since the p-value is less than 0.05. The adjusted residuals (table 10) of Manufacturing are 2.0 (greater than 1.96) in their absolute magnitude, indicating significant deviations from the independency assumption. In addition, from the comparison of rates of use of wired networks in the four sectors of SMEs, it arises that these are used mostly in the hotel and other services sectors, while in the sectors of wholesale trade and manufacturing they are used significantly less.

Table 10: Industry Sectors & Wired Networks Contingency Table

			Wired Networks		Total
			Applied	Not Applied	
Industry Sector (by NACE)	Other Services K 70, K 72, K 74	Count	17	6	23
		% within Industry Sector (by NACE)	73.9%	26.1%	100.0%
		Adjusted Residuals	1.4	-1.4	
	Manufacturing D 15, D 22	Count	3	6	9
		% within Industry Sector (by NACE)	33.3%	66.7%	100.0%
		Adjusted Residuals	-2.0	2.0	
	Trade G 52	Count	6	7	13
		% within Industry Sector (by NACE)	46.2%	53.8%	100.0%
		Adjusted Residuals	-1.4	1.4	
	Hotels 55	Count	8	1	9
		% within Industry Sector (by NACE)	88.9%	11.1%	100.0%
		Adjusted Residuals	1.8	-1.8	
Total	Count	34	20	54	
	% within Industry Sector (by NACE)	63.0%	37.0%	100.0%	

Table 11: Fisher's Exact Test for Industry Sector & Wired Networks

				Monte Carlo Sig. (2-sided)		
				Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Pearson Chi-Square	8.740 ^a	3	.033	.031 ^b	.027	.034
Likelihood Ratio	9.105	3	.028	.042 ^b	.038	.046
Fisher's Exact Test	8.359			.036 ^b	.032	.039
Linear-by-Linear Association	.000 ^c	1	.993	1.000 ^b	1.000	1.000
N of Valid Cases	54					

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 3.33.

b. Based on 10000 sampled tables with starting seed 2000000.

c. The standardized statistic is .009.

Development of SMEs through the Effective – Efficient Use of ICTs

The development of SMEs, which arose from the effective – efficient use of ICTs was evaluated on the basis of the increase in the SMEs' income, which was generated by the adoption-application of ICTs. This is income which would not have been generated if the application of ICTs by the SMEs was not effective – efficient.

The potential for development of the SMEs was evaluated with the help of a model of logistic regression, where the dependent variable is the increase in income of an enterprise after the use of the ICTs (yes, no), and where the independent variables are the presence of a specific ICT strategy for their use (yes, no), the potential of approaching new markets or segments after the adoption of ICTs (yes, no) and the investment in ICTs in 2006 (in thousands of euros).

Table 12: Parameter Estimates

Parameter	B	Std. Error	95% Wald Confidence Interval		Hypothesis Test			Exp(B)	95% Wald Confidence Interval for Exp(B)	
			Lower	Upper	Wald Chi-Square	df	Sig.		Lower	Upper
(Intercept)	-4.660	1.5892	-7.774	-1.545	8.597	1	.003	.009	.000	.213
[B2_SetupStrategy=2]	3.809	1.2833	1.294	6.325	8.811	1	.003	45.123	3.648	558.147
[B2_SetupStrategy=1]	0 ^a	.	.	.	.	.	.	1	.	.
[A10_ApproachingNewMarkets=2]	3.769	1.3881	1.048	6.490	7.372	1	.007	43.337	2.853	658.322
[A10_ApproachingNewMarkets=1]	0 ^a	.	.	.	.	.	.	1	.	.
C4.5_InvestICT_Scale_2006 (Scale)	6.811E-6	7.6693E-6	-8.221E-6	2.184E-5	.789	1	.375	1.000	1.000	1.000
	1 ^b									

a. Set to zero because this parameter is redundant.

b. Fixed at the displayed value.

The table 12 of the analysis is the most important as it provides us with the parameters of the final model together with the equivalent inductive verifications and their validity boundaries. Based on the Wald criterion, a significant influence on the shaping of the dependent variable values stems from the variables *SetupStrategy* (p-value = 0.003) and *Approach_NewMarkets* (p-value = 0.007), that is the presence of a specific ICT strategy and the potential for approaching new markets or segments. The variable *InvestICT_Scale_2006* moves away from the model since its p-value is equal to 0.375.

The reason for maintaining the *InvestICT* variable is to show that the development of the SMEs stemming from the effective – efficient application of ICTs is the result of the adoption of a specific Information and Communication Technologies strategy, and not just the result of the investment in information technology. In reality, it is proved that the development of the SMEs stemming from the effective application of technologies is a matter of strategic planning and the need to approach new market and/or segments thereof.

According to the estimated parameters, through the presence of a specific ICT strategy, the relevant probability of income increase for an enterprise rises by 45% ($e^{3.809} = 45.123$), irrespective of the

potential of approaching new markets or segments. In addition, the relative ratio of the probability of income increase of an enterprise that has the potential to approach new markets or segments versus the other ones is equal to $e^{3.769} = 43.337$, irrespective of the adoption of a new strategy. Therefore, the model that is evaluated through the sample data for the development of the SMEs stemming from the use of ICTs, has the following form:

$$\ln \left[\frac{p}{1-p} \right] = -4.660 + 3.809(\text{SetupStrategy} = 2) + 3.769(\text{Approach_NewMarkets} = 2)$$

Where p is the estimated probability of income increase of an enterprise following the use of ICTs, $\text{SetupStrategy} = 2$ is the dummy variable which indicates the presence of a specific strategy (in contrast to the SMEs which do not have a specific strategy for the use of ICTs) and $\text{Approach_NewMarkets} = 2$ is the dummy variable which indicates the potential of approaching new markets or segments following the adoption of ICTs (in contrast to the other SMEs). Following the evaluation of the logistic model parameters, what remains is the evaluation of its fit to the sample data. A significant measure of good fit is the goodness of fit test (table 13).

Table 13: Goodness of Fit

	Value	df	Value/df
Deviance	21.958	36	.610
Scaled Deviance	21.958	36	
Pearson Chi-Square	39.264	36	1.091
Scaled Pearson Chi-Square	39.264	36	
Log Likelihood	-10.979		
Akaike's Information Criterion (AIC)	29.958		
Finite Sample Corrected AIC (AICC)	31.101		
Bayesian Information Criterion (BIC)	36.713		
Consistent AIC (CAIC)	40.713		

The value of the deviance is equal to $21.958 > X^2_{0.95,36} = 50.998$ and the p-value is equal to $0.9683 > 0.05$. This constitutes an indication that the fit of the logistic regression model that was applied is satisfactory.

Table 14: Omnibus Test^a

Likelihood Ratio Chi-Square	df	Sig.
31.883	3	.000

a. Compares the fitted model against the intercept-only model.

An additional measure for the evaluation of the fit of the model to the sample data is achieved through the ratio of the maximum values of the likelihood ratio statistic (table 14) for the complete model (L_F) and the model which includes only the fixed term (L_0). The value of the ratio is $-2 \ln \left(\frac{L_0}{L_F} \right) = 31.883$ (Model Chi-square) with 3 degrees of freedom (p-value < 0.001). We can conclude, that is, that the two independent variables, when combined in the form of the logistic model, significantly contribute to forecasting the values of the dependent variable.

CONCLUSION

Many studies have been carried out in relation to the adoption and use of ICTs in business, thus contributing to their acceptance and dissemination. The present paper has tried to identify different views of SMEs on the use of ICTs.

The results of the study that was conducted, lead us to three conclusions. The first one is that the ICTs appear with a dual character which stems from the executive use of technology, meaning that use which directly relates to project implementation and strategic use, that is that use which will elevate the enterprise to a higher level of internal management but also of external strategy. The second conclusion is that size does not appear to make a difference as far as the adoption of ICTs by the SMEs is concerned. A significant difference stems from rational planning and programmed action on the part of the SMEs, which constitutes our third conclusion. As it is known, technology constantly evolves and with it must evolve those who are related to it. Therefore, the study of those elements that compose a business strategy, which will not simply be based on new technologies but will also be led by them, is recommended as the object of future research.

REFERENCES

- Bennett, R. (1997) "Export marketing and the internet: experiences of web site users and perceptions of export barriers among UK businesses," *International Marketing Review*, Vol. 14(5), p. 324-344
- Bridge, J. & Peel, M.J. (1999) "Research note: A study of computer usage and strategic planning in the SME sector," *International Small Business Journal*, Vol. 17(4), July-September, p. 82-87
- Brynjolfsson, E. (2003) "The IT Productivity Gap," *Optimize Magazine*, July, Issue 21
- Brynjolfsson, E. & Hitt L. (2000) "Beyond Computation: Information Technology, Organizational Transformation and Business Performance," *Journal of Economic Perspectives*, Vol. 14(4), p. 23-48
- Chapman, P., James-Moore, M., Szczygiel, M. & Thompson D. (2000) "Building internet capabilities in SMEs," *Logistics Information Management*, Vol. 13(6), p. 353-360
- Cheung, Steven N. S. (1987) "Economic organization and transaction costs," *The New Palgrave: A Dictionary of Economics*, Vol. 2, p. 55-58
- Cordella, A. (2006) "Transaction costs and information systems: does IT add up?" *Journal of Information Technology*, Vol. 21, p. 195-202
- Dandridge, T. & Levenburg, N.M. (2000) "High Tech Potential? An Exploratory Study of Very Small Firms' Usage of the Internet," *International Small Business Journal*, Vol. 18(2), January-March, p. 81-91
- Davern, M. & Kauffman, R. (2000) "Discovering Potential and Realizing Value from Information Technology Investments," *Journal of Management Information Systems*, Vol. 16, No(4), p. 77-82
- Day, G.S. (2003) "Creating a Superior Customer-Relating Capability," *MIT Sloan Management Review*, Vol. 44(3), p. 77-82
- Deakins, D. (1996). *Entrepreneurship and Small Firms*. London: McGraw-Hill Publishing Company
- El Louadi, M. (1998) "The relationship among organization structure, information technology and information processing in small Canadian firms," *Canadian Journal of Administrative Sciences*, Vol. 15(2), June, p. 180-199

- European Commission (2003) "Commission recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises," *Official Journal of the European Union*, 2003/361/EC, May, p. 36-41
- Hamill, J. (1997) "The internet and international marketing," *International Marketing Review*, Vol. 14(5), p. 300-323
- Hamill, J. & Gregory, K. (1997) "Internet marketing in the internationalization of UK SMEs," *Journal of Marketing Management*, Vol. 13(1-3), p. 9-21
- Kopczak, L. & Johnson, E. (2003) "The Supply-Chain Management Effect," *MIT Sloan Management Review*, Vol. 44(3), p. 27-34
- Laudon, K.C. & Laudon P.L. (2006) *Essentials of management information systems: managing the digital firm*. 6th Edn. USA: Prentice Hall
- Niehans, J. (1987) "Transaction Costs," *The New Palgrave: A Dictionary of Economics*, Vol. 4, p. 677-80.
- Pollard, C.E. & Hayne, S.C. (1998) "The Changing Faces of Information Systems Issues in Small Firms," *International Small Business Journal*, Vol. 16(3), April-June, p. 70-87
- Poon, S. & Jevons, C. (1997) "Internet-enabled international marketing: a small business network perspective," *Journal of Marketing Management*, Vol. 13(1-3), p. 29-41
- Quelch, J.A. & Klein, L.R. (1996) "The internet and international marketing," *Sloan Management Review*, Spring, p. 60-75
- Robinson, Simon (2003) "Measuring e-business readiness: Challenges for statistics and research. In: European Commission (2003b)," *The European E-Business Report 2003 edition*, Report by the e-Business Watch. Luxembourg: Office for Official Publications of the European Communities. ISBN 92-894-5119-X. p. 187-192
- Samiee, S. (1998) "Exporting and the internet: a conceptual perspective," *International Marketing Review*, Vol. 15(5), p. 413-426
- Singh, R., Garg, S. & Deshmukh, S. (2008) "Strategy Development by SMEs for Competitiveness: A Review," *Emerald Group Publishing Limited*, Vol. 15(5), p. 525-547
- Storey, D.J. (1994). *Understanding The Small Business Sector*. London: International Thompson Business Press
- Tetteh, E. & Burns, J. (2001) "Global strategies for SME business: applying the SMALL framework," *Logistics Management Information*, Vol. 14(½), p. 171-180
- Thomson, A. & Gray, C. (1999) "Determinants of Management Development in Small Business," *Journal of Small Business and Enterprise Development*, Vol. 6(2), p. 113-127
- Wickramasinghe, N. (2006) "Expanding the explanatory power of agency theory for the knowledge economy," *International Journal of Management and Enterprise Development*, Vol. 3(5), p. 510-520

Yap, C.S., Soh, C.P.P. & Raman, K.S. (1992) "Information Systems success factors in small businesses," *Omega, International Journal of Management Science*, Vol. 20(5), p. 597-609

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CAUSALITIES BETWEEN THE SENTIMENT INDICATORS AND STOCK MARKET RETURNS UNDER DIFFERENT MARKET SCENARIOS

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ABSTRACT

This paper investigates the causal relationship between sentiment and returns under different market scenarios. In contrast to previous studies that subjectively identify the bullish and bearish markets, we apply a threshold model to econometrically detect the extreme level of investors' sentiment. The empirical results show that most of the sentiment measures exhibit a feedback relationship with returns while ignoring different market states. However, sentiment could be a leading indicator if the higher or lower levels of sentiments are distinguished. Among them, ARMS is a leading indicator if the market is more bearish (in the higher regime). Otherwise, the leading effect of the derivatives market sentiment indicators (the put-call trading volume and option volatility index) is discovered if the market is more bullish (in the lower regime). Our empirical findings further confirm the noise trader explanation that the causal direction would run from investors' sentiment to market behavior.

JEL: C32; G10

Keywords: Investor sentiment, Stock market returns, Granger causality, threshold model

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MEASURING CALL CENTRE EMPLOYEE SATISFACTION AND LOYALTY

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ABSTRACT

The purpose of this paper was to assess the service quality of a call centre as perceived by its employees using the SERVQUAL model. The paper explored the dimensions predicting front-line employee satisfaction and loyalty in the call centre. Data was collected by field study in a particular call centre in Mauritius using a modified SERVQUAL questionnaire. The study examined both perception and expectation levels of front-line employees. Regression models were used to test the influence of service quality dimensions on satisfaction and loyalty. The results indicated that loyalty was best predicted by overall satisfaction, tangibles and responsiveness. This study contributes to the understanding of service quality, satisfaction and employees' loyalty within a business process outsourcing organization.

JEL: M31

Keywords: Employee, Satisfaction, Loyalty, SERVQUAL, Call Centre, Mauritius

INTRODUCTION

The worldwide Business Process Outsourcing (BPO) market is growing rapidly and in Mauritius this sector is expected to grow into the fifth pillar of its economy. The country is aiming to become a cyber island so as to meet the demands of an ever changing economic environment. The Information Technology Enabling Services (ITES)- BPO industry in Mauritius is a relatively young and nascent sector, barely over five years old. The workforce in the ITES-BPO sector has recorded an increase of 26.2% over the period of 2006-2007 with the call centre industry still the highest generator of employment (Board of Investment, 2007). Since 2006, the government strategy is to attract higher value-added activities in the ITES-BPO field and generate \$1 billion revenue from this sector. The government objective is also to expand and create as many as 20,000 jobs in the sector by 2008. To achieve the set goals, it is essential for this sector to effectively manage its resources.

Although the call centre industry is growing at a rapid rate, yet little is known about employee satisfaction with respect to service quality within this industry. Previous studies have observed that employee commitment and high levels of employees' turnover are issues of great concern in call centers (Deery, Iverson and Walsh, 2002; Malhotra and Mukherjee, 2004). Front-line employees (FLE) in call centre perform a crucial role in the delivery of frontline services, which is fundamental to the management of customer relationships (Frenkel *et al.*, 1998). Consequently, Gabbott and Hogg (1998) suggested that the quality of the service encounter involves two significant elements: service personnel and the service setting. Therefore it is essential to measure the perceptions of FLE in a service setting. Despite the large amount of research examining customer service, little attention has centered on the employees who are responsible for customer service processes in the service industries. Thus the purpose of this paper is to evaluate service quality and satisfaction among FLE in a particular call centre in Mauritius. More specifically, this study seeks: (1) to measure employees' expectations and perceptions of service quality based on the SERVQUAL model and (2) to examine service quality dimensions in predicting satisfaction and loyalty among FLE in a call centre in Mauritius.

This paper provides a brief review on service quality, employee satisfaction and loyalty, followed by the research methodology and main results of the study. Finally conclusions and further research are outlined.

SERVICE QUALITY

Delivering quality service is considered to be an important strategy for success in today's competitive environment (Parasuraman *et al.*, 1985; Reichheld and Sasser, 1990; Zeithaml *et al.*, 1990, 1996). According to Gronroos (1988), service quality is commonly defined as a discrepancy between the service quality that is delivered by the organisation and the service performance that employees expect. Conceptually, service quality is defined as global judgment or attitude relating to the overall excellence or superiority of the service (Parasuraman *et al.*, 1988). Parasuraman *et al.* (1985) developed the framework for measuring service quality, the gap theory. SERVQUAL is the most widely utilised tool for measuring service quality (Parasuraman *et al.*, 1988; 1994; Sureshchandar *et al.*, 2001; Chiu, 2002) and its application continues to increase in different service settings, such as banks (Jabnoun and Al-Tamimi, 2003), hospitality industry (Saleh and Ryan, 1992), health sector (Arasli *et al.*, 2008), education (Tan and Kek, 2004) and travel and tourism (Fick and Ritchie, 1991). The service quality model examines the discrepancy between the expectations and perceptions and is often referred to as a disconfirmation model (Oliver, 1980; Bitner, 1990). The initial 10 categories were (1) reliability; (2) responsiveness; (3) competence; (4) access; (5) courtesy; (6) communication; (7) credibility; (8) security; (9) understanding/ knowing; and (10) tangibles (Parasuraman *et al.*, 1988). In 1988, they refined the SERVQUAL dimensions which collapsed to five dimension as follows: Tangibles (physical facilities, equipment, and appearance of personnel), Reliability (ability to perform the promised service dependably and accurately), Responsiveness (willingness to help customers and provide prompt service), Assurance (knowledge and courtesy of employees and their ability to inspire trust and confidence), and Empathy (caring, individualized attention the firm provides its customers). The SERVQUAL instrument for measuring service quality has been subjected to a number of criticisms. Researchers have criticized the SERVQUAL dimensions (Crompton and MacKay, 1989; Taylor *et al.*, 1993 and Babakus and Boller, 1992) and they argued that the dimensions change with the type of service. Researches (Cronin and Taylor, 1992; Teas, 1993) have argued that there is no real evidence to support the concept of performance minus expectations gap as a basis for measuring service quality. Despite the criticisms, Parasuraman *et al.* (1991; 1994) contended that the SERVQUAL scale using the expectation/performance gaps method is a much richer approach to measuring service quality.

Relationship between Service Quality and Satisfaction

Studies in services marketing have shown that service quality and satisfaction are closely related constructs (Cronin and Taylor, 1992; Oliver, 1993; Babakus *et al.*, 2004). Employee satisfaction is an important factor in determining service quality (Zeithaml *et al.*, 1990). Satisfied employees are more committed to continuous improvement and quality (Matzler *et al.*, 2004), thus they are also more committed to delivering quality service. However, the interactive nature of service delivery places service employees in a very critical role in the delivery of quality services (Zeithaml and Bitner, 2000). Numerous studies also show that satisfied employees are highly motivated, have good morale at work, and work more effectively and efficiently (Eskildsen and Dahlgard, 2000; Yoon and Suh, 2003). Research by Reichheld and Sasser (1990) suggest that the higher the degree of employee satisfaction, the greater the chance of customer satisfaction and customer retention. According to Schmit and Allscheid (1995) satisfied employees will engage in better service delivery. Yoon, Beatty, and Suh (2001) found a significant linkage between front-line bank employees' satisfaction and customer-perceived service performance. Yee *et al.* (2008) empirically examined employee satisfaction through a survey of service shops in Hong Kong and found that employee satisfaction is significantly related to service quality and customer satisfaction, while the latter in turn influenced firms profitability. Employee satisfaction should not be ignored, yet very few businesses seriously consider employee satisfaction. According to Allred

(2001) the most difficult step to service quality improvement usually involves developing consistent service performance from front-line employees. This study therefore is interested in investigating employee satisfaction as a function of service quality perceived by front-liners.

Relationship between Service Quality, Satisfaction and loyalty

Today service organizations are concerned in the delivery of quality service and the building of loyalty among employees and customers. If employees are not happy with the work, they are more readily to quit their jobs than satisfied employees. Researchers have found that satisfied employees are more likely to improve their job performance (Judge *et al.*, 2001), be creative and cooperate with others because satisfaction is the inner force that drives employee behavior. Previous studies have suggested that loyal employees are more willing and capable of delivering a higher level of service quality (Loveman, 1998; Silvestro and Cross, 2000). According to Schneider and Bowen (1985; 1993) the efforts to promote service quality must be based on managing employee behaviors and training them in interpersonal skills in order to exhibit a true customer focus. Bitner *et al.* (1990) observed that in service encounters, employee behavior will impact on the customer perceptions of service quality. Zeithaml *et al.* (1990) argue that employees who are not suited to their jobs will not be able to deliver quality service. Consequently having the right employees will enhance the likelihood of success for any enterprise. It is therefore crucial to understand employees' needs, demands and wishes and not only those of the customers (Edvardsson *et al.*, 1997). Conversely, employee satisfaction can improve productivity, reduce staff turnover and enhance creativity and commitment. However, although a substantial amount of service quality research has focused on service customers' perceived service quality (Parasuraman *et al.*, 1988; Carman, 1990; Parasuraman *et al.*, 1991; Babakus and Boller, 1992; Cronin and Taylor, 1992), relatively little attention has been paid to exploring what factors impact on service employees' behavior with regard to delivering service quality, and to articulating the predictors of employee behavior to service quality perception and satisfaction.

RESEARCH METHODOLOGY

Service quality from the employees' perspective in call centre has not been widely researched. This study seeks to fill that gap by adapting the SERVQUAL model to explore the factors predicting call centre employee satisfaction and loyalty. The items incorporated in the SERVQUAL model were modified to collect data from FLE. The service firm examined for this study was a call centre located in the Business Park at Ebene in Mauritius. The research design was based on Parasuraman *et al.* (1988) five dimensions of service quality: responsiveness, reliability, assurance, empathy and tangible. Some modifications were made to the items as 19 items were selected out of the SERVQUAL 22 items in order to suit the call centre service setting and to measure the expectations, perceptions and satisfaction of internal service levels of front-line employees. Each item was reworded to capture internal rather than external service quality. The questionnaire consisted of three sections. In the first section, demographic information about the respondents was captured. The second section was designed to measure the expectations (E) and perceptions (P) of the respondents according to the five service dimensions. Respondents were asked to rate their expectations and perceptions of each of the 19 items on a 5-point Likert scale ranging from "1 = strongly disagree" to "5 = strongly agree" as suggested by Babakus and Mangold (1992) and Johns *et al.* (2004). The final section was structured for the purpose of measuring employees' satisfaction with the call centre and subsequently their loyalty towards the organization. The study adopted the use of a single five-point item with endpoints "extremely dissatisfied" to "extremely satisfied" to measure FLE satisfaction and loyalty was assessed by two five-point items, namely intentions to stay and willingness to recommend the organization to others.

The developed questionnaire was pilot tested and no major problems were observed, but respondents suggested a few minor changes in the wordings of the instrument. The survey was administered to the FLE population of a particular call centre during a one-week period in March 2008. All employees in the

call centre were invited to participate in the study. A total of 130 questionnaires and covering letters were distributed. In total, 90 were judged usable for data analysis for this study. The SPSS 14.0 for Windows was used to analyse the data. Descriptive statistics analysis was used to investigate the service quality gaps. A paired t-test was used to evaluate the internal service quality of the call centre. Gap measures were defined as the difference in scores between the rating of each perception measure statement and the rating of the corresponding expectation statement. Regression analyses were used to identify the SERVQUAL dimensions influencing overall satisfaction and FLE loyalty.

RESULTS

In this study, the ratio of male to female employees was 56 percent to 44 percent. More than 61% of the respondents were between the ages of 18-25 and it is observed that employees in the call centre are on average young. Approximately 83% have either School Certificate or Higher School Certificate as highest level of education and the majority (68%) has less than 1 year of service.

While the main objective of the study was to address the issue of FLE perceptions of service quality in a call centre, it also proved useful to test the use of the adapted SERVQUAL instrument for measuring service quality within this service setting. The reliability of the scale was tested using Cronbach's alpha. An alpha value of 0.904 was obtained indicating a good internal consistency for the 19 item scale. The mean scores and standard deviation for the 19 expectations and perceptions items are presented in Table 1 together with the mean service quality gaps.

Table 1 also presented the grand mean scores on the basis of the expectations, perceptions and gap for the five dimensions. The gap scores enable the service manager to understand current service quality and also to quantify gaps that exist. The t-statistics was calculated to test for the significance difference between expectations and perceptions. The gap scores for the five dimensions were all negative implying that FLE expectations were actually not being met. All the gap scores were statistically significantly different at $p < 0.05$. It is further observed that the gap scores for Reliability (-1.12) is significantly higher than the other dimensions, followed by the gap scores for Empathy (-0.80), Tangibles (-0.68), Assurance (-0.54) and Responsiveness (-0.51). The gap scores for Reliability could be used to prioritize systems and process improvements while the other four gap scores could be used to develop staff training programs and improve service environment. The overall gap score (-0.57) was statistically significantly different at $p < 0.05$, indicating that the overall service quality fell below the employees' expectations.

Relative importance of the SERVQUAL dimensions on overall satisfaction and loyalty

The focus of this study was the extent to which overall satisfaction and loyalty among FLE in call centre can be predicted; therefore regression models were used to determine these relationships. The regression models considered the SERVQUAL dimensions as independent variables and overall satisfaction and loyalty as dependent variables.

The adjusted R^2 of 0.304 indicates 30.4 percent of variances in FLE satisfaction can be predicted by the service quality dimensions (Table 2). Overall satisfaction is predicted by the four dimensions, with the exception of Tangibles. The results of the regression analysis showed that each coefficient carried negative signs. Reliability, Responsiveness, Assurance and Empathy appeared to be significant predictors of overall employee satisfaction. These negative coefficients mean decreasing level of satisfaction.

Table 1: Gap Mean Difference between Expectations and Perceptions

Description of Items	Mean Expectation Scores		Mean Perception Scores		Gap Scores (P-E)		t-value
	Mean	SD	Mean	SD	Mean	SD	
Reliability	4.56	0.77	3.44	0.92	-1.12	0.81	-12.29
Do something by a certain time	3.91	0.99	3.41	1.33	-0.50	1.36	- 3.32*
We show sincere interest on solving our customers' problems	3.46	0.97	3.25	1.02	-0.21	1.19	- 1.51
We perform services right the first time	3.90	0.69	3.20	1.24	-0.70	1.23	-5.02*
We provide services at the time required/ promised	3.67	1.14	3.42	1.16	-0.25	1.26	-1.79*
We provide correct /accurate information to our customers	4.09	0.77	3.92	1.03	-0.17	1.19	-1.23
Responsiveness	3.89	0.66	3.39	1.06	-0.51	0.89	-5.06
We provide prompt services to our customers	3.78	1.06	3.19	1.41	-0.59	1.17	-4.51*
We are always willing to help our customers	4.01	0.78	3.54	1.12	-0.47	1.16	-3.58*
We are never too busy to respond to our customers' request	3.89	0.91	3.43	1.16	-0.46	1.05	-3.87*
Assurance	3.92	0.40	3.37	0.40	-0.54	0.78	-6.22
Customers' behavior instill confidence in us	3.75	0.81	3.38	0.88	-0.37	1.16	-2.82*
We can be trusted by our customers	4.18	0.69	3.37	0.99	-0.81	1.35	-5.33*
We are consistently courteous to our customers	4.05	0.82	3.54	0.92	-0.51	1.44	-3.13*
We have the required knowledge to answer our customers' questions	3.70	0.82	3.20	0.99	-0.50	0.96	-4.58*
Empathy	3.82	0.60	3.02	0.91	-0.80	1.02	-6.94
We give individual attention to our customers	3.76	0.79	2.89	1.10	-0.87	1.10	-7.04*
We have our customers' best interest at heart	3.86	0.83	3.00	1.23	-0.86	1.53	-4.99*
We understand the specific needs of our customers	4.00	0.80	2.94	1.05	-1.06	1.26	-7.47*
We have convenient working hours	3.65	0.98	3.24	1.05	-0.41	1.45	-2.48*
Tangibles	4.11	0.61	3.43	0.61	-0.68	0.95	-6.34
We have up-to-date equipment	4.09	1.13	3.43	1.19	-0.66	1.56	-3.75*
The materials used in the workplace are visually appealing	4.43	0.78	3.48	1.22	-0.95	1.29	-6.54*
The work environment is comfortable and attractive	3.81	0.82	3.39	1.18	-0.42	1.28	-2.91*
Overall (Combined scores of 19 items)	3.32	0.69	3.89	0.41	-0.57	0.66	-7.61*

Notes: Scores based on a five-point scale ranging from 1 = strongly disagree to 5 = strongly agree;

SD = Standard Deviation;

^a Gap mean is defined as perception mean – expectation mean;

A negative gap indicates that customers perceived that internet banking service delivery did not meet their expectations;

A positive gap indicates that customers perceived that internet banking service delivery exceeded their expectations; *Significant at $p < 0.05$

Table 1 presented FLE perceptions, expectations and the gap scores for the five SERVQUAL dimensions. The scores showed that FLE expectations were consistently higher than their perceptions, thus resulting in negative gaps. These negative gaps indicated areas for service improvements.

Table 2: Regression Analysis for FLE Satisfaction

Independent variable	Coefficient	Beta	t-vaies
Constant	3.547		17.603 ^a
Reliability	-0.170	-0.113	-0.608 ^a
Responsiveness	-0.126	-0.092	-0.456 ^a
Assurance	-0.400	-0.256	-1.577 ^a
Empathy	-0.120	-0.268	-1.430 ^b
Tangibles	-0.026	-0.020	-0.150

Note: $R^2 = 0.304$; ^a Significant at 0.01 level; ^b significant at 0.5 level

Table 2 showed the regression results of the five dimensions on FLE satisfaction. The table revealed that four of the five dimensions, with exception tangibles, were significant in predicting FLE satisfaction.

To further test employee loyalty measures against those of the SERVQUAL dimensions, additional regression analysis was conducted, using both employee satisfaction and SERVQUAL dimensions as predictors of intentions to stay and willingness to recommend the call centre to others. As it can be seen from Table 3, the regression is statistically significant. 36 per cent of the variation of loyalty could be explained by overall satisfaction and two of the five SERVQUAL dimensions, responsiveness and tangibles. The other SERVQUAL dimensions were not significant predictors of loyalty. It is surprising to note that tangibles of service did not contribute to overall satisfaction but contribute to willingness to recommend to others.

Table 3: Regression Analysis for Willingness to Recommend

Independent variable	Coefficient	Beta	t-vaies
Constant	1.731		12.146 ^a
Overall satisfaction	0.041	0.110	1.145 ^a
Reliability	0.040	0.071	0.461
Responsiveness	0.239	0.464	2.793 ^a
Assurance	-0.014	-0.024	-0.176
Empathy	0.116	0.261	2.366
Tangibles	-0.074	-0.154	-1.394 ^b

Note: $R^2 = 0.36$; $F = 6.759$; ^a Significant at 0.01 level; ^b significant at 0.5 level

Table 3 showed that only overall satisfaction, responsiveness and tangibles are significant in predicting loyalty among FLE.

DISCUSSION

The purpose of this study was to examine the relationships between the five SERVQUAL dimensions, overall satisfaction and their predictive power in terms of loyalty among FLE in a call centre setting. The SERVQUAL items used in the present study were modified so as to assess the internal service setting. The results showed that the FLE perceptions were consistently lower than their expectations. These negative gaps revealed that the internal service levels were below the FLE expectations of service quality and the call centre quality improvements require change in Mauritius. The SERVQUAL dimensions with the exception of tangibles have negative influence on overall employee satisfaction. This suggests that the service delivered by the FLE at the call centre do not necessarily result in higher levels of employee satisfaction. According to Berry and Parasuraman (1991) it is important to create job products that meet the needs of employees thus satisfying and motivating them.

The results of the regressions analyses showed that overall satisfaction, responsiveness and tangibles were significantly associated with employee willingness to recommend the call centre, and intentions to stay. This study show that overall satisfaction is more important than the SERVQUAL dimensions when predicting employee willingness to recommend the call centre and their intentions to stay.

CONCLUSIONS AND LIMITATIONS OF STUDY

The study presented the findings of the expectations and perceptions of internal service quality for a call centre. According to Comm and Dennis (2000) employee satisfaction is vital because it will determine the success or failure of what the customer experiences. The SERVQUAL dimensions were found to have significant negative relationships with an employee's overall satisfaction. These findings should enable the manager to identify specific areas for performance improvement that should have a direct effect on employee satisfaction. Call centre employees also do not allow for tangible elements in assessing their level of satisfaction and managers must take this issue into account. They should direct their resources towards improving the human services rather than the tangibles element of their services. It is clear from this study that the SERVQUAL instrument can be modified to measure the quality of the internal customer. Assessing the service quality of FLE and understanding how the different dimensions influence overall service quality should enable service organizations to effectively and efficiently design the service delivery process, thus ultimately provide better service to the external customers.

There are some limitations in this study that need to be acknowledged. The results reported in the study are specific to a particular call centre, so the findings may be limited to this call centre only and might not represent the call centre service quality in the whole island. Further the study used a single-item employee satisfaction measure, multi-item perceptions may give different results. The five SERVQUAL dimensions of service quality were used in this study, further research may consider other dimensions of service quality that may have an indirect influence on employees' loyalty via overall satisfaction.

REFERENCES:

- Allred, A.T. (2001). "Employee evaluations of service quality at banks and credit unions", *International Journal of Bank Marketing*, 19(4), p. 179-185
- Arasli, H., Ekiz, E.H. & Katircioglu, S.T. (2008). "Gearing service quality into public and private hospitals in small islands: Empirical evidence from Cyprus", *International Journal of Health Care Quality Assurance*, 21(1), p. 8 – 23
- Babakus, E., Bienstock, C.C. & Scotter, J.R.V. (2004). "Linking perceived quality and customer satisfaction to store traffic and revenue growth", *Decision Science*, 35(4), p. 713 – 737
- Babakus, E. & Boller, G.W. (1992). "An empirical assessment of the SERVQUAL scale", *Journal of Business Research*, 24, p. 253–268
- Babakus, E & Mangold, G. (1992). "Adapting the SERVQUAL scale to hospital services: an empirical investigation", *Health Services Research*, 26(6), p. 767 – 786
- Babin B.J., Boles, J.S. & Robin, D.P. (2000). "Representing the perceived ethical work climate among marketing employees", *Journal of the Academic Marketing Science*, 28 (3), p. 345–58
- Berry, L.L. & Parasuraman, A. (1991). *Marketing Services, Competing through Quality*, New York; Free Press
- Bitner, M.J. (1990). "Evaluating service encounters: the effects of physical surroundings and employee responses", *Journal of Marketing*, 54, April, p. 69-82
- Bitner, M.J., Booms, B.H. & Tetreault, M.S. (1990). "The service encounter: diagnosing favorable and unfavorable incidents", *Journal of Marketing*, 54, p. 71–84

Board of Investment (2007), BPO Flash: A semi annual publication of the ITES BPO Sector, Mauritius

Carlzon, J. (1987). *Moments of Truth*, Ballinger, New York, NY

Carman, J.M. (1990). "Consumer perceptions of service quality: an assessment of the SERVQUAL dimensions", *Journal of Retailing*, 66(2), p. 27 - 45

Chiu, H.C. (2002). "A study on the cognitive and affective components of service quality", *Total Quality Management*, 13 (2), p. 265 – 274

Comm, C.L. & Dennis, F.X. (2000). "Assessing employee satisfaction in service firms: An example in higher education", *Journal of Business and Economic Studies*, 6(1), p. 43 – 53

Cronin, Jr., J.J. & Taylor, S.A. (1992). "Measuring service quality: A re-examination and extension", *Journal of Marketing*, 56(3), p. 55 - 68

Crompton, J.L. & MacKay, K.J. (1989). "Users' perceptions of the relative importance of service quality dimensions in selected public recreation programs", *Leisure Sciences*, 11 (4), p. 367–375

Czepiel, J.A. (1990). "Service encounters and service relationships: implications for research", *Journal of Business Research*, 20, p. 13-21

Deery, S., Iverson, R. & Walsh, J. (2002). "Work relationships in telephone call centers: understanding emotional exhaustion and employee withdrawal", *Journal of Management Studies*, 39(4), p. 471-96

Edvardsson, B., Larsson, G. & Setterlind, S. (1997). "Internal service quality and the psychosocial work environment: An empirical analysis of conceptual interrelatedness", *The Service Industries Journal*, 17(2), p. 252 – 263

Eskildsen, J. K. & Dahlgaard, J.J. (2000). "A causal model for employee satisfaction", *Total Quality Management*, 11(8), p. 1081–1094

Fick, G.R. & Ritchie, J.R.B. (1991). "Measuring service quality in the travel and tourism industry", *Journal of Travel Research*, 30(2), p. 2-9

Frenkel, S.J., Korczynski, M., Shire, K.A. & Tam, M. (1998). "Beyond bureaucracy Work organization in call centers", *International Journal of Human Resource Management*, 9 (6), p. 957-79

Gabbott, M. & Hogg, G. (1998). *Consumers and Services*, New York: John Wiley & Sons Ltd

Grönroos, C. (1988). "The six criteria of good perceived service quality", *Review of Business*, 9, p. 10 -13

Guerrier, Y. & Deery, M. (1998). "Research in hospitality management and organizational behavior", *International Journal of Hospitality Management*, 17, p. 145-160

Jabnoun, N. & Al-Tamimi, H.A.H. (2003). "Measuring perceived service quality at UAE commercial banks", *International Journal of Quality & Reliability Management*, 20 (4), p. 458 – 472

Johns, N., Avci, T. & Karatepe, O.M. (2004). "Measuring service quality of travel agents: evidence from Northern Cyprus", *The Service Industries Journal*, 24 (3), p. 82 – 100

- Judge, T.A., Thoresen, C.J., Bono, J.E. and Patton, G.K. (2001). "The job satisfaction – job performance relationship: A qualitative and quantitative review", *Psychological Bulletin*, 127, p. 376– 407
- Lewis and Booms (1983), The marketing aspects of service quality. In *Emerging Perspectives on Services Marketing*, Berry. L., Shostack, G. & Upah, G. (eds), Chicago: American Marketing Association, p. 99-107
- Loveman, G.W. (1998). "Employee satisfaction, customer loyalty and financial performance: an empirical examination of the service profit chain in retail banking", *Journal of Service Research*, 1(1), p. 18 - 31
- Malhotra, N. & Mukherjee, A. (2004). "The relative influence of organizational commitment and job satisfaction on service quality of customers contact employees in banking call centers", *International Journal of Service Industry Management*, 17(5), p. 444 - 473
- Mangold, W.G. & Babakus, E. (1990). "Monitoring service quality", *Review of Business*, 11, p. 21-27
- Matzler, K., Fuchs, M., & Schubert, A.K. (2004). "Employee satisfaction: Does Kano's model apply?", *TQM and Business Excellence*, 15 (9–10), p. 1179–1198
- Oliver, R.L. (1980). "A cognitive model of the antecedents and consequences of satisfaction decisions", *Journal of Marketing Research*, 17, p. 460 – 469
- Oliver, R.L. (1993). "A conceptual model of service quality and service satisfaction: compatible goals, different concepts", In Swartz, A.T., Bowen, D.E., Brown, S.W. (Eds), *Advances in Services Marketing Management*, JAI Press, Greenwich, CT, 2, p.65-85
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1985). "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, 49 (5), p. 41 - 50
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1988). "SERVQUAL: a multiple item scale for measuring consumer perceptions of service quality", *Journal of Retailing*, 64 (5), p. 21- 40
- Parasuraman, A., Berry, L.L. & Zeithaml, V.A. (1991). "Refinement and reassessment of SERVQUAL scale", *Journal of Retailing*, 67(4), p. 420 – 450
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1994). "Reassessment of expectations as a comparison standard in measuring service quality: implications for future research", *Journal of Marketing*, 58, p. 111–124
- Reichheld, F.F. & Sasser, W.E. (1990). "Zero defections: quality comes to services", *Harvard Business Review*, 68(5), p. 105 –111
- Reichheld, F.F. (2003). "The one number you need to grow", *Harvard Business Review*, 81(12), p. 46 – 54
- Rust, R.T. & Oliver, R.L. (1994). "Service quality: insights and managerial Implications from the frontier", in Rust, R. T. & Oliver, R. L. (Eds), *Service Quality: New Directions in Theory and Practice*, Sage, London, p. 1–20

- Saleh, F. & Ryan, C. (1992). "Analyzing service quality in the hospitality industry using SERVQUAL model", *Services Industries Journal*, 11(3), p. 324-43
- Schneider, B. & Bowen, D.E. (1985). "Employee and customer perceptions of service in banks: replication and extension", *Journal of Applied Psychology*, 70(12), p.423-33
- Schneider, B. & Bowen, D. E. (1993). "The service organization: human resources management is crucial", *Organizational Dynamics*, 21, p. 39–52
- Schmit, M.J. & Allscheid, S.P. (1995). "Employee attitudes and customer satisfaction: Making theoretical and empirical connections", *Personnel Psychology*, 48, p. 521-536
- Silvestro, R. & Cross, S. (2000). "Applying the service profit chain in a retail environment: challenging the satisfaction mirror", *International Journal of Service Industry Management*, 11(3), p. 244 – 268
- Sureshchandra, G.S., Rajendran, C. & Kamalanabhan, T.J. (2001). "Customer perceptions of service quality: a critique", *Total Quality Management*, 12 (1), p. 111- 124
- Tan, K.C. & Kek, S.W. (2004), "Service Quality in Higher Education using an enhanced SERVQUAL approach", *Quality in Higher Education*, 10 (1), p. 17- 24
- Taylor, S.A., Sharland, A., Cronin Jr., J.J. & Bullard, W. (1993). "Recreational service quality in the international setting", *International Journal of Service Industry Management*, 4(4), p. 68–86
- Taylor, S.A. & Baker, T.L. (1994). "An assessment of the relationship between service quality and customer satisfaction in the formation of consumers' purchase intention", *Journal of Retailing*, 70, p. 163–178
- Teas, R.K. (2003). "Expectations, perceptions, evaluation and consumer's perception of service quality", *Journal of Marketing*, Mc Graw-Hill, Singapore
- Yee, R.W.Y, Yeung, A.C.L. & Cheng, T.C.E. (2008). "The impact of employee satisfaction on quality and profitability in high-contact service industries", *Journal of Operations Management*, 25, p. 651 – 668
- Yoon, M.H., Beatty, S.E. & Suh, J. (2001). "The effect of work climate on critical employee and customer outcomes", *International Journal of Service Industry Management*, 12 (5), p. 500- 521
- Yoon, M.H. & Suh, J. (2003). "Organizational citizenship behaviors and service quality as external effectiveness of contact employees", *Journal of Business Research*, 56 (8), p. 597–611
- Zeithaml, V.A., Parasuraman, A. & Berry, L.L. (1990), *Delivering Quality Services-Balancing Customer perceptions and Expectation*, New York: The Free Press
- Zeithaml, V.A., Berry, L.L. & Parasuraman, A. (1996). "The behavioral consequences of service quality", *Journal of Marketing*, 52, p. 2 -22
- Zeithaml, V.A. & Bitner, M.J. (2000), *Service Marketing: Integrating Customer Focus across the firm*, 2nd Ed., Boston, McGraw-Hill

CUSTOMER EXPERIENCE MANAGEMENT WITH SOCIAL WEBS: A MUSIC INDUSTRY CASE STUDY

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ABSTRACT

Customer experience management has attracted a lot of attention in media and academia. Especially popular the customer experience management (CEM) has been in the music industry where companies mainly sell experiences. Leading companies are adopting new ways to systematically manage and re-engineer their customer experience programs. A novel addition to CEM that has been intensively used by music companies is the internet-enabled social webs. This research aims to show how music industry companies in the Nordic countries are employing social web (MySpace, Facebook) for CEM activities. The study is exploratory in nature and employs four case studies. Intended to be of interest to both academics and managers, the research posits that in any Web 2.0 based marketing like social webs, engaging and experience-creating interaction is needed especially from companies' side to effectively pursue value co-creation strategy. The limitation is that the findings cannot be generalized into other contexts without reservation. Future research is called for to understand the implications of Web 2.0 to CEM on a more general level.

KEYWORDS: Customer experience management, web 2.0, social webs, music industry

SUSTAINABLE DEVELOPMENT: CREATING A MODEL FOR THE BUSINESS COMMUNITY

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ABSTRACT

From the initial use of the term sustainability in its modern context at the 1974 meeting of the World Council of Churches, through the 1980 Conservation of Nature and Natural Resources presentation on Sustainable Development, to the 1987 “Brundtland Report” from the World Commission on Environment and Development, the concept of Sustainable Development has emerged as a framework for businesses to address the sometimes competing demands for environmental protection, economic development, and social equity.

The private sector, however, still narrowly interprets sustainability as environmental stewardship that offers minimal value as a model for improving the bottom line and the long-term viability of the business. This paper integrates Sustainable Development with strategic management, enterprise/systems thinking, and the increasing importance of values to create a framework for corporations to embrace Sustainability as a Management model for enhancing the long-term viability of the organization and the bottom line.

Recommendations include a call for a new Sustainable Business decision model, measurement systems that include financial performance, an ethical accountability framework, and sustainable reward systems to reinforce Sustainable Business practices.

INTRODUCTION

Ideas central to sustainability emerged in US literature with the work of Henry David Thoreau in “Walden Pond” and through organizational movements like the Sierra Club, an environmental organization started by John Muir. Muir’s love of nature, including preserving the California Sierras, initiated early discussion on the potential negative environmental impacts from unregulated development. This effort, along with the founding of the Audobon Society in 1886 and the Sierra Club in 1892, set the stage for environmentally awareness and social pressure for legal constraints that culminated in the National Environmental Policy Act of 1969 (www.ecotopia.org, 2009).

The term “sustainability” was first used by the World Council of Churches in 1974 in response to environmental challenges presented by growth and related social implications including, poverty. The discussion attempted to reconcile perceived conflicts between the environment, economic growth and social justice, concluding that it is easier to address the bottom rung of society through growth (or development), than taking wealth from the rich or overly restricting business (Dresner, 2002).

Sustainability and sustainable development gained additional prominence in 1987, when the United Nations World Commission on Environment and Development published its report “*Our Common Future*” (World Commission on Environment and Development, 1987). Chaired by Norwegian prime minister Harlem Brundtland, this document became known as the Brundtland report. The report suggested that the competing demands for environmental protection and economic development required a new approach, labeled: “sustainable development”. Sustainability was defined as development that “meets the needs of the present without compromising the ability of future generations to meet their needs” (ibid, p 8). At the 1992 United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, the term “sustainable development” gained world stature and commitment. The term suggests an integration of environmental stewardship, economic development and social justice.

Work within the private sector has demonstrated little evidence in understanding, valuing or using the Sustainable Business construct as a model for creating long-term success. “In the private sector, sustainability is still often narrowly interpreted as environmental stewardship. Recently however, sustainability has evolved to add economic and social sustainability as critical components of successful sustainable business practices” (Galea, 2004).

From the World Council of Churches original use of the term to the BCSD’s current orientation, the concept of sustainable development’s aim is to integrate environmental, economic and social justice issues. Essentially, it attempts to address environmentalist ideas with economic perspectives including placing an emphasis and value on social needs and social equity. Defining the relationship of each of these elements has evolved over this same time.

However, work is needed to operationalize the integration of these three elements (environmental, economic and social) in a way so that business leaders can embrace sustainability as a framework for long term business success. Unless business leaders embrace Sustainable Development as a model for improving the long term viability of the organization and an improved framework to increase sustainable profits, the business community will only pay “lip-service” to the ideas, begrudgingly complying where necessary.

BEYOND PROFIT

While Adam Smith is often cited in *Wealth of Nations* (1776) as the spokesperson for the profit-driven firm, many business people are unaware of his first book on the moral responsibilities of the firm. Smith states in *The Theory of Moral Sentiments*, that “A corporation is a child of the government. Its form, tax status and even its charter are granted by the government” (Smith, 1776). Smith proposes that the corporation is a social citizen with moral responsibility to its community and fellow citizens. Milton Friedman has become the 20th century spokesperson for the profit-driven perspective with the primary focus of the firm on increasing shareholder wealth. “A corporate executive is an employee of the owners of the business. He has direct responsibility to his employers...which generally will be to make as much money as possible while conforming to the basic rules of society ... businessmen who speak eloquently about social responsibilities of business preach pure and unadulterated socialism...and notable for analytical looseness and lack of rigor”. He concludes that “The social responsibility of Business is to increase profit” (Friedman, 1970). Essentially, this forms the basis for the agency theory of the firm where the corporate executive acts as an agent of the shareholder with a focus on profit.

Other management leaders have advanced the multiple stakeholder perspective and the dangers of over-focus on profit. Kaplan and Norton (1996) propose that a Balanced Scorecard is needed to ensure the firm manages interdependent elements and to improve the long term viability of the firm. Employee development, customer satisfaction and process improvement gain stature in this model. In *Built to Last*, Collins and Porras (1994) continue to go beyond the profit-centered construct. These authors evaluated successful 100 year performances for 18 US corporations and found that beyond a profit focus, successful companies place a high value on developing people (employees) and developing sustainable knowledge. In another study, “conducted by two Harvard researchers, the performance of business that balanced stakeholder interests was compared with that of companies following a shareholder first philosophy. Over an 11 year period, companies that gave equal priority to employees, customers and shareholders, enjoyed sales growth of four times and employment growth of eight times that of the shareholder first companies (Kotter & Heskett, 1992). The Balance Scorecard and related multi-stakeholder models offer support for a sustainable development framework.

This stream of modern management theory offers insights into more holistic views of the role of the firm and methods to improve performance. However, a new paradigm with complimenting management theories, practices, models, measurements and techniques are needed to operationalize sustainable development so business can embrace the concept and capture the value of the economic, ecological and social elements (Sillanpaa, p. 549). “Genuine progress towards sustainable development will require a willingness on the part of business to be held accountable for its performance across the spectrum of stakeholder’s ethical concerns and ultimately, there must be an integration of the accounting methodologies if our aim is to establish a holistic tool for assessing the contribution of sustainable development (Sillanpaa, p550).

CALL TO ACTION

The limited implementation of Sustainable Development practices and potential benefits suggested by the above, multi-stakeholder models suggest six areas to consider if we are to take sustainable development beyond the current ecological perspective and limitations.

First, we need to clarify and present a clear management framework for Sustainable Development as a practical management model. The Balanced Scorecard, Systems Thinking and Enterprise Strategy offer reasonable constructs for organizations to use in guiding organizational mission, vision and leadership of the firm. These frameworks shift the orientation of the firm from an agency-based or profit-centered focus, firm to one that is multi-dimensional and more sophisticated. The firm potentially develops improved strategy through understanding the complex interdependencies of the firms operating environment AND an increased ability to innovate because of that holistic understanding.

Second, we need to explore and clarify how strategic planning practices, which are already perceived as complex and costly, can be modified to effectively address the additional dependencies suggested by a Sustainable Development model. Current strategic planning models already typically include assessment of internal external elements, reconciliation with the corporate mission and objectives and recognition of environmental and political dynamics.

Third, the outcomes of strategic planning need to be managed in a way to link the functional areas of the institution with Sustainable Development objectives. This suggests many implementation issues. How might products be designed to consider economic, social and environmental issues beyond current packaging and cost reduction constructs?

Fourth, to achieve functional excellence based on a Sustainable Development model requires that employee culture and values be aligned and reinforced with Sustainable Development principles. Here again, traditional management theory and practice speak to corporate culture and the importance of values within the organization yet most management theorists and practitioners acknowledge the difficulty in creating positive corporate culture and supporting values. Introducing Sustainable Development as a model of governance and decision making requires changes in culture and values.

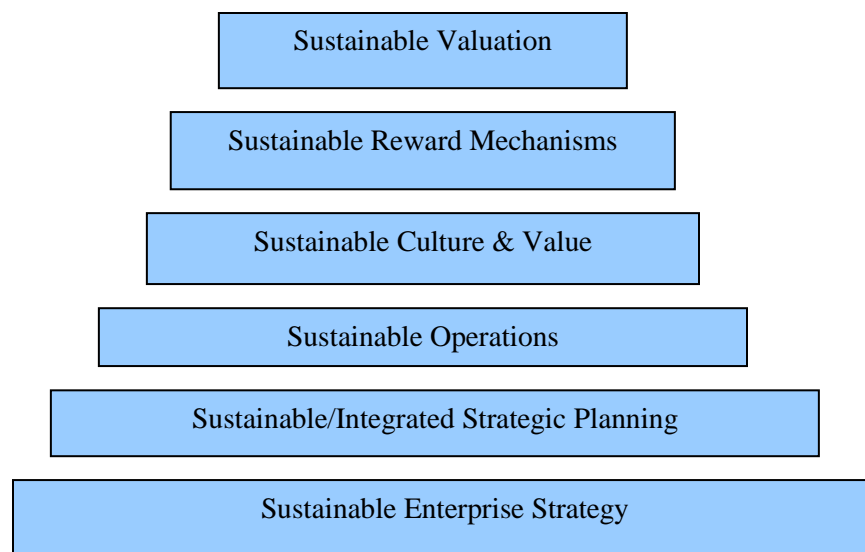
Fifth, beyond culture and values, compensation and reward mechanisms are required to support Sustainable Development thinking, action and objectives. If the objective of the firm goes beyond short-term profit maximization, how can operations, sales, finance and staff personnel be compensated in a way that rewards Sustainable Development work while other companies or the investment community may reward or judge their performance differently.

Six, corporate valuation and reporting changes are needed to reflect the increased value of the organization from sustainable practices including environmental, social, risk mitigation and enhanced long-term sustainable advantage. Ultimately, the investment community must be able to understand this increased value through reasonable transparent assessment and accounting practices.

A NEW FRAMEWORK / A NEW PARADIGM

This paper integrates Sustainable Development with strategic management, enterprise/systems thinking, suggests improved processes for linking functional components to Sustainable Development objectives, the increasing importance of culture and values, and the need for Sustainable reward systems and financial reporting mechanisms that capture the value of the economic and social components of the model in ways that are meaningful to all stakeholders. This framework and its operational elements may drive corporations to embrace Sustainability as a Management model for enhancing the long-term viability of the organization and a sustainable bottom line. See Figure 1.

Figure 1: Model for Sustainable Management



REFERENCES

- Collins J. C. & Porras J. I. *Built to last: Successful habits of Visionary companies*. New York: HarperCollins, USA Publishers, Inc., 1994
- Dresner S., (2002). *The Principles of Sustainability*. Earthscan, London, Sterling, VA
- EcoTopia. (2009, April 12). *Environmental Movement Timeline: History of Environmentalism*. Retrieved April 12, 2009, from www.ecotopia.org/ehof/timeline
- Friedman, M., (1970). *The Social Responsibility of Business is to Increase its Profits*. The New York Times Magazine, September 13, 1970. Copyright © 1970 by the New York Times
- Foot, D.K., & Ross S. (2004). Social sustainability. In C. Galea (Ed.), *Teaching business sustainability*, (p. 107) Vol. 1: From theory to practice, Greenleaf Publishing Limited
- Kaplan, R. & Norton, D., (1996). *Balanced Scorecard: Translating Strategy into Action*. Harvard Business School Press, Cambridge, MA.
- Kotter & Heskett, (1992). *Culture & Performance*. Free Press.

Rainey, D. (2006). *Sustainable Business Development*. Cambridge Press, New York.

Schendel, D. & Hoffer, C. (1979). *Strategic Management: A New View of Business Policy and Planning*. Little Brown & Company. NY.

Sillanpaa, M., (1999). *A new deal for sustainable development in business: Taking the social dimension seriously at the body shop*. In M. Bennett & P. James (Ed.), *Sustainable Measures: Evaluation and reporting of environmental and social performance*, (p.529) Greenleaf Publishing

Smith, A., (1776). *Theory of Moral Sentiments*, Buffalo, NY: Prometheus Books, 1990 ed.

Smith, A., (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*, Buffalo, NY: Prometheus Books, 1991 ed.

World Commission on Environment and Development (1987) *Our Common Future*, Oxford: Oxford University Press, p 43 (WECD)

World Council of Churches (1974) '*Report of Ecumenical Study Conference on Science and Technology for Human Development*', Geneva: World Council of Churches

BIOGRAPHY

Dr. Nastanski is Dean of the School of Business and Professor of Management and Marketing at Saint Leo University. Prior to joining Saint Leo, he was Executive Director of Business Development and Marketing, for Elcotel, Inc., and held senior executive positions in Schlumberger, a global energy company where he directed operations in Paris, France and several US locations. He also holds a Masters in Business Management from Central Michigan University and a Doctorate in Business Administration from the University of Sarasota. His research interests include the integration of technology and learning, sustainable management and is the author of numerous publications including "From Shanghai to Mumbai", a book centered on Asian business dynamics published by Kendall-Hunt Publishing in 2005.

SCREENCASTS AS A LEARNING RESOURCE TO ENHANCE A QUANTITATIVE BUSINESS METHODS COURSE

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ABSTRACT

The challenge of teaching the required Quantitative Business Methods course is the diversity of Excel and quantitative skill levels of the students. Some students are able to keep up with the course assignments while others become frustrated and fall behind.

Screencasting is a technology that is used to capture each action a user is performing on their computer screen accompanied by audio narration describing what the user is doing on the screen. The screencasts were used to demonstrate Excel lessons and example problems for the class. Screencasts were recorded outside of class and posted to the course management site.

Student survey results indicated that the majority of the students who viewed more than 25% of the screencasts found them to be helpful for completing the homework assignments, staying up to date in the course, studying for the tests, and completing the course project. Technical difficulties were encountered downloading and viewing the screencasts by the students. Further study of the effectiveness of the screencasts is suggested. To overcome technical difficulties encountered by using the course management system to post the screencasts students could be provided with a CD-ROM of the screencasts at the beginning of the course.

INTRODUCTION

Quantitative Business Methods is a required course in the business program for management, marketing, finance, and accounting majors. The challenge of teaching the required Quantitative Business Methods course is the diversity of Excel and quantitative skill levels of the students. The majority of the students in the business program are transfer students. The pre-requisite Statistic, Algebra, and Introductory Computer courses are taken primarily at community colleges. Most students have not taken an Excel course in over a year and some students have never taken an Excel course. Students have expressed concerns about the difficulty of the Quantitative Business Methods course, their Excel knowledge, and keeping up with the homework for the course.

The classes have 30-35 students making it difficult to give individual attention during the lab time. The classrooms that accommodate these students are physically large making it difficult for the professor to physically navigate the room to help students. Some students are able to keep up with the course assignments while others become frustrated and fall behind. To address the concerns of students about completing assignments and keeping up to date with the course the professor developed screencasts outside of class to provide a supplemental learning resource to help students. This paper reviews the experiences of a professor using screencasts during the fall 2008 semester to enhance the core business course Quantitative Business Methods.

WHAT ARE SCREENCASTS?

Screencasting is a technology that is used to capture each action a user is performing on their computer screen accompanied by audio narration describing what the user is doing on the screen. Screencasting is well suited for software tutorials and demonstrating basic concepts (Educause Connect, 2006). It allows

students to learn at their own pace in a self directed manner (Educause Connect, 2006). Screencasts are well suited for classes with students that have varying levels of proficiency with a subject. Students who would find the material remedial can choose not to view the screencasts while other students who find the material very challenging can view them several times and rewind them when they need the information repeated (Kroski, 2009). This technology is effective for both visual and auditory learners as there is video and narration that is less complicated than written directions (Rethlefsen, 2009). Camtasia Studio and other screencasting packages allow for editing. When making a presentation using screencasting software the presenter is forced to perform the demonstration in a step by step manner describing every action they are performing on the screen. Users of the packages can edit non value added speech such as “um” or “uh” and wasted motions reducing the time and increasing the quality of the presentation beyond the level of an in person presentation (Udell, 2005).

METHODS

The screencasts were used to demonstrate Excel lessons and example problems for the Quantitative Business Methods course. Screencasts were recorded outside of class using Camtasia Studio 6.0 software and posted to the course management site. The presentations were edited to remove wasted motions and unnecessary speech. Camtasia Studio supports high definition quality video for the web and mobile devices. It allows the user to capture full screen videos and zoom in on important actions that the user is performing. The screencasts files posted to the course management system were windows media files. The professor made four different sets of screencasts. These screencasts were screencasts that were Excel tutorials (13 screencasts), demonstrations of example quantitative analysis problems (6 screencasts), screencasts that reviewed the sample tests (3 screencasts), and screencasts that were posted to help students do their project (4 screencasts).

ASSESSMENT OF LEARNING OUTCOMES

There were five criteria that were used to assess the learning outcomes achieved by the screencasts. The five criteria were:

1. Student feedback on a survey about the screencasts and other teaching techniques
2. Percentage of students submitting homework assignments during fall 2008 compared to prior semesters
3. Quality of homework submitted during fall 2008
4. Number of hits to course management site where files were stored and accessed.
5. Test scores

Criteria 1: Student Feedback Survey

A student feedback survey was administered during the middle of the semester to assess the effectiveness of the screencasts. Of the 28 students in the class 21 completed the survey and 14 of the 21 students said they viewed the screencasts outside of class. The survey was analyzed in terms of the entire class response, students who had viewed less than 25% of the screencasts, and responses of students who were regular viewers. A regular viewer was defined as a student who viewed at least 26-50% of the screencasts. Five students were classified as regular viewers. The major limitation of the survey was the small sample size.

Columns 1 through 4 of Table 1 list the topic of the screencast, the number of students who viewed the screencast, the percent of students from the entire class who viewed the screencast, and the percent of regular viewers who viewed the screencast. The most popular screencasts were the screencasts for the scenario manager, IF statement, and the project. These were screencasts that few students reported having prior knowledge about. However, the decision trees screencast, screencasts for sample tests and decision making under uncertainty were the least viewed and contained material specific to the

Quantitative Business Methods course. It is speculated that since more class time was spent on these topics that students may have not needed to view the screencasts. The primary reason reported for not watching the screencasts by 71% of the students who did not watch the screencasts was that they learned the material in class or by using the textbook.

Table 1: Screencasts Viewed by Students

Topic	Number of Students Viewing Screencast	Percent of Students Viewing Screencast	Percent of Regular Viewers Viewing Screencast	Percent of Students Claiming to Know Skill at Beginning of Semester-Not Regular Viewers	Percent of Regular Viewers Self Reporting to Know Skill at Beginning of Semester
Scenario Manager	9	64%	100%	6%	0%
IF Statement	8	57%	100%	12.5%	0%
Screencasts for Project	8	57%	100%		
Basic Formulas	7	50%	80%	69%	40%
Calculating Loan Payment	7	50%	100%	31%	20%
Absolute and Relative References	6	43%	100%	12.5%	0%
Using Goal Seek to Find Breakeven Point	6	43%	80%	6%	0%
Decision Making Under Uncertainty	5	36%	80%		
Screencasts for Sample Test	4	29%	60%		
Decision Trees	2	14%	40%		

This table contains data from the student feedback survey to determine which screencasts were watched by the students in comparison to their self reported Excel knowledge at the beginning of the semester. There are no figures reported in columns 5 and 6 for decision making under uncertainty or decision trees screencasts as the survey did not ask if students had prior knowledge about these topics. Multiple skills were included in the screencasts for the project and sample test so no data is reported in the 5th and 6th columns. A higher percentage of students who viewed 0-25% of the screencast or did not view the screencasts self reported knowing Excel skills at the beginning of the semester than students who were regular viewers of the screencasts.

The data in columns 5 and 6 of Table 1 is being used to assess what percentage of the students who viewed a screencast in comparison to their prior knowledge of the skill at the beginning of the semester. There are no figures reported in columns 5 and 6 for decision making under uncertainty or decision trees as the survey did not ask if students had prior knowledge about these topics. These were topics that were specific to the Quantitative Business Methods course. Multiple skills were included in the screencasts for the project and sample test so no data is reported for prior skills in the 5th and 6th columns. It would be expected that students who already knew a particular skill would be less likely to view a screencast about that skill. A higher percentage of students who viewed 0-25% of the screencasts or did not view the screencasts self reported knowing Excel skills at the beginning of the semester than students who were regular viewers of the screencasts.

Table 2 is a summary of the percentage of students rating the screencasts as helpful or very helpful for completing the homework, completing the car decision case study, studying for the test, and staying up to date with the course that had viewed 0-25% of the screencasts, were regular viewers, viewed the screencasts for the project, and viewed the screencasts for the sample test. There were 9 students who viewed 0-25% of the screencasts, 5 students who viewed at least 26% of the screencasts, and 7 students who did not view the screencasts. The students who viewed 0-25% of the screencasts thought they were most effective for helping them do their homework as 88% of the respondents rated the screencasts as helpful or very helpful for completing the homework. Over 50% of the respondent who viewed 0-25% of the screencasts rated them as helpful or very helpful for completing the car decision case study, studying for the test, and staying up to date with the course. All of the regular viewers rated the screencasts as helpful or very helpful for completing the homework and staying up to date in the course. To specifically evaluate the effectiveness of the screencasts for completing the car decision case study and studying for the test the responses from respondents who viewed these specific screencasts were tabulated. There were 4 respondents who viewed the car decision case study and 8 respondents who viewed the screencasts

for the project. The screencasts for the car decision case study and studying for the test were rated as helpful or very helpful by 75% of the respective respondents.

Table 2: Effectiveness of Screencasts as a Resource

	Percent helpful or helpful by viewers	rated or very helpful by 0-25% of regular viewers	Percent helpful or helpful by viewers	rated or very helpful by respondents who viewed the screencasts for the project	Percent helpful or helpful by viewers	rated or very helpful by respondents who viewed the screencasts for the sample test
Complete the homework	88%	100%				
Complete the car decision case study	55%	60%		75%		
Study for the test	66%	80%				75%
Stay up to date with the course	55%	100%				

Table 2 is a summary of the percentage of students rating the screencasts as helpful or very helpful for completing the homework, completing the car decision case study, studying for the test, and staying up to date with the course that had viewed 0-25% of the screencasts, were regular viewers, viewed the screencasts for the project, and viewed the screencasts for the sample test.

Criteria 2 & 3: Quality and Quantity of Homework Submitted

Table 3: Percentage of Homework Submitted

	Fall 2007	Spring 2008 Section 1	Spring 2008 Section 2	Fall 2008
Percent of Homework Submitted	72%	76%	75%	84%

Table 3 lists the percentage of homework assignments submitted during the fall 2007, spring 2008, and fall 2008 semesters for all students enrolled in the Quantitative Business Methods course. There were two sections of the course taught during spring 2008.

The percentage of homework submitted increased from 72% during fall 2007 to 76% and 75% for sections 1 and 2 respectively during spring 2008, to 84% during fall 2008. The increase may be due to the screencasts as 80% of the students who regularly viewed the screencasts reported turning in at least 90% of the homework compared with 71% of the students who never viewed the screencasts and 44% of the students who viewed 25% or fewer screencasts outside of class reported turning in at least 90% of the homework. Also, less class time was spent reviewing homework. More material was covered in the course during the fall 2008 than in prior semesters. Homework scores increased slightly. The most notable increases in grades for assigned work was the project grades increased from an average of 79 to 87 from spring 2008 to fall 2008. The project grades account for 28% of the total grade.

Criteria 4: Number of Hits to Course Management Site

The professor calculated the average number of hits to files from the course management site to determine which resources the students were accessing the most. The average number of hits for PowerPoint files used for the lectures was 51, Excel files needed to do the homework assignments files was 43, the answers to homework problems was 32, and the screencasts was 19. The screencasts files had the lowest average access. The survey was anonymous; however, the course management system records gave the professor an indication of the percentage of students accessing the screencasts. The screencast files were being accessed in patterns that confirmed the results of the student survey about the percentage of students using the screencasts.

Technical difficulties were encountered downloading and viewing the screencasts by the students. The files had to be posted to the discussion section of the course management system instead of the course content section causing difficulty in locating the files. To further compound the access problem the students could not open the screencasts by clicking on the link. They had to save the file first and then open it. Since the files were windows media files students with Apple computers had to download the Windows Media player. To overcome technical difficulties encountered by using the course management

system to post the screencasts students could be provided with a CD-ROM of the screencasts at the beginning of the course.

Criteria 5: Test Scores

The average test score for the first test was within 1% of the averages from prior semesters. The majority of the students that were regular viewers of the screencasts scored in the 80-89 range with one student failing the test and one student scoring above 90.

CONCLUSIONS

Screencasts were rated by students as helpful for completing assignments and staying up to date with the course. Project grades and homework submissions grades increased from prior semesters; however average test scores on all three exams were similar to prior semesters. The improvement in student performance may be due to screencasts or other factors. Students who chose to view the screencasts are the students who self report lower Excel skill levels at the beginning of the course.

Technical difficulties were experienced most often by the students who viewed 0 to 25% of the screencasts. The most frustrating technical difficulty reported was not being able to open the screencasts. Further study of the effectiveness of the screencasts is suggested. To overcome technical difficulties encountered by using the course management system to post the screencasts students could be provided with a CD-ROM of the screencasts at the beginning of the course.

REFERENCES

Educause Connect (2006), 7 Things you should know about screencasting. Retrieved March 24, 2009, from <http://connect.educause.edu/Library/ELI/7ThingsYouShouldKnowAbout/39389>.

Kroski, Ellyssa. (2009, February 1). That's Infotainment!; Screencasts are ideal for users getting the most from your library. Here's how to make your own video tutorials. *School Library Journal*. P.40-44.

Rethlefsen, Melissa. (2009, January 1). Product pipeline: Screencasting opens up a world of new instruction says Melissa L. Rethlefsen, so take a look at some of the best free tools out there. *Library Journal Library Journal*. 134.1 p.S12. Literature Resource Center. Gale. VALE-Richard Stockton College of NJ retrieved March 23, 2008 from <http://go.galegroup.com/ps/start.do?p=LitRC&u=richstockcol>.

Udell, Jon. (2005, May 16). Secrets of Screencasting. Infoworld.com.

Winterbottom, Sandy. (2007, June). Virtual lecturing: Delivering Lectures using Screencasting and podcasting technology. *Planet (18)* p. 6-8.

ROLE OF BOND MARKETS IN INFRASTRUCTURE FINANCING IN INDIA

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ABSTRACT

Given the stage of development of emerging economies like India and the corresponding needs of their infrastructure sectors it is imperative to evaluate financing options available to sustain long term productivity. In this light, this paper seeks to examine the role of the small investor and how they can be tapped by deepening the bond market. Various regulatory and legal changes required to make it more conducive to industrial requirements are also discussed. Moreover, the study also investigates various aspects of project bonds relating to their role in infrastructure financing.

INTRODUCTION

India riding high on the recent economic boom is seen as next economic powerhouse. It is growing at the rate of 7-8% and is likely to sustain and perhaps increase its current growth rate as the fundamental of its economy is strong. The only major hurdle to sustain its current economic growth rate is its underdeveloped infrastructure. Basic infrastructure services are in poor shape and require huge investment to uplift it. The current rate of investment in infrastructure is quite low and is mostly done through government resources. Owing to the budget constraints and fiscal burden of the government, considerable attention has been paid to involve the private sector as an alternative source of financing for infrastructure projects. The private sector is still wary of huge commitment of investments owing to the cross subsidy policies and the interference of the government. The huge requirement of investments of infrastructure sector calls for innovative way of financing which not only offers a secured way and reasonable rate of return for the investors but also suits the way the entrepreneurs require that funds. The Corporate Bond Market is one channel that links society's savings into investment opportunities. It not only eases the pressure on banks but also provides low cost funds to the issuer by passing the intermediary role of banks. For the investor, there exists a yield premium opportunity in comparison to traditional deposits at banking institutions and also provides a medium to diversify the investments. Coexistence of domestic bond market, equity market and banking system provides risk pooling and risk sharing opportunities for investors and borrowers.

LITERATURE REVIEW

The Corporate Bond Market has been widely studied across the world by lot many local and international bodies in respect of many countries worldwide. Thus many of the issues relating to development of bond markets are known. The major challenge was to understand the utility of bond markets in infrastructure financing. The Rakesh Mohan Committee report published in 1996 detailed out the worsening deficiencies of infrastructure sector in India and the mammoth investment requirements for overcoming the problem. The study done by Patil Report in 2005 made a number of recommendations to address failings in the Corporate Bond Market. The recommendations mainly dealt with increasing the confidence of the investors and borrowers in the debt market. It calls for more transparency, establishment of database and the uniformity of rules for public and private sectors. However, the implementation of the recommendations is yet to occur. Study done by Japan Bank of International Cooperation on Malaysian Bond Market has provided a lot of reference of how a developing country can successfully use its bond market for infrastructure financing. Study done by Dr. LC Gupta and Dr. CP Gupta titled 'Indian Stock

Market Reform and Regulation' has given an excellent overview of the regulations regarding capital market in India and abroad.

RESEARCH METHODOLOGY

Building on international experiences in the region and their similarity to India's growth trajectory, evaluating corporate bond markets as a vehicle for infrastructure financing can provide useful learning outcomes.

INFRASTRUCTURE DEVELOPMENT TRENDS IN INDIA

India is currently on the path of high economic growth. It is growing at the rate of 7-8% as compared to the 3-4 % growth rate of the world and is aiming double digit growth rate in next five years. According to the Goldman Sachs 2004 Report, it is poised to be one of the largest economies in the world by 2050.

The main lacuna for its growth is its infrastructure sector. The reach and quality of its physical infrastructure - in utilities (electricity, water and gas), transport, and telecommunications ranks among the lower quartile of the middle-income economies. According to Planning Commission of India, India needs around 540 billion USD in next five years for in its infrastructure sectors, if it has to sustain its current growth rate.

The huge resource of India in terms of foreign reserves, for the most part, is invested in other regions. This financial resource has traditionally been invested principally in the USD denominated assets, especially the US Treasury bills and bonds, owing perhaps to a limited choice of alternative and equally good or better investment instruments and vehicles within a liquid and well functioning capital market. It is therefore ironic that, while the country enjoys sufficient international liquidity, its own capital intensive development projects of both the public and private sectors continue to be left in dire need of financing. Of late Indian government has recognized the importance of infrastructure and has introduced various policies and reforms to improve it.

The key factors contributing to the rapid development of the country's infrastructures and facilities include:

Sustained economic growth: With annual GDP growth averaging 6.4% (CAGR) over the last 18 years (1990-2008), coupled with rapid urbanization and high population growth, the demand for basic infrastructure such as utilities (power, water and sewerage), transport, ports and telecommunications have grown at a faster pace. Whereas the demand has grown manifolds, the supply of infrastructure has not been able to keep pace with the demand thereby creating demand- supply mismatch.

Fiscal constraints and shift to privatization: Growing failures and inefficiencies of state-owned enterprises and government agencies involved in the provision of infrastructure services such as ports, electricity, telecommunications and highways, resulted in a change in policy stance that emphasized privatization and private sector-led growth. The policy change has included many incentives for private sectors like tax holiday, single window clearances, 100 % foreign direct investment etc. Along with that, government has set up many special lending agencies like IIFCL, IL&FS etc to lend only to infrastructure sectors. The major impact of these policies has been witnessed in power sector with more and more private players chipping in and committing huge investments in power projects.

High public expenditure: The government has given the priority status to various infrastructure sectors and has substantially increased its expenditure on the basic infrastructure services.

Shift in Government policy: From the role of provider of the services, the government has shifted its role to the facilitator. Various new policies such as promotion of PPP, relaxed capital market norms, has

created business friendly environment which has resulted in greater private participation in infrastructure. The Table below shows the estimated sector wise public and private Investment during the eleventh Plan.

Table1: Sector-wise Public and Private Investment during the Eleventh Plan

Sector-wise Public and Private Investment during the Eleventh Plan								
USD at 2006-07 prices								
Sector	Tenth Plan	2007-08	2008-09	2009-10	2010-11	2011-12	Total 11th Plan	Share (%)
Power	71.18	18.1	22.64	28.42	35.83	45.38	150.37	
Public	48.78	13.26	16.67	20.97	26.44	33.39	110.74	73.6
Private	22.4	4.84	5.97	7.45	9.39	11.98	39.64	26.4
Roads	35.34	12.52	13.25	14.32	16.56	19.39	76.05	
Public	33.63	8.35	8.78	9.25	10.15	12.08	48.61	63.9
Private	1.71	4.17	4.47	5.07	6.41	7.32	27.45	36.1
Telecom	22.46	8.07	9.72	12.27	15.47	19.61	65.12	
Public	14.4	3.71	3.84	4.33	4.75	5.15	21.78	33.5
Private	8.06	4.35	5.88	7.93	10.71	14.46	43.34	66.5
Railways	29.18	8.1	9.75	11.86	14.57	18.65	62.93	
Public	29.11	6.47	7.8	9.53	11.74	15.08	50.62	80.4
Private	0.07	1.63	1.94	2.33	2.83	3.57	12.31	19.6
Irrigation	27.2	6.59	8.25	10.4	13.16	16.03	54.42	100
Public	0	0	0	0	0	0	0	
Water Supply and Sanitation	15.81	6.3	7.59	9.24	11.35	1.89	48.57	
Public	15.56	6.14	7.39	8.99	11.04	13.69	47.25	97.3
Private	0.25	0.16	0.2	0.25	0.32	0.4	1.32	2.7
Ports	1	2.36	2.86	3.48	4.24	5.08	18.03	
Public	0.53	0.68	0.8	0.94	1.11	1.21	4.75	26.3
Private	0.47	1.69	2.06	2.54	3.13	3.87	13.29	73.7
Airports	1.65	1.52	1.58	1.66	1.78	1.94	8.48	
Public	0.94	0.49	0.53	0.66	0.75	0.88	3.31	39.1
Private	0.72	1.03	1.04	1	1.03	1.06	5.16	60.9
Storage	1.18	0.92	1	1.08	1.18	1.28	5.46	
Public	0.35	0.46	0.5	0.54	0.59	0.64	2.73	50
Private	0.82	0.46	0.5	0.54	0.59	0.64	2.73	50
Gas	2.13	0.73	0.84	0.98	1.13	1.32	5	
Public	2.13	0.49	0.57	0.66	0.78	0.91	3.41	68.2
Private	N.A	0.24	0.28	0.31	0.36	0.41	1.59	31.8
Total	214.76	65.21	77.47	93.71	115.28	142.76	494.43	
Public	175.07	46.63	55.12	66.28	80.51	99.06	347.61	70.3
Private	39.69	18.58	22.35	27.43	34.76	43.7	146.82	29.7

Source: Projections of Investment in Infrastructure during the Eleventh Plan

The Table above clearly shows private sector share is increasing in infrastructure sector especially in power sector which till now has the government (public sector) as its biggest resource provider. The above fact is also important as Power Sector accounts for the highest investment among all the sectors.

Private Participation in Infrastructure Projects: In the World Bank's Private Participation in Infrastructure (PPI) Database, a total of 306 projects by private sector in India was listed between 1990 and 2007. Between 1990 and 2007 a total of around 96,130 million US dollars were invested by private players in infrastructure sector. Along with the policy initiatives undertaken by the government, it is essential to examine some of the financing options available to fund infrastructure projects. The next section closely evaluates financing options with an emphasis on developing debt markets and subsequently identifies the bottlenecks present in the Indian Debt Markets.

CORPORATE BOND MARKET IN INDIA

Features of Corporate Bond Markets

Before looking at the Indian corporate bond market it is important to analyze the features of Corporate Bond Market in other countries and then compare them with the Indian Bond Market.

Some of the salient features of International Corporate Bond Markets are:

Bond Markets are mostly used by highly rated large corporate. Therefore the yield on bonds issued by such large and less risky companies is generally low as the risk involved in investing in these bonds is also low. Where smaller, high risk companies, access bond markets, they generally do so through private placements as private placement is generally taken by small number of investors and has less disclosure requirements.

Very few corporate bond markets are large and active. Generally banks and bond markets compete to provide funds. Therefore the countries in which banking systems are well developed has comparatively less developed and active bond market. There are very few liquid secondary bond markets. Even the largest issues are traded for a brief period and are then hold till the maturity.

Presence of Government bonds is a pre-requisite for the active secondary market. Government bonds not only provide the benchmark-yield curve but also a low-default risk tool for portfolio management. Therefore it is necessary that the government market functions freely and offers adequate liquidity for this benchmarking to be effective. Retail Investment (investment by retail investors) in bond markets is not substantial. This is because of the low returns offered by the bond markets. As a result retail investors looking for high return investments invest in equity markets and those looking for safe but low return investments invest in bank deposits etc.

The Indian Corporate Bond Market

In India debt market is less popular when compared to equity market, which is reverse of the trend followed in rest of the world. Whereas rest of the Indian Capital Market has forged ahead and offers a world class market in terms of liquidity, turnover, participants etc, its corporate debt market has not flourished yet. This has been due to the dominance of the government securities in the debt market and that too, a market where government was borrowing at pre-announced coupon rates from basically a captive group of investors, such as banks. Thus there existed a passive internal debt management policy. This, coupled with automatic monetization of fiscal deficit prevented a deep and vibrant government securities market. The efficient secondary debt market can only exist when there are whole range of investors with different needs, expectations, risk profile and time horizons whereas in India secondary

market is limited to only few brokers and institutional investors with very inadequate provisions for active participation by the small investors.

Table 4 below shows the relative size of bond market in a range of developed and developing countries.

Table 4: Outstanding Bonds

<i>Table Outstanding Bonds</i>	<i>Private Bonds Outstanding/GDP%</i>	<i>Public bonds outstanding/GDP%</i>
USA	111.9%	46.3%
UK	15.9%	31.1%
Germany	34.1%	41.0%
France	41.4%	53.8%
Spain	42.0%	38.9%
Korea	54.0%	21.1%
Japan	42.4%	150.2%
Thailand	20.2%	21.1%
India	1.0%	32.9%
China	10.4%	15.2%
Hong Kong	17.8%	9.1%
Singapore	18.8%	39.2%
Australia	39.3%	12.6%
Indonesia	2.4%	16.6%
Brazil	12.0%	44.6%

Source: World Bank

The data clearly shows that corporate bonds issuance is very much lower than the norm and there exists a wide opportunity to tap this market. However, Government (public) bond issuance is in line with the other countries. It is clear from the above table that the share of bank deposits and government bond in total financial assets has decreased whereas equity has substantially increased from 18% in 1990 to 44% in 2005. However share of corporate bonds are almost negligible and has further decreased in the last few years. It is also interesting to see the share of private placements in the total corporate bond issuance. Table 5 below gives the share of private as well as public placement in the total corporate bond issuance.

Table 5: Share of Private as Well as Public Placement

Year	Public Issue	Private Placement	% Share of Private Placement	% Share of Public Placement
1995-96	2,940	10,035	77.34	22.66
1996-97	7,015	18,391	72.39	27.61
1997-98	1,929	30,983	94.14	5.86
1998-99	7,407	38,748	83.95	16.05
1999-00	4,698	55,073	92.14	7.86
2000-01	4,139	52,456	92.68	7.32
2001-02	5,341	45,427	89.47	10.53
2002-03	4,693	48,424	91.16	8.84
2003-04	4,324	48,428	91.8	8.2
2004-05	4,095	55,384	93.12	6.88

Source: Reserve Bank of India

It is clear from the above table that public placement is negligible when compared to private placement. The above dominance of private placement can be explained by the fact that private placement requires few disclosure requirements and hence lower the cost of issuance.

Why Does India Need Strong Corporate Bond Market for Infrastructure Financing

The requirement of investment funds for productive investment in any industry can be divided into three broad categories – equity, long-term debt, and medium to short-term debt. These funds are required in different proportions depending on the nature of the activity, the sector in which the investment is proposed to be made, and on the perceptions regarding the future developments in the financial sector. Although there is some flexibility in these proportions, by and large not too much variation in either the debt: equity ratio or the term structure of debt appropriate for the particular industry is either possible or desirable from the point of view of both the lenders and the borrower. The health of the financial sector in any economy can be measured by its ability to provide funds in the above three broad categories in more or less the same proportion as required by the demand. There may be possibility that there could simultaneously exist excess demand and excess supply in different segments of the financial market. In such a situation, either the investing entities could expose themselves to needless risk by meeting their funds' need in whatever form they are available. Consequently, the overall risk profile of the economy would tend to go up. Alternatively, if they don't meet their fund requirement, the segment of the financial sector facing the highest level of excess demand would prove to be the binding constraint to investment activity and effectively determine the actual level of investment in the economy. It is, therefore, entirely possible that ex-post investment may fall short of ex-ante savings, not because of a lack of investment demand, but because of a mismatch between the structures of the demand for and supply of investment funds. In addition, the excess supply of funds in one segment of the financial sector carries the danger that such funds may be used for speculative purposes in foreign exchange, real estate or commodities, which create their own problems in economic management. The net result can be an economy which is performing well below its potential and with high levels of systematic risk. India was free of such mismatch in earlier years as there was excess demand in all segments of the financial market, arising primarily out of the high level of pre-emption of financial savings by the government and a substantial incidence of directed lending. But now the conditions have changed and now India is more vulnerable to such mismatch.

Infrastructure financing characterized by heavy investment requirements, long gestation period and long pay back periods is likely to be most affected by such potential mismatch. In its earlier years it was free of such mismatch as most of the financing came from the public sector that is not as susceptible to funding risks as private. However the situation has changed dramatically in recent years. The public sector no longer dominates the economic scene in the country as it used to. The share of public investment in total investment dropped to around 30 per cent in the late 1990s as compared to over 50 per cent in 1980's and has further dropped since then. In 2006, Government of India (GoI) acknowledged that the needed infrastructure investments for India may not be possible out of the budgetary resources of GoI alone. In order to remove these shortcomings and to bring in private sector resources as well as techno managerial efficiencies, the Government committed to promote Public Private Partnerships in infrastructure development. It also recognized that infrastructure projects with long gestation period may not be fully financially viable on their own. The GoI therefore proposed to set up a special facility to support PPP projects. This support is generically termed as "viability gap funding". Thus the current development strategy envisages a progressively higher degree of involvement of the private sector in infrastructure and heavy industries, which require long-term funds, whether equity or debt. Thus, it appears very likely that the need for risk capital, especially long-term debt, by the private sector in India will rise rapidly in the coming years. The functioning of either equity or debt market depends on the availability of equity funds in the future. There is little possibility of any increase in long-term debt funds without the emergence of a relatively active secondary market in debt instruments. Therefore, the possibility exists that the Indian

economy may be constrained in the coming years by the unavailability of long-term debt unless measures are taken to develop the market. This is particularly worrying since the problem will be most acute in those sectors from which the government is trying to exit as a part of its privatization strategy.

India is bank-dominated market as shown by Table 6. Infrastructure requirements are huge and as shown above. They are in the tune of around 540 billion dollars for next five years. Not only the demand is huge but also the type of funding required is long term as the gestation period of these projects is long. Banks neither are in position to provide such huge financing nor are the loans they provide for such long term. It is evident by the Asian financial crisis that depending on only one kind of financing increases the risk profile of the economy. India largely escaped the worst effects of this crisis- mainly because at that time it was not a part of global financial system. But the situation has changed since then. As the consequence of the accelerating liberalization, it is now very much a part of global financial structure. Thus it is now prone to such crisis. Corporate Bonds provide an alternative to bank deposits for investors. Boot and Thakor in their paper explained how countries benefit from well-diversified financial systems. Bond markets not only diversify the investments of economy but also help in managing risks properly.

Rapid economic growth which is expected to continue is expected to put pressure on conventional (largely bank based) sources of finance in the future. Bank credit is currently expanding at the very rapid rate of 30% per year, while the deposit base is only expanding at 20%, putting pressure on liquidity of banks. Along with corporate demands for credit, consumer demand is rising sharply. Basel 2 norms introduced by Reserve Bank of India have further put pressure on banks balance sheets. Ratio of savings as compared to GDP in India is around 26% which is one of the highest in the world. It makes great sense to tap this saving for the development of the infrastructure in India through bond market. Most of the savings in India is deposited in banks; once bond markets are developed there will be an alternative source of investments by developing the bond markets. Under the current high foreign exchange fluctuations scenario there is a strong case of financing infrastructure through local currency. Bond Market can be the medium to raise long term and large scale funds used for infrastructure.

Financing through Infrastructure Bonds

Infrastructure bonds have the very nature of raising funds for infrastructure where they are project-based (purpose-built asset), centered on a specific activity or objective, with a limited project life-span. With regards to the project life-span, usually projects of this nature require long-term financing and thus the debt market is a rational avenue for this, as bank loan terms are unable to match the longer period of financing that a long tenure bond is able to provide.

A project bond is the issue used to finance a specific capital investment project which utilizes potential cash flows as the source of debt servicing. Risk is mitigated in a project bond issuance through effective allocation of repayment obligation to parties who are best suited to managing this risk. As observed in the above diagram, there are conspicuous features of an infrastructure project bond issue and the way the whole project is set up for the purpose of this issue. All the related parties in the project have a specific role which is extremely significant in the project's overall success or failure. One very distinct feature of this kind of issue is the presence of an off-taker which will be the commissioning body of the finished infrastructure. This adds an element of certainty to this type of funding structure as the cash flows are relatively secure for obligors. On the other hand, the contractors and suppliers supporting the construction of the project need to be strong parties too, as they are responsible for the completion of the revenue-generating source; without which, the purchase agreements would not be able to function and come into effect.

There is another distinct feature of a project financing scheme, that is, the 'cash flow ring fencing' arrangement. It enables a clear allocation of funds to their specific purpose which acts as a safeguard to

satisfy the broad range of project expenses and financing repayments. Besides the above, another defining feature of these types of bonds is that there is an explicit amount of time where the debt servicing component/revenue generating source will not be generating any cash flow. Typically, this is from the time of implementation of the project to the time of its completion. Even then, there is a period of time when debt repayments are scheduled to start, which could be quite a substantial period of time after the entity begins operations which is known as the 'ramp up period'. This case is seen mostly in toll road projects which have seen slow consumer uptake rates when first introduced into the market. Lastly, infrastructure financing through bond issuance is more suited to projects with well-defined and certain cash flows and a bond market environment that is relatively stable. The Bond Market has been successfully used in countries like US, Japan and other emerging economies like Malaysia.

In US, Bond market is effectively used by municipalities which either issues revenue bonds or general obligation bonds. The major difference between the two types of bonds depends on the source of debt service. Revenue bonds are bonds whose debt service is normally payable from identified sources of revenues generated from the financed project. On the other hand general obligation bonds (GOBs) are type of municipal bonds whose debt service is payable from the general revenues of the issuer of such municipal bonds. They are backed by the tax imposing power of the municipality. Revenues bonds are neither subject to issuance caps (the volume depends on the requirement of the financed project) nor require approval of voters before issuance whereas GOB's often require approval before issuance.

RECOMMENDATIONS FOR PARTICIPATION IN FINANCING OF INFRASTRUCTURE PROJECTS

There is a need to focus on enhancing funding efficiency for infrastructure projects in India. One of these areas centers in on the construction risk for green field projects where there is an opportunity for a strong entity to provide a "construction performance guarantee" which covers the cost overrun, timeline delivery and performance specifications to enhance the project debt's ratings during the construction phase. This allows for the project bonds to be issued at higher ratings, thus lowering financing costs over the project life. There are not many bonds that have tenures exceeding 10-15 years, resulting in a maturity mismatch with respect to long gestation infrastructure projects, which are often built for a useful life of 30 years and above. Thus, there is a need to address this shortfall through the introduction of instruments that can facilitate the matching of the funding tenures with the concession periods or useful life of the asset.

Although the volume of funds raised through international project bonds remains relatively small, the market has rapidly expanded and delivered many high-profile transactions (e.g., \$1.2 billion issued by the Ras Laffan Liquefied Natural Gas project in Qatar, \$1 billion issued by the Petrozuata heavy oil project in Venezuela, and \$125 million issued by the Quezon power project in the Philippines). International project bonds differ widely in their issue size, maturity, issue spread, project structure, and legal characteristics and covenants. Issue size ranges from \$23 million to \$1.2 billion, their maturity from less than 3 years to 100 years, and the yield at issue over US Treasuries from 10 basis points to 802 basis points. Dailami and Hauswald (2003) present an interesting finding: If issue terms and sector effects are controlled, legal and regulatory obstacles have the largest and statistically most significant effect on the quality of the project bond. Increases in the obstacles for judiciary and regulatory issues and taxation in the host country lead to much higher at-issue spreads. Covenant protection and contractual devices alone are insufficient to overcome shortcomings in host country's legal, economic, and political institutions.

Tapping the Small Investor

The perceptions of the small investors, as outlined in the above sections and the measures that may be needed to attract them into the market, however, are likely to be lost sight of in the larger scheme of things. It is, therefore, desirable that these be specifically addressed at this stage itself.

There are two broad categories of issues which have been raised and which need to be addressed. First,

what measures need to be taken to persuade small investors to diversify their investments from the fixed term non-tradable small savings instruments to tradable market-based debt instruments, including mutual funds. Second, what can be done to mitigate the inherent risks associated with private corporate debt.

While redefining the yields and returns structure it is essential to note that at present the yields of small saving instruments are inversely related to the risk bearing capacity of the investors. This happens in two ways. First, the tax concessions applicable to these instruments cause the effective (tax adjusted) interest rates to increase with the marginal income tax bracket of the investor. Second, the yield curve for small savings instruments is fairly steep, and more or less mimics the structure of coupon rates on government bonds. This appears completely unnecessary for non-tradable, risk-free administered rate instruments. In other words, individuals who have lesser liquidity or precautionary needs are excessively compensated as compared to those who are more vulnerable.

Clearly, the process of inducing savers to move to market-based debt instruments should begin with those who have higher risk-taking capacities. It is, therefore, suggested that two steps should be taken quite quickly:

- (a) Removal of tax concessions from all small savings schemes.
- (b) Flattening of the yield curve for small savings schemes of different maturities.
- (c)

Recommendations for Making Bond Market Conducive for Infrastructure Financing

The following are the recommendations for the corporate bond market which suffers from lack of supply and demand rather from a defective market infrastructure. Reform the stamp duty as it is critical to corporate bond market development. A standard rate should be there and maximum payable should be capped. Relax exchange controls on corporate bonds. Reform disclosure for public offers i.e. allow disclosure appropriate for public issues into largely professional markets. Development and enhancement of related derivatives markets.

CONCLUDING REMARKS

Indian economy is now faced with the urgent call to develop physical infrastructures to strengthen the foundations of sustained development and poverty reduction. An understanding of how to finance long term, large-scale capital investment projects is indeed a formidable challenge. Bond financing is one of the most profitable and appropriate financing options. A notable development now is the rapid expansion of international project bond markets, providing India with wider choices in bond financing. Developing an active and efficient debt market in India will involve action across a number of fronts. It requires substantial legislative, policy and institutional changes, including improvements in governance standards. However, it is felt that much of these changes will eventually come about simply because of the need to develop a market for private debt instruments in the context of the on-going economic reforms. The interests of the government and the private corporate sector are convergent on this set of issues, and there should be sufficient pressures to ensure that they be addressed.

REFERENCES

- Bahel, N., Ranjan, S., and, Sen, P. (2003), *Developing the Indian Debt Capital Markets: Small Investor Perspectives*, Planning Commission, Government of India.
- Huang, J., and, Huang, M. (2002), *How Much of the Corporate-Treasury Yield Spread is Due to Credit Risk?*, Working paper, Oct, 2002, <http://www.stanford.edu/~mhuang>.
- Planning Commission, *Ninth Five Year Plan 1997-2002*, New Delhi, April 1999. www.planningcommission.nic.in.

Reddy, Y.V.(2002), Developing Bond Markets in Emerging Economies: Issues and Indian Experience, Keynote address at the Asian Bond Conference at Bangkok, March 2002.

Yuan-Hwan Kim. (2005), Financing Infrastructure Development: Asian Developing Countries Need to Tap Bond Markets More Rigorously.

Reserve Bank of India.

FACTORS INFLUENCING JOB SATISFACTION AND INTENTION TO QUIT -A CASE STUDY OF LICENSED AIRCRAFT ENGINEERS IN AN AIRLINE COMPANY

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ABSTRACT

Licensed Aircraft Engineers (LAEs) play an important part in the process of ensuring reliable dispatching of aircrafts. They belong to that category of employees from the aircraft maintenance department that are considered to be highly qualified and have international recognition for the skills they possess. At one point in time, the airline company under investigation faced a situation where a great majority of its LAEs were having the intention to quit their jobs or had already quit their jobs. The study therefore tries to shed some light on the factors that were influencing the LAEs to leave their jobs and proposes actions that might be taken to retain this category of officers. The major factor that influenced their intention to quit was more towards the due recognition and consideration that was not given to them by management and their leaders for their efforts put in their work.

INTRODUCTION

Job Satisfaction can be considered as being the feeling we have about our job. Mueller and Mc Closkey (1990: 113) define job satisfaction as “the degree of positive affective orientation toward employment”. Job satisfaction is considered as a complex hypothetical construct that evaluates the affective and competency elements of the approach towards work. It is also regarded as a complex and multifaceted concept that means different things to different people. Although it is true that many researches discuss job satisfaction as a single psychological construct, it in fact is just one feature of job attitudes that includes morale, personal and industrial development and life purpose (Cook & Wall 1980; Hackman & Oldman, 1976; Herzberg, Mausner & Snyderman 1959; Judge & Hulin 1993; Law & Wong 1999; Locke 1975). Some schools of thought define job satisfaction as “a positive emotional reaction to one’s work that results from meeting or exceeding of individual’s want and needs. In other words, if a person perceives that that his values are realized within the job, he improvises a positive attitude towards his job and thus acquires job satisfaction (Mc Cornic & Tiffin 1974:74). Mosadeghrad 2003b in Rad (2006 :xii) defined job satisfaction as being “an employee’s affective reaction to a job, based on a comparison between actual outcomes and desired outcomes.” This therefore makes it clear that job satisfaction varies from person to person and one single element does not result in job satisfaction, rather, it arises when all elements concerned are in harmony.

LITERATURE REVIEW

Job satisfaction is an important construct for a variety of reasons. Employees who possess high levels of job satisfaction are apt to have stronger commitment to an organization (Brown & Peterson, 1993). Employees with higher levels of job satisfaction are also less likely to search for a job (Sager 1994) or leave a job (Boles *et al.* 1997). Additionally, job satisfaction influences boundary – spanning employee turnover through organisational commitment (Brown and Peterson 1993). Relevant research data have demonstrated the importance of job satisfaction in terms of stability, efficiency, productivity, employee relations, absenteeism and turnover (Baron 1986; Mahradi 1999; Staw & Ross, 1985; Hulin 1991; Carsten & Spector, 1987; Ostroff 1992). So therefore research stipulates that in order to manage employee turnover it is important to understand the factors that affect employee job satisfaction

(Oshagbemi 2000). With increasing threats of competition, retention and staff turnover, especially of highly skilled personnel, ensuring job satisfaction of staff form an important issue for managers.(Rad 2006: xii, see also Rogers *et al.*, 1994)

Determinants of Job Satisfaction

Factors that determine job satisfaction have most of the time been categorised as being extrinsic or intrinsic . While extrinsic factors include elements like pay promotion opportunities, relationship with co workers, supervision and recognition, intrinsic factors include personality, education, intelligence , abilities and age. Another school of thought has categorized the determinants of Job satisfaction under the three broad headings as described below. However, irrespective of the way they have been categorised, there is a strong convergence between the factors that determine job satisfaction as elaborated below

Individual Attributes: These refer to the demographic variables that are used to describe the specific characteristics of the employee actually doing the job. They include characteristics such as gender, age, race, pay , education and tenure. Whereas studies show that there is a meaningful relationship between age and job satisfaction, (Davis 2004) ,there is however, a very low correlation between educational level and job satisfaction (Forsyth and Copes 1994).

Job Characteristics: The nature of the job or tasks being performed by the employee refers to the job characteristics. Therefore, people are more satisfied with their jobs when they are working in a field that they are interested with or that they simply like and enjoy doing. (See Robins 1998)

Organisational Characteristics: Such characteristics focus on the atmosphere of the work environment in which jobs are performed and they include how employees are treated in the workplace in terms of the relationship they share with co workers and their immediate superiors. (See Luthans 1995)

Consequences of Job Satisfaction

Researches carried out so far are more pronounced on the very close relationship that exists between job satisfaction and productivity, employee turnover and absenteeism. A large body of research shows that job satisfaction has a positive effect on productivity (Kreitner & Kinicki 2001, Robbins 1998). Put in simple language, satisfied employees should be productive employees and vice versa. However , here is an inverse relationship between turnover and job satisfaction. That is, employees with low satisfaction are more likely to quit their jobs. According to Luthans (1995:129), “high job satisfaction will not, in and of itself , keep turnover low, but it does seem to help. On the other hand , if there is considerable job dissatisfaction, there is likely to be high turnover”. At the same time, research indicates a consistent negative relationship between job satisfaction and absenteeism, emphasizing the fact that dissatisfied employees will most likely absent themselves from work as compared to satisfied employees. For the purpose of this study, much emphasis will be laid on the relationship between job satisfaction and intention to quit.

Job Satisfaction and Intention to Quit

Turnover intentions can be described as a response to the existing organisational conditions and can range from day dreaming to the act of turnover (Kraut 1975). Rad (2006: xii) claims that “job satisfaction is an immediate antecedent of intention to leave the workplace and turnover. Recent research have generally shown that job satisfaction is found to be “significantly and negatively” linked to intentions of labour turnover (Chiu et al. 2005: 838) Put in the words of Firth (2004:181), “intention to quit is largely influenced by job dissatisfaction”. Moreover, Oshagbemi (2000: 213) puts forward that “less satisfied

workers tend to resign while the more satisfied ones tend to remain in a job”.(See also Gangadhraiah *et al.*, Martin 1990). Research claims that job stressors and lack of job satisfaction are among the factors that contribute to people’s intention to quit their jobs (Moore 2002 in Firth 2004). Among the variables that are consistently found to be related to intention to quit are: job stress and/or stressors, lack of commitment towards the organization and job dissatisfaction in general. Irvine & Ervans (in Rad 2006) have highlighted the importance of work characteristics, definition of the characteristics of the work role, the characteristics of the work environment as factors that contribute to job satisfaction. Although as stipulated before, many factors influence intention to quit among workers, in a further research carried out by Hatton & Emerson 1998 (in Firth *et al.*, 2004), it was found that staff turnover was also partly due to low levels of support from superiors. In his recent study carried out, Rad (2006) found that employee’s job satisfaction significantly correlated with and was affected by leadership style of managers involved. Leadership support can be referred to as being the extent to which a person perceives that he is getting due consideration from his or her immediate superior. Recent studies carried out also show a consistent relationship between leadership support and job satisfaction, therefore also affecting intention to quit. (See for example Brown & Peterson 1993, Netemeyer *et al.*, 1997).

BACKGROUND OF THE STUDY

LAEs belong to that category of employees from the aircraft maintenance department that are considered to be highly qualified and have international recognition for the skills they possess. They are strict to internal and external rules and regulations, which, in turn, are governed by mandatory requirements from the airline control bodies. In the early 1990s, through a job evaluation exercise in the organization concerned, it was found that the category of LAEs was classified among a very few job titles on the highest salary scale of the organisation. In 1996, the LAEs made a request for a separate salary structure which was unfortunately turned down. Although recurrent requests have been made to management regarding this issue, there was however no action taken. Recently, the company decided to outsource part of its maintenance services thus causing a reduction in the take home pay of the LAEs. At the same time, facts show that outsourcing of such a service did not cost cheaper to the company, nor were those in the company where work was outsourced more skilled than the LAEs concerned. This was viewed as a betrayal to the LAEs and many showed their intention to quit. Contradictory as it may sound, the airline company concerned has not been proactive in setting appropriate retention plans for this category of workers. Consequently, since 2005, the airline company concerned is facing a high rate of turnover among its LAEs.

AIMS & OBJECTIVES

The aim of the study is to chart out the direct relationship between job satisfaction and the high level of turnover the company is actually experiencing as far as LAEs are concerned. It also attempts to

- (i) assess the level of Job satisfaction of LAEs through the various parameters involved
- (ii) investigate the reasons causing job dissatisfaction in the organisation.
- (iii) shed some light on the reasons why LAEs have the intention to quit the organisation.
- (iv) Propose recommendations as to what can be done to retain LAEs

METHODOLOGY & LIMITATIONS OF THE STUDY

A questionnaire consisting of 14 questions was used to gather data among all 42 LAEs over a period of two weeks in January 2008. The response rate was 83.33 % with 35 valid questionnaires. A likert scale of 1- 6 (where 1 would mean Strongly Disagree and 6 Strongly Agree) and 1-5 (1= Very satisfied 5 = Very dissatisfied) was used in the questionnaire to judge the various factors influencing job satisfaction, labour turnover and intention to quit. Personal details were gathered through close ended questions. Data was used analysed using SPSS and cross tabulation. However, the study was conducted at that point in time

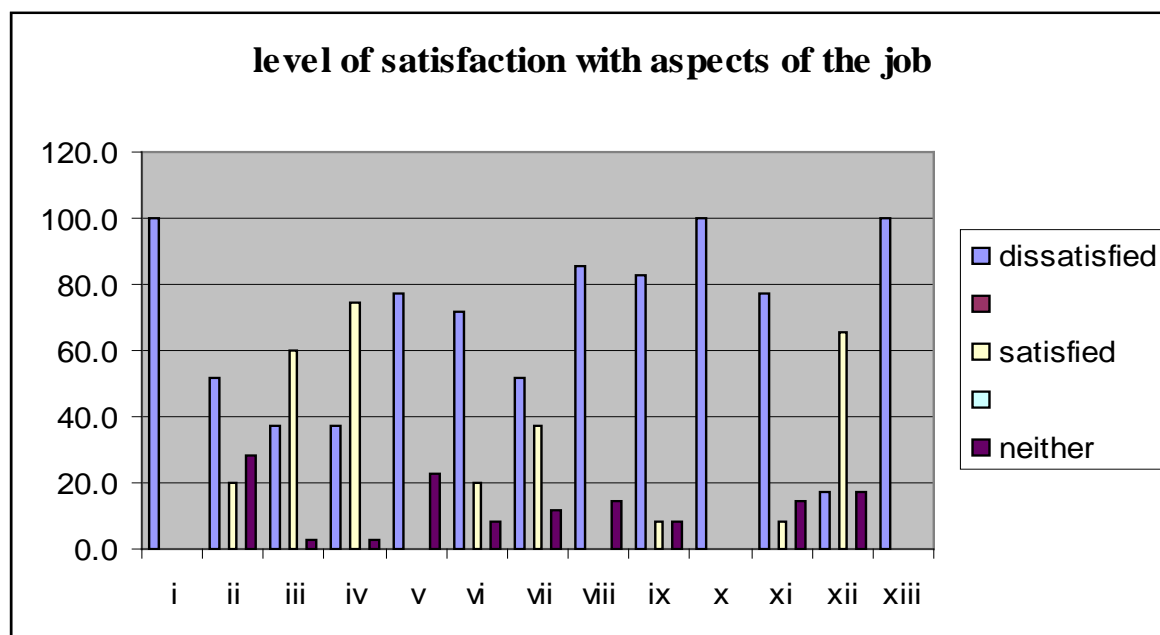
when a considerable amount of LAEs had already left, this could have influenced the opinion of LAEs who were still in employment. The findings might have been different had the study been conducted in the very beginning of the crisis when the amount of LAEs who had already left was not so apparent.

FINDINGS & ANALYSIS

Demographics : The survey revealed that all LAEs were males with majority of the LAEs concerned being fairly young in the age bracket of 30 – 39 years , followed by a few aged between 40- 49 and around 4 being above 49. Among them 83% have less than 20 years of service and only 3% having more than 30 years of service.

Job Satisfaction : As far as the job in general is concerned, 34% of respondents were very dissatisfied with their job in general whereas 35% were dissatisfied. While 11% have not expressed their feelings, only 9% voiced out their satisfaction to their job in general. An indepth anaysis of the factors causing job satisfaction/dissatisfaction as mentioned below yielded the following results:

Figure 1 : Level of Job Satisfaction with Job Parameters

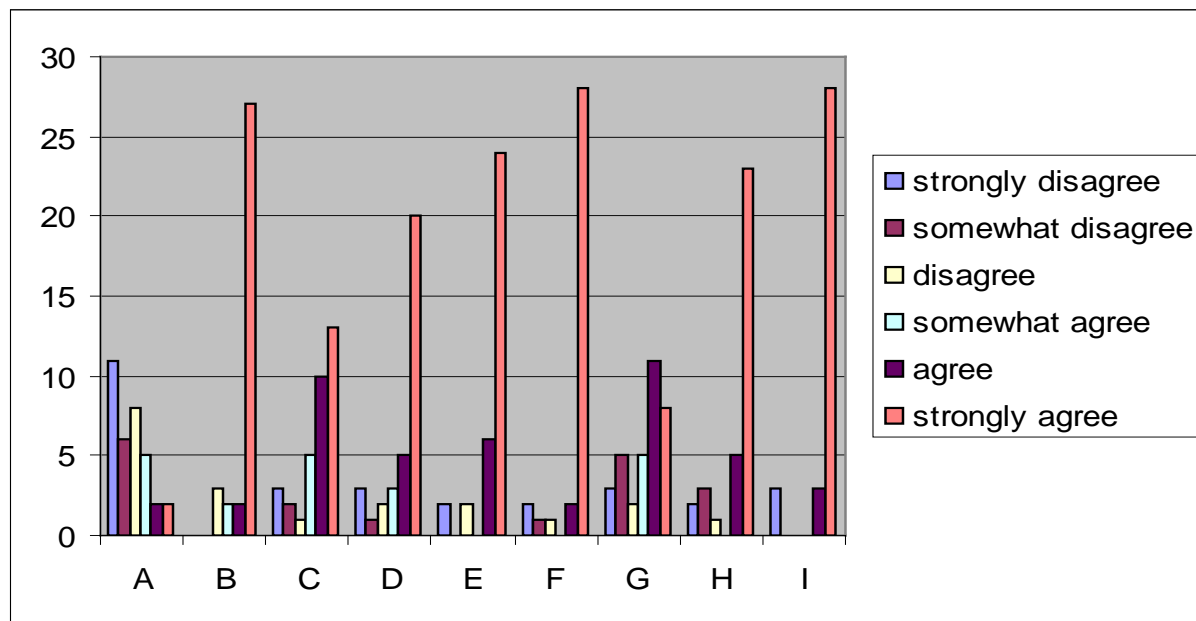


- (i) total earnings
- (ii) Job security
- (iii) type of work
- (iv) number of working hours
- (v) working time
- (vi) working conditions/environment
- (vi) workload
- (vii) opportunity for promotion
- (viii) training and re-qualification
- (ix) social care, benefits

The salient features that the table clearly shows is that among the parameters of job satisfaction concerning the job itself, LAES were very satisfied and satisfied with the type of work and number of working hours. However, the LAEs showed strong dissatisfaction or dissatisfaction with respect to working conditions, workload, opportunity for promotion, relationship with direct superior. It is good to note that none of the LAEs were satisfied with how work was organised.

Intention to Quit : As far as intention to quit is concerned, the findings reveal that 97% of LAEs have the intention to do so. The factors that would contribute towards this step are investigated in the table below :

Fig 2: Factors contributing to LAEs intention to Quit



A Relationship with Co workers

B Remuneration

C Work environment

D Work conditions

E Attitudes of Superiors

F Attitude of Management

G Hours of work

H Future Financial and Social Well Being of the Family

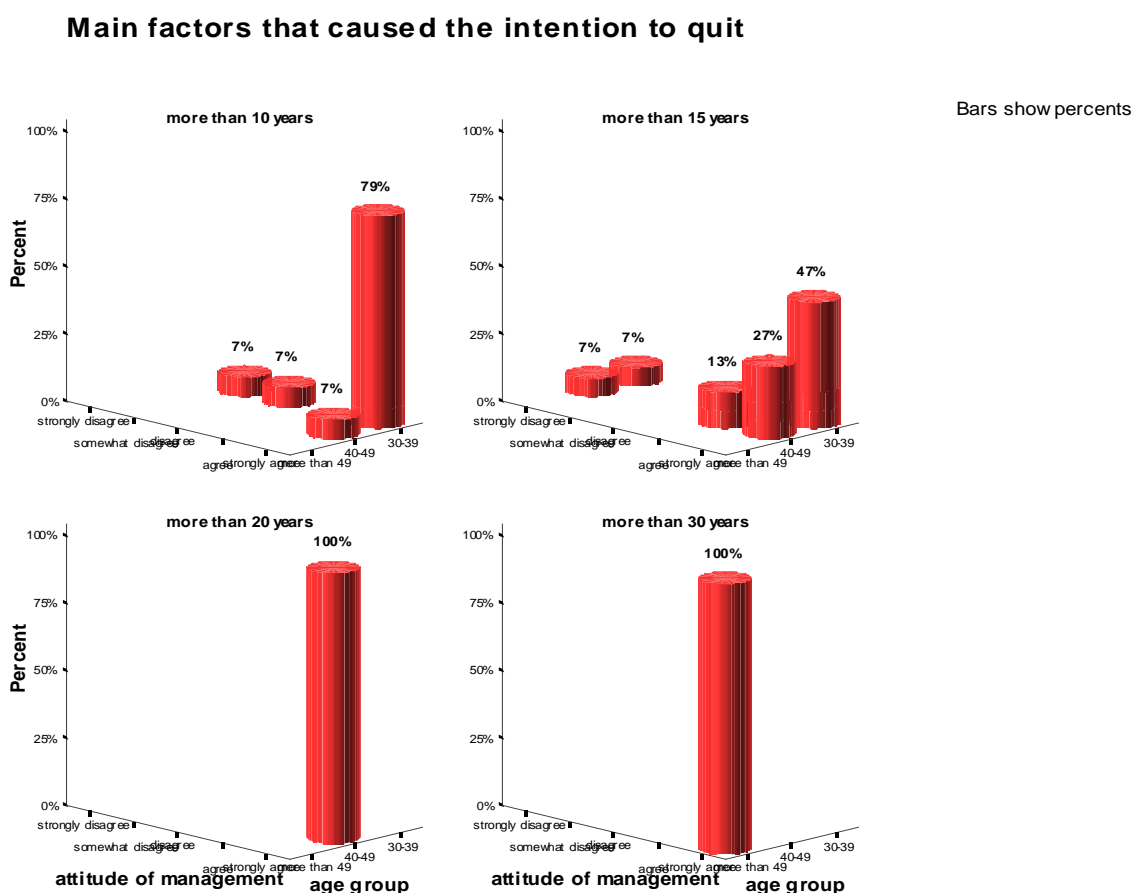
I No recognition for good work

As Figure 2 clearly shows, maximum LAEs found that the attitude of management would influence them to quit followed by remuneration and no recognition for good work. Other factors that would positively affect this decision would be the attitude of superiors, and future financial and social being of the family. However, relationship with co workers and hours of work would not be affecting this intention considerably. Analysing the two tables, it becomes clear that LAE's relationship with their superior was influencing, to a large extent, their level of job satisfaction and simultaneously, this would be one of the factors that would influence them to quit followed by remuneration.

Further analysis was therefore carried out to find the relationship between years of service, attitude of management and intention to quit. Not surprisingly, the following results were obtained (as depicted in the bar charts below). Irrespective of the age group and number of years of service, the major factor that influenced LAEs to quit the organization was the attitude of management. From the diagram, it becomes

clear that 100 % of those who are in the 40-49 age group bracket and more than 15 years of service found the attitude of management influencing their intention to quit and 79% of those within the 30-39 age group and with more than 10 years of service. The critical factor over here is that despite having more than 15 years of service, LAEs had the intention to quit because of their superiors. This clearly shows that even if the pay of the LAEs showed some decrease over the previous years, this would not have been the ultimate factor that would push them to leave their jobs rather; they were expecting more support from their managers. It is moreover a pity to also note that even those with more than 15 years of service had the intention to quit because of this factor. There is therefore strong indication that even organizational commitment is being hampered by lack of management support. LAEs have lost trust and faith in their managers. In this particular case, it would be very appropriate to say that LAEs would not be quitting their jobs, but would be quitting their managers.

Figure 3: Main Factors Causing Intention to Quit



RECOMMENDATIONS AND FUTURE RESEARCH

The study makes it clear that there is an urgency to tackle the issue of retention of LAEs in the organization. The airline company in question finds itself in great need to retain its LAEs since the organisation's work has to go on. From the study it is clear that the workers concerned are dissatisfied with the leadership skills and the way they are being treated by managers and team leaders. And this is the major cause influencing intention to quit among 97% of the LAEs surveyed. And moreover, as put forward by (Rad 2006 : xi) "Job satisfaction is critical to retaining and attracting well qualified

personnel”. According to Firth *et al.* (2004) after a research carried out among retail salesperson, “Monitoring workloads and supervisor – subordinate relationships by management may not only reduce stress, but increase job satisfaction and commitment”.

Going back to the airline company concerned, it has been the practice in the company that LAEs are promoted to team leaders and managers solely based on knowledge of their job. The airline company concerned should realise that customer satisfaction is no longer the buzzword in service undertakings it's rather employee contentment and loyalty (Rogers *et al.*:1994). Taking into consideration the crucial link between job satisfaction and the support from superiors, it is therefore recommended that once team leaders and managers of the airline concerned, are nominated based on their technical abilities, they should imperatively be provided with the proper leadership and managerial skills through proper training and development. Rad (2006: xxiv) rightly points out that management should have a good understanding of “human nature, the basic needs, wants and abilities of people”. Such training would enable team leaders of the LAEs to understand them better as employees of the organisation and thus give due recognition to their work done. The training dispensed should also take into consideration the culture of the organisation. Since, it has been found that organisational culture does affect leadership style. While it is also true that there should be a review of their salaries, the results show that improvement in the way in which LAEs of the company are treated would be more effective in retaining them rather than an increase in their salaries. The increase in salary, as the results depict, would not be the sole factor that would retain LAEs concerned. More so, as the results indicate, taking into consideration that they are satisfied with the job itself. It is therefore strongly recommended that LAEs nominated to be team leaders and managers be given appropriate training rather than an increase in pay to retain them in the organisation. Future research might focus on the specific leadership skills that the team leaders working with LAEs would require. This will make the training more focused.

REFERENCES

Baron R, 1986 *Behaviour in Organisations*, Ally & Bacon, Newton MA

Boles J S, Johnston M W, Hair JF, 1997 “*Role Stress, Work Family Conflict and Emotional Exhaustion : Inter Relationships and Effects on some Work Related consequences*”, *Journal of Personal Selling and Sales Management*, vol.17, No.1, pp. 17-28

Brown S P, Peterson R A 1993, “*Antecedents and Consequences of Salesperson Job Satisfaction: Meta Analysis and Assessment of Causal Effects*”, *Journal of Marketing Research*, vol.30, pp. 63-77.

Carsten J M, Spector P E, 1987 “*Unemployment, Job Satisfaction, and Employee Turnover : A Meta Analytic Test of the Muchinsky Model*”, *Journal of Applied Psychology*, vol. 72, pp. 374- 381.

Chiu C K, C S Chien & C P Lin, Hsiao C Y 2005, “*Understanding hospital employee job stress and turnover intentions in a practical setting – the moderating role of locus of control*”, *Journal of Management Development*, vol. 24, no. 10, pp.837-855.

Cook J, Wall T, 1980 “*New York Attitude measures of trust, Organisational Commitment and Personal Need Non Fulfillment*”, *Journal of Occupational Psychology*, vol. 53, pp.39-52.

Davis G, 2004 “*Job Satisfaction survey among employees in small businesses*”, *Journal of Small Business Enterprise Development*, vol. 11, no.4, pp. 495-503.

Forsyth C J, Copes J H 1994, “*Determinants of Job Satisfaction Among Police Officers*”, *International Review of Modern Sociology*, vol.24, no.1, pp. 109-116.

Gangadhraiah H M , Nardev G and Reddy M V 1990, “*Nurses’ Job Satisfaction in Mental Health and Neuro – Science Setting*”, Nursing Journal of India , vol.81, pp. 201- 204

Hackman J R , Oldham G R 1975 “*Development of the Job Diagnostic Survey*”, Journal of Applied Psychology , vol. 60, pp. 159-170.

Hatton & Emerson 1998 in Firth L , Mellor D J , Moore K A, Loquet C 2004, “*How can Managers Reduce Employee Intention to Quit*”, Journal of Managerial Psychology”, vol.19, no.2, pp. 170-187.

Herzberg F , Mausner B, Snyderman B 1959 *The Motivation to Work* , John Wiley & Sons , New York

Hulin C L 1991, in Dunette M D , Hough L M (Eds) , *Handbook of Industrial and Organisational Psychology* , Consulting Psychology Press, Palo Alto , CA , vol. 2

Irvine & Evans 1995 in Rad A M M , Yarmohammadian M H 2006 , “*A study of relationship between manager’s leadership style and employees’ job satisfaction*”, Leadership in Health Services, vol. 19, no.2, pp. xi-xxviii.

Judge T, Hulin C 1993 “*Job satisfaction as a reflection of disposition: A Multiple Source Causal Analysis*”, Organisational Behaviour & Human Decision Processes, vol. 56, pp. 388- 421.

Kraut A I 1975, “*Predicting Turnover of Employees from Measured Job Attitudes*”, Organisational Behaviour and Human Performance, vol.13, no. 2, pp 233-43.

Kreitner R & Kinicki A 2001, *Organisational Behaviour* , Irwin , Chicago

Law K S, Wong C 1999 “*Multidimensional Constructs in Structural Equation Analysis: An Illustration Using the Job Perception and Job Satisfaction Constructs*”, Journal of Management, vol. 25, pp 143-160.

Locke E A 1975 The nature and causes of Job Satisfaction in Dunette M D (Eds) , *Handbook of Industrial Psychology* , Rand Mc Nally , Chicago pp 297-343.

Luthans F , 1995 *Organisational Behaviour* , Mc Graw Hill Education , USA

Maghradi A 1999, “*Assessing the effect of Job Satisfaction on Managers*” , International Journal of Value Based Management , vol.12, pp. 1- 12

Martin B J 1990, “*A successful approach to absenteeism*”, Nursing Management, vol.21, pp. 45-48.

Mc Cormic , Tiffin J 1994 , *Industrial Psychology* , 6th Edition. Prentice Hall Inc. New Jersey.

Mosadeghrad 2003 in Rad A M M , Yarmohammadian M H 2006 , “*A study of relationship between manager’s leadership style and employees’ job satisfaction*”, Leadership in Health Services, vol. 19, no.2, pp. xi-xxviii.

Moore 2002 in Firth L , Mellor D J , Moore K A, Loquet C 2004, “*How can Managers Reduce Employee Intention to Quit*” , Journal of Managerial Psychology”, vol.19, no.2, pp. 170-187.

Mueller C W , Mc Closkey J C 1990 “*Nurses’ Job Satisfaction : A proposed Measure*”, Nursing Research , vol. 39, no.2 pp 113-117 .

Netemeyer R G , Boles J S , McKee, D O and Mc Murrian R 1997, “*An investigation into the antecedents of organisational citizenship behaviours in a personal selling context*”, Journal of Marketing , vol.61, no.3, pp. 85-98

Oshagbemi T 2000, “*Is Length of Service Related to Job Satisfaction ?*”, International Journal of Social Economics, vol. 27, no.3 , pp. 213- 226 .

Ostroff C 1992 “*The Relationship between satisfaction , Attitudes and Performance : An organizational Level Analysis*” , Journal of Applied Psychology, vol. 77, pp 963- 974.

Rad A M M , Yarmohammadian M H 2006 , “*A study of relationship between manager’s leadership style and employees’ job satisfaction*”, Leadership in Health Services, vol. 19, no.2, pp. xi-xxviii.

Robbins S P , 1998 *Organisational Behaviour Concepts , Controversies and Applications*, Prentice Hall, India .

Rogers J D , Clow K E , Kash T J 1994 , “*Increasing Job Satisfaction of Service Personnel*”, Journal of Services Marketing, vol.8, no. 1,pp.14-26.

Sager J K 1994, “*A Structural Model Depicting Salespeople’s Job Stress*”, Journal of the Academy of Marketing Science, vol. 22, no.1, pp 74-84.

Staw B M , Ross J 1985 , “*Stability in the Midst of Change : A Dispositional Approach to Job Attitudes*” , Journal of Applied Psychology , vol. 70, pp. 469-480.

A COMPARATIVE ANALYSIS OF SOCIAL SERVICES & SOCIAL SECURITY PROGRAMS IN THE INTERNATIONAL ARENA: ARE THERE BEST PRACTICES TO BE USED AS A TEMPLATE?

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ABSTRACT

Providing social services to meet the needs of society is at the foundation of the United States political system. Social Security and related social services, created to protect the integrity of our political system, has been a moral triumph. But an important question remains: "Are we adequately meeting the needs of our at-risk population when compared to the international community?" Our research will be based on both primary and secondary research. The results of our research will be analyzed and the results presented as viable alternatives and recommendations for improving the current crisis in our social welfare programs.

INTRODUCTION

Some critics have likened the current Social Security system to a modern day version of a "Ponzi Scheme"[1] as we effectively confiscate monies from the younger generation to pay for the aging of America. Can a society based upon a capitalistic economic system effectively administer programs tantamount to a "Welfare State? [2]" The effective administration of social programs aimed at providing social risk services to the disadvantaged and elderly members of our society is at the core of the issue. Are there more effective programs currently in existence in the international arena that could become the template for us to improve our current social programs?

By the late 1800's Europe recognized the need to develop social programs to ensure the stability of their economic systems. Germany, in 1889, created the first Social Security Retirement Program to promote the concept of "safety nets" for their aging population. The United States entered the Social Security arena after an economic failure, triggered by the Stock Market Crash of 1929, sent our economy into a "Great Depression." From 1929 through 1934 the need for government sponsored social programs became apparent as untold members of our society fell into financial disrepair.

President Roosevelt responded with the Social Security Act of 1935 which created monthly benefits to individuals attaining the age of 65 and no longer working. The act also provided benefits to the unemployed, aid to dependent children and for medical services [3]. The act was amended throughout the years, but the first recognition of a major crisis in the system became apparent in the late 1970's. Currently referred to as "FDR's folly" [4], the need to restructure and improve the Social Security system continues today as we search for an acceptable solution which will allow us to provide a social net for the elderly and the disadvantaged without causing an economic crisis.

Congress has repeatedly attempted to "save" social security, but currently the system is on "life support." It is critical that we reconfigure the current social policies in effect to protect the long-term viability of both the program and our economy. We must continue to provide safety nets to members of society in need without harming the integrity of our economic system. In our present recession prone economy, viable alternatives to the existing social security system must be investigated and ultimately implemented.

The debate that a more effective and efficient social program exists in the international community should be investigated and critiqued.

THE CURRENT SOCIAL SECURITY SYSTEM

The Social Security initiative is a public insurance program funded by deductions from employee salaries and matched by the employer in an equal amount. Social Security is funded by the Federal Insurance Contribution Act.[6] The program includes the following initiatives:

- Federal Old Age, Survivors and Disability Insurance
- Unemployment Insurance
- Temporary Assistance to Needy Families
- Medicare-Health Insurance for the Aged and Disabled
- Medicaid-Grants to States for Medical Assistance Programs
- State Health Insurance Program for Children
- Supplemental Security Income
-

The law was enacted to provide monthly benefits to retirees 65 years of age and the disbursements were based upon the employee's payroll contributions [7] along with the other benefits and programs listed above.

When the program was started in 1935, the employer and employee paid a maximum of 2% on the first \$3,000.00 in wages. In 1965, the Social Security Act was expanded to include Medicare and was separated from the Old Age Survivor and Disability rate [8]. Starting in 1975, cost of living increases were mandated. In 1983, due to inflation and concern over the adequacy of the fund to meet future obligations, the federal government enacted increases in the payroll tax and the gradual increase in retirement age requirements as well as implementing the taxation of benefits. The minimum retirement age was reduced to 62, but with a lower payment benefit. The age of retirement which entitles the retiree to full benefits is determined by their date of birth. The current rate for Medicare is 1.45% for both the employee and the employer with no upper limit and for Old Age Survivor Benefits; the 6.2% rate for both the employee and the employer is limited to the first \$102,000.00 of earnings [9]

PROBLEMS WITH THE CURRENT SOCIAL SECURITY ACT

The primary problem with the current program is that retirees are living much longer today than when the program was initiated, 67 in 1935 has increased to 77 in 2009, and that fewer people are working in relation to the recipients receiving the funds. In 1935, there was a 16:1 worker to recipient ratio, which has narrowed to the current 3.3:1 ratio. To further complicate the issue, after the mandated increases enacted in 1983, SSA generated a surplus of funds which were quickly diverted to other uses, primarily to off-set the federal deficit [10]. Monies initially collected to provide for the deluge of baby boomers facing retirement evaporated into the vortex of an Uncle Sam IOU liability.

How much of a shortfall exists is debatable, but recent calculations by the Social Security Administration states that the ability of the fund to make payments to retirees after 2016 is questionable [11]. The census bureau suggests that as people continue to live longer and longer, by 2050, the average life expectancy is expected to reach 83 [12], the shortfall will expand. Adding to the crisis is the realization that from 2004 until 2030, the projected fund distributions are expected to increase from 7% to 13% [13], primarily due to the demands generated by the Medicare program.

A major deficiency in the current Social Security regressive tax system is that the poor and middle class workers assume a larger contribution percentage due to the upper limit income shield benefitting the wealthiest taxpayers. The higher the income you earn, the lower the percentage of tax you pay, which is viewed as discriminatory and favoring the rich.

Another problem with the current system involves eligibility of survivor benefits due to a change in marital status. Widows, married less than 9 months, are not entitled to receive survivor benefits along with divorcees married less than 10 years. Co-habiting same-sex couples are not entitled to survivor benefits, unless the state in which they reside recognizes same-sex marriages [14].

Confusion abounds as to whether the current program should be defined as a tax, an insurance policy or a re-distribution of wealth program [15]. If social security is viewed as a tax, usually the payment of a tax, does not guarantee a refund. If Social Security is viewed as an insurance policy, than only those who in essence “paid” their premiums should be entitled to distributions. If we view Social Security as a re-distribution of wealth program, than a needs assessment should be implemented to determine eligibility for benefits.

Critics of the current program state that the intergenerational forcible transfer of wealth increases dependence on the government as is unsustainable in the future [16]. Many believe the program is a welfare program disguised as a retirement program caused by the inefficiencies of the government [17]. The social safety net [18] established during the Great Depression has become an unmanageable dinosaur depleting our resources and undermining private retirement savings goals.

SOLUTIONS TO FIX THE SOCIAL SECURITY SYSTEM

Our current economic crisis has forced middle class America to question the underpinnings of our capitalistic monetary system. Our economy is entrenched with the idea of capitalism being superior to socialism. Contrary to that premise are the current social security programs which are essentially socialistic policies. A capitalistic solution previously suggested during the previous Bush Administration recommended the privatization of a portion of the funds. This policy, which is still under consideration, was not enacted due to the instability of the stock market and the lack of support by congress. The current stock market crisis supports the decision as being correct.

Other solutions presented for possible consideration are:

1. Raise the payroll tax cap for Social Security contributions
 - a. Currently proposed by the Obama administration
2. Reduce benefits to the wealthiest participants
3. Raise the tax rate
4. Raise the retirement rate
5. Raise the tax on social security benefits paid out to recipients

All of the above mentioned potential solutions could provide additional funds to bolster the coffers of the federal program, but we cannot focus on solutions without mentioning potential negative consequences. We do not want to impose additional socialistic restraints on an already overburdened US economy. Any increase in taxes or reduction in payments during an economic recession is viewed as harmful to the recovery by some leading economists. Assuming that premise to be true, the only viable solution to the current problem would be an increase in retirement age for benefit eligibility during the current economic slowdown.

Prior to the current world wide economic crisis, social security programs in the international arena were selected as potential templates for improving our system. Venezuela was initially hailed as a successful social program for the United States to emulate. But recent information pertaining to the current situation in Venezuela portrays a far different story. The once highly regarded social programs have been replaced with poorly managed and corrupt systems [19]. The free healthcare program created to serve the poor in Venezuela has encountered crippling problems resulting in the closure or insufficient staffing of approximately 70% of the facilities [20].

Canada has a similar social security program to ours, and they recognized the need to address the challenges of an aging population and shrinking workforce. In 1997, the Canadian system was reformed and it resulted in a higher tax base, a higher tax rate and a decrease in benefits paid and increased eligibility requirements [21].

INTERNATIONAL COMPARATIVE SOCIAL PROGRAM ISSUES

Recently, the United States Social Security Administration released a 335 page report on the comparative Social Security programs throughout Europe. The report provides an in-depth analysis of the 44 countries in Europe providing old age, disability, survivors, sickness and maternity benefits to their residents. The information provides a starting point to assess the United States social welfare system compared to the socialized welfare programs existing throughout Europe.

The differences in the international programs are rampant and undermine the value for comparative analysis purposes. One country, Belarus, reported a contribution rate of only 1% for the insured compared to 37.45% paid in the Netherlands. The employers contributions for the social programs varied in a similar manner with Croatia reporting 0% paid compared to a 35.14% cost in France. There are extremes in all areas of the data ranging from significant differences in total population, life expectancy, percent of aged population and GDP per capita. A complete analysis of the specific programs, benefits available and contribution process of the corresponding countries will be explored and lessons learned provided.

The need to determine which international social welfare programs are adequately meeting the needs of the at-risk population is critical. Some programs may appear viable in theory, but in practice may fail. In Greece, for example, a proposed change to their deficit-plagued pension system was met with extreme resistance by the populace resulting in massive strikes causing the economy to grind to a halt. The British welfare system has recently been exposed as a contradiction in policy vs. practice. The underpinning of the system is centered on the philosophy of providing “free” medical care for everyone. In reality, that system is inconsistent and unreliable resulting in the wealthy “buying” services when needed but unavailable in the free arena.

Iceland, hailed as the “best” country to live in 2007 by the United Nations, has essentially declared bankruptcy in 2009 [22]. The ramifications of providing universal pension and healthcare payments to all persons residing in Iceland, coupled with extensive maternity, paternity, work injury and unemployment benefits has bankrupted the country [23].

An in-depth comparative analysis is needed to examine all the pertinent parameters of our current system and contrast them with comparable international social service programs to determine adoptability. Only countries with analogous economic and political systems will be selected for inclusion to provide useful recommendations for future implementation. The need to differentiate between viable economics and voodoo economics must be completely investigated to ensure a viable solution.

LESSONS LEARNED: WHY SOCIAL SERVICES FAIL?

Attempting to provide a safety net to society's underprivileged has been a goal since the New Deal was initiated and ushered in a new era appropriately named the "Great Society." Many of the programs attempted to resolve long standing problems encountered by the disadvantaged members of society. They were meant to be temporary solutions, but unfortunately, the war against poverty failed and the needs remained.

The belief that social welfare programs trap the underprivileged participants by undermining their ability to escape from the safety net has been debated for many years. The massive problems encountered by the most vulnerable-the elderly – have been neglected in the popular debate. The current Social Security program is dying and we need to provide life support before it is too late. Too many of the at-risk members of society, most of whom provided immeasurably to society during their lifetimes, will be irrevocably damaged if social security fails.

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 integrated the concept of personal responsibility into the landscape of the safety net debate. An aggressive overhaul of the current system mandates the privatization of many of the programs designed to help those in need. The current philosophy on Capitol Hill is to shift responsibility from the public arena to the private, both in terms of responsibility and financial management. But in a recession laden economy the solutions are limited.

A crisis is looming and a viable alternative to the current system is imperative. One proposal meeting with significant political resistance is the plan for privatization for the individual workers accounts. This system is currently in place throughout the world, but with mixed results. In Chile, for example, the privatization process requires contributions by the employees and not the employers. The instability in the financial markets resulted in a roller coaster range of returns that ultimately created an estimated 40% of the participants in Chile being underfunded. The working poor and women were most severely impacted by the shortages as well as the self-employed who were not mandated to participate.

The American dream is being eroded by deficits in the funding of Social Security, Medicare and Medicaid programs further complicated by rising costs. Needy members of society seek a mix of public and privately based funding sources to support their basic needs. The role government should play in providing assistance in a capitalistic economy is confusing at best. The need for a safety net is apparent but the failures in the current system are undermining the confidence of the contributors and recipients.

We need to solve these overwhelming problems with social security and needs based social programs to provide the quality of life mandated by society. It is imperative that we examine the practices of successful domestic and international social services and the resulting impact on their financial condition. We live in a dynamic economy and our social security policies must be flexible to meet the needs of the recipients as the political and financial parameters evolve.

CONCLUSION

Social Security was established during a time of economic crisis in our country to provide a sense of security to our aging populace. The goals of the program are as relevant in 2009 as they were in the 1930's. The current economic crisis has created panic among the aging baby boomers. The fear of growing old and having less security is an overwhelming feeling reverberating throughout the world. Government policies supporting the needs of our older members of society need to be effectively implemented without undermining capitalism. We cannot enact policies that will provide disincentives to hard work and success in order to "save social security." The United States economy is successful because we have always adhered to the policies of capitalism sprinkled with limited social programs. The

international arena is facing a myriad of financial problems caused in part by unrealistic social programs. We need to learn from their mistakes, not implement them as a solution to our Social Security problem.

REFERENCES

1. Chapman,B., “Social Security: Ponzi Scheme Within Ponzi Scheme,” Conspiracy Planet, January 12, 2009.
2. Tevault, D., “What’s Wrong with Social Security?” Civics and Politics, 2/18/2008.
3. http://en.wikipedia.org/wiki/Franklin_D._Roosevelt
4. Tevault, D., “What’s Wrong with Social Security?” Civics and Politics, 2/18/2008
5. <http://en.wikipedia.org>
6. [http://en.wikipedia.org/wiki/Social_Security_debate_\(United_States\)](http://en.wikipedia.org/wiki/Social_Security_debate_(United_States))
7. King, T. and Cecil, H., “The History of Major Changes to the Social Security System” The CPA Journal, May 2006
8. Ibid
9. Ibid
10. [http://en.wikipedia.org/wiki/Social_Security_\(United_States\)](http://en.wikipedia.org/wiki/Social_Security_(United_States))
11. Ibid
12. http://en.wikipedia.org/wiki/Social_Security_Underestimates_Life_Spans
13. [http://en.wikipedia.org/wiki?Social_Security_\(United_States\)](http://en.wikipedia.org/wiki?Social_Security_(United_States))
14. Ibid
15. King, T. and Cecil, H., “The History of Major Changes to the Social Security System” The CPA Journal, May 2006
16. Tevault, D., “What’s Wrong With Social Security?” Civics and Politics, February 18,2008
17. Ibid
18. Jones, J., “Safety Net Semantics” The Hoover Digest, No 3 2003
19. Amersterdam, R.,” Why Venezuela’s Social Programs Are Failing”, Perspectives on Global Politics and Business, March 2009.
20. Ibid.
21. <http://www.parl.gc.ca/information/library/PRBpubs/prb0541-e.htm>
22. <http://travel.latimes.com/daily-blog/index.php/un-picks-best-and-worst-1122/>
23. Ibid
24. http://www.aarpinternational.org/resourcelibrary/resourcelibrary_show.htm?doc_id=

HOTEL MANAGERS' PERCEPTIONS OF SERVICE QUALITY: A CASE STUDY

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ABSTRACT

The hotel industry is facing increasing competition that compels hoteliers to seek competitive advantage. The industry has to withstand constant threats not only from new hotels being developed in the destination but also from reputed hotels in competing destinations. In the hospitality sector, delivering service quality to customers is increasingly recognized as a key factor for the success and survival of firms. This study compares managers' perceptions of service quality with customers' expectations to determine if managers understand the wants of consumers. A case study approach was adopted where the SERVQUAL methodology was used to measure service quality managers and customers. The results reveal that there is a negative discrepancy across all of the five dimensions of service quality. Therefore, it is recommended that management considers various measures in order to reduce service quality gap.

INTRODUCTION

The tourism industry in Mauritius has been expanding at a very fast pace demonstrated through the construction of resort hotels in different parts of the island to increase room capacity, revenue and to cater for the diverse needs of the business and leisure tourists. The hotel industry plays an extremely important role in the local economy. Hotels are major revenue and employment generators and in 2007, large hotels characterised by more than 80 rooms provided 26, 322 direct jobs (AHRIM, 2008). In 2007, there were 97 hotels in Mauritius with a capacity of 10, 857 rooms (AHRIM, 2008). The yearly occupancy rate for all hotels in Mauritius was 76% for 2007 and 78% for large hotels. However, hotels are facing increasing competition that forces them to seek competitive advantage and profitable ways to differentiate themselves. Service quality has become a key concept particularly for these labor intensive firms. Hotels in Mauritius have acknowledged the importance of the customers and have placed greater emphasis on the delivery of service quality (Marriott, 1995). Hence research in the area of service quality in Mauritius (Ramsaran-Fowdar, 2006) and internationally have mostly focused on the customers' perspectives. Apart from the study of Juwaheer and Ross (2003), limited empirical evidence is available on managers' perceptions of service quality in hotels. It is important to investigate management's perceptions as they are the providers of service and hence have a significant control over the level of service delivered by the organization. The objectives of this study are to assess managers' perceptions of service quality and compare these perceptions with the expectations of their customers to determine if they are aware of the exigencies of their customers. The modern customers have a wide array of products to choose from, are more discerning and continuously seek improvements of products and services. Thus, it is very important for hotels to determine if the management is aware of the level of service quality expected by customers since it is closely related to business performance in terms of profitability, growth, market share, goodwill, image, recurrent business as well as customer loyalty (Callan, 2007).

SERVICE QUALITY

Service quality has been defined as meeting customer expectations Parasuraman *et al.* (1985). Parasuraman, *et al.* (1988:17) define expectations ‘as desires or wants of consumers, i.e., what they feel a service provider should offer rather than would offer.’ According to Zeithaml and Bitner (2003), customer expectations are the standard parameters for performance against which service experience are evaluated. Zeithaml *et al.* (1990: 20) argue that there are many factors which influence customer expectations namely word-of-mouth, personal needs of the customers and the latter’s own past experiences. A customer with frequent experience with hotel services would be more likely to demand more of similar firms. Furthermore, external communication such as television, advertising and price helps to form expectations of customers (Zeithaml *et al.*, 1990: 20).

Services quality is more difficult to measure than product quality due to the characteristics of intangibility, inseparability, variability and perishability (Parasuraman *et al.*, 1985). A service is intangible and takes the form of experiences or performances (Zeithaml *et al.*, 1985) as it is something that cannot be touched, evaluated or seen. Greater emphasis is placed on personal information sources and the customers use price as a determinant to evaluate service quality (Palmer, 1998) as the product is incorporeal. Hence, managers of hotel firms need to lessen this service complexity by enhancing tangibles cues and focus on the level of service quality delivered. Another characteristic of services is inseparability where the customer must come to the service provider to consume the service. Therefore, the customer assists not only in the delivery process but also in the production process (Eiglier and Langeard, 1987; Zeithaml *et al.* 1990). These interactions between the service provider and the consumer are referred to as service encounters (Shostack, 1985) in the marketing literature. They represent moments of truths (Carlzon, 1987; Albrecht, 1988; Bitner *et al.*, 1990) where the organization can truly show what it can do and how it can meet expectations of customers. In order to reduce service failures and downfalls (Kotler *et al.*, 1996; Palmer, 1998; Kasper *et al.*, 1999), organizations must effectively manage these service encounters. Moreover, the characteristic of heterogeneity reflects the potential for high variability in service delivery (Zeithaml *et al.*, 1985). This is a particular problem for service firms as the service performance is delivered by different people and the performance of people can vary from day to day (Rathmell, 1966; Carman and Langeard, 1980; Zeithaml *et al.*, 1985; Onkvisit and Shaw, 1991). As such, service quality depends on the efficiency and effectiveness of the employees involved in service delivery.

Various methods have been used to assess service quality; however, the most widely used tool is the SERVQUAL instrument developed by Parasuraman *et al.* (1991). A number of researchers have applied the SERVQUAL model to measure service quality in the hospitality industry, with modified constructs to suit specific hospitality industry situations (Saleh and Ryan, 1992; Bojanic and Rosen, 1993; Getty and Thompson, 1994; Lam and Zhang, 1998; Tsang and Qu, 2000). The SERVQUAL model is based on five dimensions of service quality: tangibles, reliability, responsiveness, assurance, empathy which are assessed using 22 statements. The level of service quality is evaluated by comparing the expected service and the perceived service. Parasuraman *et al.* (1988) contend that a customer will perceive that there is service quality only when the service provider meets or exceeds his/her expectations. For Ryan (1999), SERVQUAL is a simple tool for tourism managers to determine the areas of weakness in their service delivery. In a study performed in hotels, Gabbie and O’Neill (1997) found that the highest expectations of customers were related to the dimensions of reliability and assurance, while the customers did not have high expectations of the dimensions of tangibility and empathy. Fick and Ritchie (1991) have also used the SERVQUAL Instrument in three major tourism sectors; airline, restaurant and ski area service. They found that the two most important dimensions for expectations concerned reliability and assurance for all three sectors studied.

According to Parasuraman *et al.* (1990) service quality is affected by 5 gaps (Table 1). Gap 1 refers to the discrepancy between customer expectations and management perceptions of these expectations. Other discrepancies in service delivery is demonstrated through the four service quality gaps explained in Table 1.

Table 1: The 5 Service Quality Gaps

<i>Gaps in Service Quality</i>	Explanations
Gap 1	The difference between customer expectations and management perceptions of customer expectations
Gap 2	The difference between management perceptions of consumer expectations and service quality specifications
Gap 3	The difference between service quality specifications and the service actually delivered
Gap 4	The difference between service delivery and what is communicated about the service to customers
Gap 5	The difference between customer expectations and perceptions of the quality of the service received

Table 1 depicts the 5 service quality gaps as proposed by Parasuraman et al., 1990. These gaps are used in SERVQUAL model which is a widely used tool to measure service quality in the service sector.

According to Nightingale (1985), management perception of service quality regularly differs from the perceptions of customers' which ultimately results in the delivery of poor service quality. Management think they know what their customers expect and accordingly design the service and train the staff to meet those pre-conceived expectation of guests. A negative discrepancy results in Gap 1 where managers' fail to understand the wants of customers. Murphy (1993: 131) states that there are two main factors that cause Gap 1 to occur. Firstly, problems regarding internal communication in the organization result into poor feedback from front-line employees to top managers. This could also be due to the levels of hierarchy between management and front-liners which do not facilitate communication. Secondly, a lack of marketing research affects the organization's ability to identify customer wants and detect problems. Information generated from marketing research is essential to close Gap 1 as this will help managers understand the needs and wants of customers and how to better meet the expectations of customers.

A number of studies have investigated Gap 1. For example, Nightingale (1985) found evidence that management's perceptions of service quality differ from the perceptions of customers. On the other hand, a study carried out by Nel (1993) revealed that management had a relatively good understanding of customer expectations. Coyle and Dale (1993) evaluated service quality in the hospitality industry where a number of gaps between the perceptions of customers and that of managers were identified. For instance, managers believed that the competence of staff was the most important but this was not supported by the customers. Moreover, customers ranked tangibility as less important than what managers expected. One of the reasons identified by the researchers for the poor evaluation of customer expectations was that managers had minimum contact with customers and were not able to assess customer wants accurately. A study carried out in Mauritius by Juwaheer and Ross (2003) found that managers overestimated customer expectations in the following items such as visually attractive brochures, spacious rooms of hotels, good seating arrangements in restaurants and bars and willing of staff to help customers. The data was obtained through interviews with managers.

METHODOLOGY

The present study addresses Gap 1 which arises when management have an inaccurate perception of customer expectations. The case study approach was used to investigate service quality in a hotel of 92 rooms employing around 250 staff. The SERVQUAL instrument was used to assess Gap 1. Two questionnaires were designed and distributed based on the original SERVQUAL instrument with 22 statements for measuring service quality across 5 dimensions. The questionnaire for assessing tourist expectations was designed in two languages specifically in English and French to suit the language needs

of tourists and to encourage higher response rates. The second questionnaire assessed managers' perceptions of service quality in the hotel and was designed only in English as it is the official language of Mauritius. A covering letter was attached to each questionnaire to explain the purpose of the survey and to seek for the respondent's assistance in contributing to the study. A pre-test was performed before the final data collection to determine if the questionnaires were well understood. The pre-testing was carried out with 5 managers and 15 tourists. As a result, the Likert scale which was from 1 to 7 has been modified to 1 to 5. Given that a few statements had been literally translated from English to French, they were revised accordingly.

The majority of tourists at the hotel were invited to participate in the survey over a period of one week. Only one questionnaire was distributed per family or couple and those under 18 were not included in the survey. The study was carried out in March 2008 and 164 self-administered questionnaires were distributed among tourists and 14 questionnaires were provided to all the middle managers and the General Manager. All the managers returned the completed questionnaires whereas only 128 tourist questionnaires were found usable for the study indicating a response rate of 78%.

RESULTS AND DISCUSSION

Table 2 provides a comparison between the managers' perceptions of customer expectations with customers' actual expectations of service quality in a hotel. Tourists were asked to rate their expectations of hotel services on a scale of 1- 'strongly disagree' to 5 'strongly agree'. Customers rated the tangibility statements from 4.16 to 4.45 where the statement related to "neat appearing staff" had the highest score showing that the appearance of staff is very important to customers. The lowest mean for tangibility related to "service materials" such as brochures and pamphlets. Customers rated reliability statements with mean scores ranging from 4.20 to 4.33. The highest expectation mean for reliability is "staff providing the service at the promised time" showing that customers expect the hotel to keep its promises. The third quality dimension related to responsiveness where the expectation scores varied from 4.30 to 4.51. The maximum mean for expectation was for "staff always willing to help" and "staff at the hotel is never too busy to respond to guests" with mean scores of 4.51 each. These were the highest mean for expectations across all the 22 statements. Customers have a high expectation of the staff and their role in helping them and responding to their needs. The scores for assurance varied from 4.22 to 4.33. The highest mean score for expectations was 4.33 for the statement "staff is consistently courteous with guests". The expectation scores for empathy was from 4.25 to 4.45 where the highest mean score was obtained for "operating hours convenient to all its guests", while the lowest score was that of the "hotel has guests' best interest at heart", with a mean of 4.25. It is important to note that customers rated all the 22 statements with a mean score of over 4.0 revealing that they have high expectations regarding the 5 dimensions of service quality.

Table 2 also depicts management perceptions of customer expectations. To calculate the SERVQUAL scores the expectations means were subtracted from the perception mean (P-E). The results reveal that all the statements across the 5 dimensions of service quality have inferior scores than customers' expectations. For instance, there are negative gaps in all the statements regarding tangibility as it seems that managers have underestimated the expectations of customers. In this dimension, the greatest gap is for "neat appearance of staff" (-0.24). The guests have rated this statement higher than the management as from the customer's point of view, the appearance and neatness of the staff is of great importance. Unlike physical products, services are intangible and hence customers primarily evaluate the modern looking equipment and the appearance of staff. The dimension of reliability also results in a negative gap, except for the statement related to "staff performs the service right the first time" where the gap is positive (0.09) which means that the management has a reasonably good understanding of guests' expectations for that statement. The dimension of responsiveness also obtained a negative score with a mean of -0.48. The statement which has the highest gap is that of "staff always willing to help" with a mean score of -0.58.

Therefore, this demonstrates that the managers are not aware that for the customers expect of staff is an extremely important factor for customers and hence they should emphasize on responsiveness a very positive and helpful behavior from staff. Just like the other preceding dimensions, the assurance dimension also has a negative SERVQUAL score (-0.19). The highest gap is that of “staff has the knowledge to answer guests” with a mean of -0.43. From the analysis it can be said that the second largest gap after responsiveness is with the empathy dimension (-0.24).

Table 2: Gap between Managers’ Expectations and Customers’ Perceptions

Service Quality Statements	Perception Mean (P) (Manager)	Expectation Mean (E) (Customer)	SERVQUAL Scores
1. Modern looking equipment	4.07	4.29	-0.22
2. Physical facilities	4.36	4.37	-0.01
3. Neat appearance of staff	4.21	4.45	-0.24
4. Service Materials	4.07	4.16	-0.09
Tangibility Scores	4.18	4.32	-0.14
5. Staff promise to do something by a certain time	3.93	4.17	-0.24
6. Staff show interest in solving problems	4.00	4.16	-0.16
7. Staff perform the service right the first time	4.29	4.2	0.09
8. Staff provide service at time promised	4.00	4.33	-0.33
9. The hotel emphasizes on error free services	4.14	4.16	-0.02
Reliability Scores	4.07	4.2	-0.13
10. Staff tell exactly when services would be performed	4.00	4.42	-0.42
11. Staff give prompt service to client	3.86	4.3	-0.44
12. Staff always willing to help guests	3.93	4.51	-0.58
13. Staff at the hotel is never too busy to respond to guests	4.00	4.51	-0.51
Responsiveness Scores	3.94	4.43	-0.49
14. Behaviours of staff instills confidence in clients	4.14	4.26	-0.12
15. Guests feel safe in their transactions	4.29	4.32	-0.03
16. Staff are consistently courteous with the customers	4.14	4.33	-0.19
17. Staff has the knowledge to answer guests	3.79	4.22	-0.43
Assurance Scores	4.09	4.28	-0.19
18. The hotel gives customers individual attention	4.07	4.34	-0.27
19. The hotel has operating hours convenient to all its guests	4.21	4.45	-0.24
20. The hotel has staffs who give personal attention to its guests	4.07	4.37	-0.3
21. The hotel has the guests’ best interest at heart	4.21	4.25	-0.04
22. Staff of the hotel understands the specific needs	4.00	4.34	-0.34
Empathy Scores	4.11	4.35	-0.24
Dimensional Mean	4.078	4.316	-0.238

Table 2 shows Gap 1 where the discrepancy between the managers’ perceptions of customer expectations and the actual expectations of customers are revealed. The mean scores for managers’ perceptions and customers’ expectations were assessed across a list of 22 statements. These were then classified in 5 dimensions: tangibles, reliability, responsiveness, assurance and empathy. The overall gap score is also provided.

The results of this study show that there is a gap between managers’ perceptions of customers’ expectations. This contradicts the work of Salah and Ryan (1991), who found in their study that for all service quality dimensions the managers, overestimated guests’ expectations. However, in the present study it is seen that customers have high expectations which and managers are not aware of the expectations of their customers. Hence they may find it difficult to design the right product and services to satisfy the needs and wants of their target markets. Customers have very high expectations regarding responsiveness, followed by assurance, tangibles, empathy and reliability. On the other hand, management ranked responsiveness as the least important dimension which resulted in the highest gap of

-0.49. Managers' perceived that for the guests tangibility was the most important dimension. Although the physical evidence of the hotel is important for customers, hoteliers should realize that aesthetic will not be enough to achieve satisfy customers. Instead the study reveals that tangibles alone are not sufficient to achieve competitive advantage. Instead, differentiation can be achieved through the behavior of employees who need to provide superior service to increasingly demanding customers. Managers must then adjust their perceptions so that the hotel does not lag behind. According to Douglas and Connor (2003), customers attach importance to the dimension of responsiveness because the helpfulness of staff is particularly important in an environment where they have little control. The overall service quality gap is -238 showing that the management fails to understand customers' expectations of service quality.

CONCLUSIONS

The present study has investigated managements' perceptions of customers' expectations by using the SERVQUAL instrument. In the competitive environment in which hotel businesses operate, service quality is a vital tool used to achieve competitive advantage. Thus it is imperative for managers to carry out continuous evaluations and make improvements in their service delivery. Management must undertake regular marketing research to follow trends in consumer behavior and also to detect aspects of the service that customers consider important when evaluating hotel experiences (Murphy, 1993). For example, the importance of in house surveys or guest comment cards cannot be underestimated as they help management to understand guests' feelings about the services offered and also the employee whom they most appreciated. This will ultimately incite employees to deliver more quality service. In addition to that, management should use strategies such as handling of complaints and effective service recovery. Staff must listen to the complaints of guests, identify problems and act promptly. Service recovery procedures should be identified and more emphasis should be laid on value-added service. There should be effective upward communication between front-line employees and top management since the former have a critical role to play in the service encounter. Contact employees are most knowledgeable about the customers' preferences and therefore managers should encourage regular feedback with front-liners as this will allow good flow of communication. Furthermore, management should recognize the importance of the behavior of staff in service delivery. Customer focused staff should be hired and the appropriate training should be carried out on a regular basis. In addition to that, employees should be constantly reminded of the vision and mission of the organization. The hotel must take its employees as its internal customers and the working environment must be conducive to delivering service quality. According to Ford and Heaton (2000), today's consumers want their goods and services to be packaged as part of a memorable experience. Therefore, it is necessary for hotel managers to know what customers expect from their hotels and what how they can do to satisfy customer expectations.

REFERENCES

- Albrecht, K. (1988). *At America's Service*. Illinois: Homewood.
- AHRIM (2008). Annual Report 2007-2008, Association des Hôteliers et Restaurateurs-Ile Maurice.
- Bitner, Marie Jo (1990). "Evaluating service encounters: the effects of physical surroundings and employee responses", *Journal of Marketing*. Vol. 54, April, 69-82.
- Bojanic, D.C. and Rosen, L.D. (1993). "Measuring service quality in restaurants: an application of the SERVQUAL instrument", *Hospitality Research Journal*. Vol. 18, pp. 3-14.
- Callan Roger, J. (1997). "An attribution approach to hotel selection. Part 1 The managers perceptions", *Progress in Tourism and Hospitality Research*. 3, 333-349.

- Carlzon, J. (1987) *Moments of Truth*, New York: Ballinger.
- Carman J.M and Langeard E. (1980). "Growth strategies of service firms", *Strategic Management Journal*. Vol. 1, pp. 7-22.
- Coyle, M. P. and Dale, B. G. (1993). "Quality in the hospitality industry: a study." *International Journal of Hospitality Management*, 12 (2), 141-154.
- Eiglier, P. and Langeard, E. (1981). "A conceptual approach of the service offering". In Hartvig Larsen, H. and Heede, S. (eds.). *Proceedings of the EAARM xth Annual Conference*. Copenhagen School of Economics and Business Administration, May.
- Fick, G. R., and Ritchie, J. R. B., (1991). "Measuring service quality in the travel and tourism industry", *Journal of Travel Research*. Fall, 30, 2, 2-9.
- Ford, Robert and Heaton Cherill (2000). *Managing the Guest Experience in Hospitality*, 1st edition, USA: Cengage Learning.
- Gabbie, O. and O'Neill, M. (1997). "SERVQUAL and the Northern Ireland hotel sector: a comparative analysis." *Managing Service Quality*, 7 (1), 43-49.
- Getty, G.M. and Thompson, K.N. (1994). "The relationship between quality, satisfaction and recommending behaviour in lodging decisions", *Journal of Hospitality and Leisure Marketing*. 2 (3), 3-21.
- Juwaheer, D. T. and Ross, L. D. (2003). "A study of hotel guest perceptions in Mauritius", *International Journal of Contemporary Hospitality Management*. 15 (2), 105-115.
- Kasper, H. De Cries, W. and Van he, P. (1999) *Services Marketing Management: an international Perspective*. West Sussex: Wiley
- Kotler, P.; Armstrong, G.; Saunders, J. and Wong, V. (1996) *Principles of Marketing*. New Jersey: Prentice Hall.
- Lam, T., Zhang, Q. (1998). "A study of service quality: the case of travel agents in Hong Kong", *Tourism and Hotel Industry in Indo-China South East Asia: Development Marketing and Sustainability*, Third International Conference, Proceedings 4-6 June, Thailand, 36-46.
- Marriott, C. (1995) "An island haven for the well-heeled", *Asiamoney*, 38.
- Murphy, J.A. (1993). *Service Quality in Practice*, Dublin: Gill and Macmillan.
- Nel, D (1993), "Service quality in a retail environment: closing the gaps", *Journal of General Management*, Vol. 3.
- Nightingale, M. (1985) "The hospitality Industry: defining quality for a quality assurance programme – a study of perceptions", *The Service Industries Journal*. 5 (1), 9-22.
- Onkvisit, S. and Shaw, J.J. (1991) "Is services marketing really different?." *Journal of Professional Services Marketing*. 7 (2), 3-17.

- Palmer, A. (1998) *Principles of Services Marketing*, Bershitre:McGraw-Hill.
- Parasuraman, A., Zeithaml, V. and Berry, L. (1985). "A conceptual model of service quality and its implications for future research." *Journal of Marketing*, 49, 41-50 .
- Parasuraman, A., Zeithaml, V. and Berry, L. (1988). "SERVQUAL: a multiple-item scale for measuring service consumer perceptions of service quality". *Journal of Retailing* 64 (1), spring, 12-33.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1991). "Understanding customer expectations of service." *Sloan Management Review*. 32 (3), 39-48.
- Ramsaran-Fowdar Rooma R. (2006). "Developing a service quality questionnaire for the hotel industry in Mauritius.", *Journal of Vacation Marketing*, 13 (1), 19-27.
- Rathmell, J.M. (1966). "What is Meant by Services?." *Journal of Marketing*. 30, 32-36.
- Saleh, F. and Ryan, C. (1992). "Client perceptions of hotels – a multi-attribute approach.", *Tourism Management*. 13 (92), 163-168.
- Shostack, G. L. (1977). "Breaking free from product marketing." *Journal of Marketing*. 41, April, 73-80.
- Tsang, N. and Qu, H. (2000). "Service quality in China's hotel industry: a perspective from tourists and hotel managers." *International Journal of Contemporary Hotel Management*, 12 (5), 316-326.
- Zeithaml, V. A. Berry, L. L. and Parasuraman, A. (1990). *Delivering Quality Service-Balancing Customer Perceptions and Expectations*. New York: The Free Press.
- Zeithaml, A.V. and Bitner, M.J (2003) *Services Marketing: Integrating Customer Focus Across The Firm*, 3rd Edition, Mc GrawHill.

DISTINCTIVE MARKETING COMPETENCIES: CASE STUDY FOOD MANUFACTURING BUSINESS OF THE MANIZALES CITY COLOMBIA

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ABSTRACT

This research shows the organizational response of the food industry in the city of Manizales in the area of marketing. It identifies the competencies developed by the food sector, especially in the strategic planning of the area of marketing and visualizes intra-industry differences; while some businesses have developed great marketing skills, others limit themselves to simple marketing tasks

INTRODUCTION

The internationalization of the economy, beginning at economic liberalization, forced businesses to redefine their marketing competencies. It was not longer sufficient to provide the products needed, but it was necessary to compete in the market using new strategies, focused within the organizations. Their resources and capabilities needed to be repositioned through proper strategic planning, enabling them to compete successfully

THEORETICAL FRAMEWORK

Globalization

Globalization began within the process of internationalization of the economy that took place after world war II, as nations did not restrict themselves when investing within their territorial area, but looked for trading and investing alternatives in other countries, creating a mix of economic exchanges between different nations. This process that begun with regional agreements, deepened by the GATT and later on by WTO, aims to substantially increase the commercial exchange between countries, advocating for permanent trade liberalization

Globalization legally began with the establishment of the United Nations (UN) and the creation of several organizations such as the International Monetary Fund, the General Agreement on Tariffs and Trade and the World Bank. But this first moment was really a regional phenomenon of the first world in the wake of trade liberalization and the investment between the countries of the Organization for Economic Cooperation and Development

The term "Globalization" has been widely used in recent years, and sometimes indiscriminately used by people, governments, and analysts and by the world at large. This phenomenon deals with themes of economy, society, culture, and politics among others. In other words Globalization seeks to unite the whole world, with the individuals within corporations, and change the economy of each country into co-dependent of others, opening completely the commercial and governmental borders.

The globalization process has been limited. Financial globalization has been achieved but not total globalization. There is still no free movement of persons or goods, even though progress has been made in this regard. Messages against liberalization had begun to gain strength because of the global economic crisis,

But, apart from this, business must be competitive, and this is where organizations should focus all their efforts, generating sustainable competitive advantages and addressing the growing internationalization of markets.

Competitive Advantage. Competitive advantage can not be understood if the business is not viewed as a whole. Competitive advantage lies in the many discrete tasks a business executes in the design, production, marketing, delivery and support of its products. Each of these tasks can contribute to the relative cost position of businesses and to create a basis for differentiation. (Porter, 1991)

It is necessary a systematic review of all activities a business executes and how these interact to be able to analyze the sources of competitive advantage. The value chain is the basic tool to do this analysis.

To understand the behavior of costs and the sources of existing and potential differentiation, the value chain divides the business in its relevant strategic tasks. A business obtains its competitive advantage by executing better or at a lower cost these strategic and important tasks.

Competitiveness, understood as a company's ability to meet the demand for a significant share of the market through sustainable competitive advantage without sacrificing profitability (Camisón 1997), is strongly linked to productivity. To be productive, the investments in capital, human resources, and innovation must be fully integrated, as these are systemic, and impact the entire organization, and also support tangible and intangible resources.

CONTINUOUS IMPROVEMENT AND THE THEORY OF RESOURCES AND CAPABILITIES

Improvement lies in its intrinsic nature of "learning by doing". In other words improvement lies in its receptivity of the learning processes through repetition and experimentation.

This idea of improving by practice has some bearing on the experience effect, although this effect has reduction of costs, and incremental innovation as a result. Currently the consequences are more far-reaching and may even affect the company's ability to enter new markets (Fernández, 1995).

So it might be said that this is a collective learning process. The intangible assets are called "tacit knowledge", and they are characterized by not being fully understood, not even by their owner (Polanyi 1948) or by the "embedded knowledge" as opposed to migrating knowledge. (Badaracco 1992). The company must convert the tacit knowledge, which lies in the human capital, into explicit knowledge, and communicate and appropriate it to then turn it into the basis of new knowledge (Nonaka, 1995)

This appropriation of knowledge is done through organizational routines, and through the coding of knowledge into organized and mobile packages such as books, formulas, machinery, and plans drawn from the minds of individuals. The inserted knowledge is embedded "primarily in specialized relationships between individuals and groups and also in the particular norms, attitudes, information flows and ways of making decisions that characterized their encounters." Through this network, members of the company acquire knowledge unattainable otherwise.

This collective intelligence is hidden in the network, which in some way binds individuals together and it's reflected in the mature experiences taking place in the system. It has always been said that the whole is greater than the sum of its parts. It can be said then, that the capabilities and some resources are also characterized by a long and gradual period of accumulation often impossible to acquire in organized markets. The possession of a highly motivated personal equipped with specific skills for the tasks to be

executed influence on the reputation of honesty in a business or in the cooperation relationships within a company based on mutual trust.

This explains the difficulty of other companies, different from the one that created them, to appropriate these assets. Therefore, the competitive advantage based on economies of scope associated with resources and capabilities, is sustainable for extended periods of time. This is the main contribution of intangible assets to business competitiveness.

But the focus on intangible assets is not intended to express that physical assets lack importance or lack impact on business competitiveness. It is true that investment in intangible assets will not be transformed into products unless it comes with an investment in material resources.

Therefore, despite the superiority acquired by intangible assets as a source of sustainable competitive advantages, tangible assets are defined as necessary but not sufficient for competitive success, and therefore businesses should always be attentive of them.

The Theory of Resources and Capabilities arises when discussing the relationship between resources and capabilities of a business. The optimal usage of resources and capabilities contributes to the success of a business, based on the different knowledge and skills generated by people within the business, in such a way that they become a valuable resource to create value. The more the Theory of Resources and Capabilities emphasizes the needs of the business the more it becomes useful and indispensable for competing in the market (Calderon, 2001).

Resources are the available business input or factors through which companies conduct their activities and tasks, and capabilities are the knowledge and skills within the business. Capabilities prompt the innovation, creation, generation and promotion of new products using the available resources. Knowledge and skills make a business competitive in its own environment.

It should be stressed that resources by themselves do not constitute a competitive advantage, as it has been mentioned above. To be considered a competitive advantage, resources should be valuable, rare, inimitable, not replaceable and to count on an business to support them, in such a way that when controlled by the business will allow the design and implementation of a strategy to improve its efficiency and effectiveness. The resources within a business will always make the difference. This helps to explain why two businesses competing in the same sector and having similar coverage can never be equal.

It is possible then to demonstrate how each day is more realistic to say that the value of a business is more closely related to the intangible than to the tangible assets. Traditionally, some businesses still make their assessment based on tangible assets and in some cases they ignore or deny the value of ideas being generated and considered, the people who produce these ideas and create new products, the new knowledge as the key source for business success and society itself, which really makes a business apt to compete in this changing world. (Renguelor, 2000).

The Theory of Resource and Capabilities proposes the existence of resources, skills and competencies in the business having the latter as a primary source of competitive advantage. The business is a unique collection of resources and capabilities that can not be bought and sold freely on the market (; Rumelt 1987, Wernerfelt, 1984).

Competitive advantage can be achieved when organizations exploit the latent benefits in its idiosyncratic endowments of business resources.

So resources are stocks of factors that a business owns or controls and they can be classified as financial, physical, human, organizational and technological - (Grant, 1992). The capabilities are based on organizational knowledge, often not encoded, which is stored in organizational memory and can be regarded as routine or set of routines (Fernández, 1993, Grant, 1991).

Routines include complex patterns of interaction between people and the other business resources and are the result of the business collective learning (Prahalad and Hamel, 1991).

1. The Concept of resources and capabilities of a business. Where the business resources are all the assets, and capabilities are the organizational processes, the business attributes, the information and the knowledge controlled by a business which enables it to devise and implement strategies to improve its efficiency and effectiveness.
2. Requirements to fulfill by resources and capabilities to generate income. Where it is mentioned that all the resources and capabilities of the business must generate income, durable in time, for business to appropriate it.
3. Conditions of equilibrium and rationality in relation to decisions on resources and capabilities. Everything should be shared appropriately, and new resources should be searched for.

Marketing

A business would not function properly if applies the theory of resources and capabilities, ignoring the marketing of products or services:

Marketing and Marketing Techniques, is the set of analytical tools, methods of forecasting and marketing research used to develop a prospective approach to the needs of demand "(Lambin, 1998).

Initially, business was merely about trying to sell a product already manufactured. In other words, the activity of Marketing Techniques was executed after post production and the business objective was to encourage the sales of the final product.

Now, marketing has many more functions to be fulfilled before the beginning of the production process; among them are market research and the design, development and testing of the final product.

Therefore, marketing or marketing techniques focuses primarily on analyzing the taste of consumers, seeking to establish their needs and desires and influencing their behavior of those who wish to acquire existing goods, so different techniques are developed to persuade consumers to buy a certain product.

The activity of marketing includes planning, organizing, directing and controlling the decisions made on product lines, on pricing, promotion and on after-sales services. In these areas marketing becomes essential. In other areas, such as in the development of new product lines, marketing plays an assessing role.

In addition, marketing is responsible for the physical distribution of products, for establishing distribution channels, and for supervising the transportation of goods from the factory to the warehouse and from there to the point of final sale.

The concept of marketing is based on three beliefs (Stanton, et al 1999). The first belief is that planning and operations should be directed to **customer orientation** where employees and departments should seek customer satisfaction. The second belief is that marketing activities must be **coordinated**, designed and combined in a coherent manner, and an expert must have the authority and responsibility to implement them. The third belief is that a coordinated customer-oriented marketing is essential to achieve the objectives of organizational performance, where the target of increasing business profits should be changed to a secondary one, such as, the number of customers served.

A business will be ready to discuss the details of the marketing mix, a nuclear concept of modern marketing, once the business has decided upon its marketing strategy (strategic planning).

But to decide upon a marketing strategy the organization must have a basic strategy, which has been called by experts the mix of marketing or marketing mix, and encompasses four variables: Product, Price, Place or site and promotion.

A business can control, modify and use these variables to influence customers. These variables are interrelated and make up the total package that will determine the degree of marketing success.

According to the philosophy of the marketing mix, there is now an optimal mix of the four factors for each market segment, and at a particular point in time. The marketing mix is the basis for the formulation of the marketing plan.

Market Research

Market research is as a way of reaching the target market in a more assertive manner. In the broadest sense of the word, market research is understood as the attaining of objective data about the market, represented by its distributors and consumers.

The American Marketing Association formally defines Market Research as: "The function that links a business with its market through the collection of information used to identify and determine the opportunities and challenges of the market" The activities of marketing are generated, refined, and evaluated using this information.

The performance of the market is monitored and understood as a business process. This is objective information. In other words, this information is not dependent on one specific person, but it's independently derived from the market in which the business is involved.

RESEARCH OBJECTIVES

General Purpose : To identify the competencies that large and medium manufacturing business in the Manizales food sector have developed from the resources and skills in the area of marketing, that have allowed them to face the current market and the ever growing of foreign competition to improve their competitive position.

. Specific Objectives

- To describe the basic features of the area of the food marketing sector of Manizales large and medium-sized businesses.

- To identify the processes of strategy formulation to develop distinctive capabilities in the betterment of products.
- To determine the strategies applied to the betterment of the products (packaging, warranty, post sales service, brand, image)
- To identify distinctive competencies in positioning, advertising, and promotion.
- To learn the parameters developed by businesses in terms of price, marketing and knowledge of their competitors.
- To establish competencies in logistics and distribution of products developed by the businesses.

METHODOLOGY OF RESEARCH

Identification Of Target Population : All the large and medium size businesses within the food sector of the city of Manizales were selected as the target population.

Sample Size: Given the small size of the population, 11 large and medium size businesses in the Manizales food sector were selected using the judgment of the investigator

Table 1: Business

LARGE BUSINESSES	ACTIVITY
INDUSTRIA LICORERA DE CALDAS	<i>Liquor</i>
DESCAFEINADORA COLOMBIANA S.A. QUE PODRÁ ABREVIARSE EN DESCAFECOL (CASA LÚKER)	<i>Instant coffee</i>
CENTRAL LECHERA DE MANIZALES S.A. - CELEMA.	<i>Dairy Products</i>
MEALS DE COLOMBIA	<i>Coffee</i>
MEDIUM SIZE BUSINESSES	
CENTRAL DE SACRIFICIO MANIZALES S.A.	<i>Meat</i>
INDUSTRIAS NORMANDY S.A. - PERO PODRÁ UTILIZAR LA EXPRESIÓN ABREV	<i>Dairy Products</i>
PANADERIA LA VICTORIA GOMEZ JARAMILLO LIMITADA	<i>Bakery</i>
CHOCOLATE CALDAS S.A.	<i>Chocolates</i>
COLOMBIANA DE DESHIDRATADOS S.A. SIGLA COLDES S.A.	<i>Dried Fruit</i>
INDUSTRIA COLOMBIANA DE FECULAS S.A.	<i>Flour</i>
FRUGY S.A.	<i>Fruit Pulp</i>

Data-Gathering Techniques: Research techniques or tools for gathering information such as surveys and interviews were required in this research. These tools were based on the cadre of skills shown below. These three instruments were the basis for the collection of information in this research

Table 2: Categories and Variables: Marketing Competencies

COMPETENCIES		VARIABLES
<ul style="list-style-type: none"> STRATEGIC PLANNING OF MARKETING 		<ul style="list-style-type: none"> -Forecasting Capacity. -Budget. -Knowledge of the Environment.
<ul style="list-style-type: none"> MARKET RESEARCH 		<ul style="list-style-type: none"> -Short to long term. -Allocation of Resources (human, material...etc.) -Mechanisms. _Market Segmentation. -Knowledge of the Market and of the Competition. -Monitoring System of the Environment. -Knowledge of the Sector(strategy, technology) --Participation of the levels of the organization (managers, intermediate, low) -Diagnostic Techniques. -Implementation, evaluation, auditing. --Interiorization.
<ul style="list-style-type: none"> MARKETING MIX 		<ul style="list-style-type: none"> -Product Design (brand, packaging.) -Cost Objective. -Choice of New Products. -Survival of Old Product -Compliance (meets expectations and needs of the client) -Quality. -Innovation. _Attributes. _Product Life Cycle. -Pricing. -Promotions, discounts. Price Promotional Tools (advertising, personal sales, public relations, sales promotion). -Media. Sales-Force (promoters). -Sales promotions (contests, exhibitions).

	<p>Promotion Ways to stimulate demand and to inform</p> <p>Place</p>	<p>-Segmentation.</p> <p>-Places of product location.</p>
<ul style="list-style-type: none">• LOGISTICS-Capacity of Coordination, flexibility and Delivery.		<p>-Chain of Distribution.</p> <p>-Channels of Distribution (wholesale, retail).</p> <p>-Transportation.</p> <p>_Flexibility in Changes of delivery of volumes.</p> <p>-Response time of deliveries.</p> <p>_Information Systems.</p> <p>_Automation (hardware, software)</p>
COMPETENCIES	VARIABLES	
<ul style="list-style-type: none">• AFTER-SALES SERVICE-Zero-client Concerns		<p>-Warranty.</p> <p>-Usage Training.</p> <p>-Installation.</p> <p>-Maintenance.</p> <p>-Repairs.</p> <p>-Handling of Complaints.</p>

CONCLUSIONS

Strategic Planning: The concept of competitiveness is in boom, and it should not be a fad but a response to deep concerns about the referenced environmental changes of the economic and social actors. Strategic Planning, as distinctive competency, is provided by the following sub-competencies: ability to forecast, budget capacity, knowledge of the environment, capacity of strategy formulation, strategy implementation and the definition of the mission and vision of the organization. The area of marketing is not being taken into account in its entirety and a number of businesses mainly focus on conducting market research, without implementing the adapted strategies in all the areas.

Market Research: Market research brings in the relationship between competencies and the environment, as well as takes into account strategic planning and the organizational parts of different companies, hence the importance that every business designs its own projects based on prospects of the different variables of the market research.

The variables taken into account in this distinctive competence are: current customers, lost customers, potential customers, target market, market segmentation and knowledge of the competition strategy.

It was observed in the investigation that in general the manufacturer businesses of the Manizales food sector place a lesser emphasis on the implementation or use of market research as a distinctive competence and as a tool to tap into the market. Two companies, characterized as exporters, understand the importance of market research and make use of it, but only on short term.

Conclusion Mixture Mix: Only two of the surveyed food sector businesses that are manufactures use the mixture mix appropriately. In general, the Manizales food manufacturing sector use marketing strategic planning as a tool, except for one of the businesses surveyed that neglects this part, as they make little emphasis on strategic planning in the area of marketing.

Conclusion After Sale Service

It is in the after-sale service, that manufacturing businesses of the food sector make a greater effort, which supports the claim that this is a very important distinctive competence, because serving the customers well is the most important aspect of their business.

The logistics in the manufacturing businesses of the food sector are generally efficient, since they place great emphasis on the delivery of their products, on how these are delivered, on the consistency of their information systems with the current requirements and on the definition of a logistics process based on the needs of the customers.

Because these businesses are not organized among themselves, or have no agreement with the competition to reach out more clients and to avoid neglecting the market, they are losing competitiveness in the sector, which is gained by the businesses that do have the infrastructure and are prepared to face these challenges.

As a general conclusion, most companies do not feel a strong pressure to innovate, to be more strategic or to develop distinctive competencies in the field of marketing, due to the characteristics of the products they deal with, and mass consumption. These businesses use traditional tools and focus primarily on the after sale service.

The behavior is not homogeneous, but only a small fraction of these businesses have realized the importance of developing an integrated marketing area to help out the business's global competitiveness.

BIBLIOGRAFIA

BADARACCO, J.L. (1992). Alianzas estratégicas. El Caso de General Motors e IBM. Madrid: McGraw-Hill.

CALDERON, G. Documento. Fundamentos teóricos de las competencias: Una aproximación. Manizales. 2001.

CAMISÓN, Zornoza.Cesar. La Competitividad de la Pyme Industrial Española: "Estrategias y Competencias Distintivas". Madrid. 1997.

FERNÁNDEZ, Z. (1995). Las bases internas de la competitividad de la empresa. *Revista Europea de Dirección y Economía de la Empresa*, Vol. 4 (2), pp. 11-19.

GRANT, R.M. (1991). The Resource-Based Theory of Competitive Advantages: Implications for Strategy Formulation. *California Management Review*, pp. 114-135.

LAMBIN, Jean, “Marketing estratégico” Mc Graw-hill segunda edición, Madrid, 1991.

NONAKA, IKujiro, TAKEUCHI, Irotaka. The Knowledge creating-company. 1995

POLANYI, M. (1948). *Personal Knowledge*. The University of Chicago Press, Chicago.

PORTER, Michael E., Ventaja competitiva de las Naciones, editorial CECSA.

PORTER, Michale, E., Estrategia Competitiva (Técnica para el análisis de los sectores industriales de la competencia). Editorial CECSA.

PRAHALAD, C.K. Y HAMEL, G. (1990). The Core Competence of the Corporation. *Harvard Business Review*, Vol. 68 (3), pp. 79-91.

PRAHALAD, C.K. Y HAMEL, G. (1991). La Organización por Unidades Estratégicas ya no sirve. *Harvard-Deusto Business Review*, primer trimestre, pp. 47-64.

RENGUELOR, Stanislav. La globalización o el descubrimiento del continente invisible del conocimiento. 2000.

STANTON, William - Ventas, Conceptos y planificación Estratégica. Editora MCGraw Hill .

STANTON, William Fundamentos Del Marketing. MCGraw Hill .

WERNERFELT, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, Vol. 5, pp. 171-180.

BIOGRAFIA

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HOW DOES NATIONAL FOREIGN TRADE REACT TO THE BCE'S POLICY WITHIN AND OUT UE?

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ABSTRACT

This paper examines how the external foreign trade reacts to the BCE's Official Discount Rate considering exports to Us and Japan in EU27 and in four European country. Although many previous studies have measured the cointegration and causality among exchange rate, export, and import never have they considered this relationships introducing in their analysis monetary variables as interest rate. The objective of this article is to partially fill the gap in the literature. We utilize the bounds testing approach to cointegration and error-correction modelling to test relations between monetary policy, exports, and terms of trade, making the distinction between short and long-run effects possible. While investigating the dynamic causal link between terms of trade and monetary policy, the stationary properties of the series and the co-integration of quarterly data included in the analysis have been taken into account. Short-run dynamic modelling is accomplished using a ARDL model, in a so-called indirect approach or Amended Granger Causality Test, accounting for interest rate to test the null hypothesis of relationship between variables and particularly to asses how the foreign trade react not only to the Bce's policy, but also to the parity of the Euro-U.S. dollar and Euro-Yen exchange rate. The results show that a long-run relationship exists between between real exports, real foreign income, real bilateral cross rate and interest rate for a large part of these countries and long run parameter estimates are consistent with economic theory in the most of the cases. More important the statistically significant of error-correction term corroborate the results of the long-run parameter estimates and suggests that overlooking the cointegrating relationship among the variables would have introduced misspecification in the underlying dynamic structure.

KEYWORDS: Cointegration Analysis, Export, Central Bank Policy.

JEL: G 11

INTRODUCTION

Taking a cue from the work of Aristotelous (2002), Arizeet al. (2000), and Singh, J.P. and Kónya, L. (2006), among others, this article examines the existence of short and long-run dynamic association between interest rate and trade performance in some European country evaluating the short-run impacts of interest rate on exports by estimating long-run function demand and error-correction (EC) models. Along with interest rate, GDP of the importing country and real bilateral exchange rates are also employed as explanatory variables of real export volumes. Cointegration methods are able to show whether there is a long-run relationship among the relevant variables, as well as to estimate their short-run dynamics. Cointegration is especially useful because many time series are non stationary, or “integrated,” so that they require differencing for standard regression procedures to be valid. A set of integrated time series can be “cointegrated” if there is a stationary relationship among them, that is, the variables might move together in the long run, never deviating far from each other, even if they are all continually increasing. Although relationship between exchange rate volatility and foreign exchange market have been studied extensively, co-movements between export and interest rate have received no attention. A body of literature in international finance includes studies that concentrate on assessing the impact of exchange rate uncertainty or fluctuation on trade flows. Economists indeed have investigated the relationship between exchange rate volatility and trade volume but they have not reached an agreement among themselves. While theoretical argument for the positive effects of exchange rate uncertainty on the trade

flows is provided by De Grauwe(1988), a majority of the studies in the literature are empirical and provide support for negative or no effects. Coric and Pugh (2006) and Bahmani-Oskooee and Hegerty (2007) provide the latest review of the literature. Particularly the theoretical and empirical literature, reviewed by Bahmani-Oskooee and Hegerty (2007), shows both justification for and evidence supporting decreases, in which floating exchange rates are said to introduce volatility into the foreign exchange market and in this way could deter trade flows increases, or no change at all as a result of increased exchange-rate risk. Among the articles reviewed by the authors Aristotelous (2002) uses the popular cointegration technique of Johansen and Juselius (1990) and finds that Japanese imports from the U.S were reduced in the long run due to exchange-rate volatility. De Vita and Abbott (2004) apply the autoregressive distributed lag (ARDL) approach of Pesaran et al. (2001) to assess U.S.' exports to its five main markets. While short-run results are not given, the long-run coefficient for the volatility term is significantly positive. One common feature of studies mentioned above is that they have all used aggregate trade data, yielding empirical results that could suffer from aggregation bias. Disaggregating trade data by commodities could provide useful insights as to which commodities are affected by exchange rate risk. Rapp and Reddy (2000) look at monthly U.S. exports to its G-7 partners, also at the 1-digit level. The results from the Johansen cointegration procedure show a negative volatility coefficient for all but one sector, which is positive but insignificant. Peridy (2003) develops a sectoral theoretical model (which includes such "micro" variables as differentiation and returns to scale), and then tests it empirically on Japan market. Volatility is proxied both as a moving standard deviation and with GARCH; at least one measure is significantly negative for Japan for each sector—with the exception of non ferrous metals and other transport equipment. GARCH does tend to produce more positive coefficients than the standard-deviation method, highlighting the debate in the literature over the "correct" proxy for risk.

Summarize the results of these studies have been 'a mixed bag'. While some studies have concluded that exchange rate volatility impede trade, other studies disagreed. This is because an increase in exchange rate risk has a substitution and an income effect. The substitution effect leads traders to substitute away from foreign trade towards domestic trade, while the income effect leads to increase foreign trade activity. In addition, some studies have reported no significant relationship between exchange rate volatility and exports. The objective of this article is to partially fill the gap in the literature by examining the impact of BCE' Official Discount Interest Rate on some European country's exports with their most important trading-partner offset UE. Considering the dominant roles of the USA and Japan as trading partners of European countries, this article focuses on the exports from European countries to the US and to Japan for the period from 1999 to 2008. The remainder of this article is organized as follows. Section II presents the econometric methodology employed in this article with export demand model and the relationship between Export and interest rate. The data sources and variable definitions with their time-series properties and the estimation technique, including testing for unit root/stationarity and cointegration are also discussed in this section. The empirical results are presented in Section III. The main conclusions of the study are summarized in Section IV in which we also discuss the policy implications of our findings.

DATA AND METHODOLOGY

Voluminous studies have evolved after the seminal works of Granger (1969) and Sims (1972) on determining causality among macro variables, such as money, income and interest rates; money, output and inflation; output, exports and exchange rates; output, consumption and prices; etc. Though relationship between exchange rate volatility and foreign exchange market has already received particular attention, researchers have generally ignored monetary variables. As commercial partner we have considered Usa and Japan. Indeed, the aim of this paper is to investigate how the trade performance in some European country (Spain, France, Italy and German) reacts to the Bce's policy on official discount interest rate. In this sense this article investigates the long-run relationship between exchange rate volatility and exports by performing long term demand function and evaluating the short-run impacts of interest rate on exports by estimating EC models, as in the studies of Arize et al. (2000) and Bahmani-

Oskooee and Ardalani (2006) among the others. Many of the studies that have assessed the effects of exchange-rate uncertainty have modelled the quantity of exports or imports as a function of the importing country's income, a measure of relative price, and a proxy for volatility. The former two variables capture income and substitution effects; higher income and lower price tend to increase demand. The relative price of competing domestic goods to traded goods is usually expressed as either the trading country's real exchange rate or its terms of trade. To analyse the impact of interest rate on each European country's exports, we tend to estimate simpler, reduced-form models in which exports or imports are a function of income, some measure of relative price, and the official BCE's discount rate, specify the following long-run real exports demand function:

$$X_{ijt} = \lambda_1 + \lambda_2 Y_{ijt} + \lambda_3 RE_{ijt} + \lambda_4 IR_t + \varepsilon_{ijt} \quad (1)$$

where where X_{ijt} denotes real exports from a country i (an European country) to a country j (either the US or Japan); Y_{ijt} the GDP of an importing country j ; RE_{ijt} the real bilateral exchange rate, reflecting the price competitiveness; IR_t the official discount Bce's interest rate; and ε_{ijt} a disturbance term. Economic theory suggests that an increase in real foreign income should lead to an increase in the demand for exports, while a rise (fall) in relative export prices, proxied by real bilateral exchange rate, would cause the domestic goods to become less (more) competitive than foreign goods, therefore exports would fall (increase). In other words one would expect that increases in real GDP of trading partners result in a greater volume of exports toward to those partners. In addition, the real exchange rate depreciation (an increase in the level of directly quoted exchange rate) may lead to an increase in exports due to the relative price effect. In this sense the coefficients for income, λ_2 , should be positive, implying that the higher the economic activity in the importing country, the higher the demand for export, and also that a higher real exchange rate implies a lower relative price and so the value for λ_2 is also expected to be positive. Since this study focuses on the coefficient λ_3 , the expectations for the sign of λ_3 are explained further in some what more detail. We use quartely data in this article. The quarterly data starts from the first quarter of 1999 and ends in the last quarter of 2008. The data on the Bce monetary policy and macroeconomic variables come from Eurostat. More specifically real GDP and Consumer price indices (CPI) come from Eurostat–National Accounts section, data export trade data are drawn from Eurostat–External trade section, exchange rates and interest rate were collected from Eurostat–Finance section. The list of variables is as follows. The real export from country i to country j is defined as follows:

$$X_{ijt} = \ln \left(\frac{EX_{ijt}}{EXUV_{it}} \times 100 \right) \quad (2)$$

where X_{ijt} denotes the log value of the real exports of country i to country j ; EX_{ijt} is the quarterly nominal exports of country i to country j , measured in term of Euros. The real GDP of the importing country (country j) is commonly used as a proxy measure for economic activity of the importing country in much literature dealing with quarterly or annual data. Accordingly, the variable Y_{ijt} in Equation 1 is defined to be the natural logarithm of the real GDP of an importing country j in time t .

$$Y_{ijt} = \ln(GDP_{it}) \quad (3)$$

The bilateral trade between two countries depends upon, among other factors, exchange rates and the relative price level of the two trading partners. In the absence of commodity price data, we follow Bahmani-Oskooee (2002), and use the (CPI-based) real bilateral exchange rate (P_{ijt}), as proxy of the relative price level. Hence, the real exchange rates included in the export equations of this article is calculated from a purchasing power parity relationship formulated as follows:

$$P_{ijt} = \ln \left(RER_{ijt} \times \frac{CPI_{jt}}{CPI_{it}} \right) \quad (4)$$

where RER_{it} is the effective nominal exchange rate, CPI_{it} and CPI_{jt} denote the quarterly consumer price index of an exporting country i and an importing country j , respectively. In this sense an increase in RER_{it} indicates a depreciation of the foreign cross rate.

$$Y_{ijt} = \ln(GDP_{it}) \quad (5)$$

According to our list of variables, Equation (1) turn in:

$$X_{ijt} = \lambda_1 + \lambda_2 Y_{ijt} + \lambda_3 P_{ijt} + \lambda_4 \ln IR_{ijt} + \varepsilon_{ijt} \quad (6)$$

Descriptive statistics of all variables are showed in Table 1.

Table 1 – Descriptive statistics

	EXJDE	EXJES	EXJEU27	EXJFR	EXJIT	EXUSDE	EXUSES
Mean	1.05E+09	97705225	3.58E+09	4.52E+08	3.61E+08	5.54E+09	5.18E+08
Median	1.07E+09	96387230	3.60E+09	4.52E+08	3.71E+08	5.62E+09	5.13E+08
Maximum	1.20E+09	1.38E+08	4.21E+09	5.36E+08	4.33E+08	6.92E+09	6.75E+08
Minimum	8.05E+08	69691591	2.73E+09	3.12E+08	2.56E+08	3.74E+09	3.25E+08
Std. Dev.	92598237	15696168	2.85E+08	45177200	35563840	6.18E+08	89697621
Skewness	-0.93151	0.407105	-0.99274	-0.79783	-1.22021	-0.6552	0.025143
Kurtosis	3.751491	2.943441	5.348632	4.515267	4.873141	3.880723	2.176308
Jarque-Bera	6.725964	1.110226	15.7637	8.070221	15.77386	4.154736	1.134996
Probability	0.034632	0.574007	0.000378	0.017684	0.000376	0.125259	0.566942

	EXUSEU27	EXUSFR	EXUSIT	GDPJP	GDPUS	RER_JP	RER_USD
Mean	2.01E+10	2.18E+09	2.00E+09	977607.4	2530252	116.2307	1.180458
Median	2.05E+10	2.12E+09	1.99E+09	935884.6	2543128	116.8626	1.216508
Maximum	2.31E+10	2.91E+09	2.39E+09	1323740	2946983	139.8388	1.642863
Minimum	1.34E+10	1.74E+09	1.46E+09	779904.5	2020908	93.79877	0.866486
Std. Dev.	2.02E+09	2.51E+08	1.98E+08	145320.4	217970.9	10.37622	0.219121
Skewness	-1.25917	0.79895	-0.21327	0.690071	-0.01886	-0.12815	0.218281
Kurtosis	4.887868	3.450245	3.091153	2.683038	2.431687	2.640546	2.118719
Jarque-Bera	16.51019	4.593339	0.317065	3.342097	0.54067	0.324828	1.61207
Probability	0.00026	0.100593	0.853395	0.18805	0.763124	0.850089	0.446625

This table report descriptive statistics of all data considered in this paper. The list of variables is as follow: EXJDE stand for German export to Japan, EXJES is Spain export to Japan, EXJEU27 represent Eu27 export to Japan, EXJFR is France export to Japan, EXJIT stand for Italian export to Japan, EXUSDE stand for German export to USA, EXUSES is Spain export to USA, EXUSEU27 represent Eu27 export to USA, EXUSFR is France export to USA, EXUSIT stand for Italian export to USA, GDPJP represent USA GDP, GDPUS is Us' GDP, RER_JP is real bilateral cross rate Euro-Yen as computed following expression (2), RER_USD is real bilateral cross rate Euro-Yen as computed starting from expression (4).

A study about co-movements or cointegration poses the following questions, which should first be addressed: Are the exports and relative exchange rate integrated of order one? Is the official discount rate also integrated of order one? Are all these variables cointegrated? To provide valid empirical evidence on long-run relationships between variables it is imperative to test the time-series properties of the variables

in question. Because the data used in this study are time series data, they could change over time and do not have fixed or stationary means. Unit root tests identify whether the variables are stationary or non stationary. There are a number of tests developed in the time-series econometrics for testing for the presence of unit roots. This study uses two most popular tests, namely the augmented Dickey–Fuller (ADF) and the Phillips–Perron (PP) tests in testing for unit roots in exports, real exchange rate and interest rate. The DF test is based on the regression:

$$\Delta X_t - \mu + \beta X_{t-1} \quad (7)$$

Where, X_t denotes the variable of interest and Δ denotes the difference operator; μ and β are parameters to be estimated. The null hypothesis (H_0) is: X_t is not $I(0)$. The ADF test is based on the regression:

$$\Delta X_t - \mu + \beta X_{t-1} + \sum_{i=1} \gamma_i \Delta X_{t-i} + \varepsilon_i \quad (8)$$

Where t is selected such that ε_i is white noise; μ , β and γ_i are parameters to be estimated. The ADF and the ADF statistics are calculated by dividing the estimates of β by its standard error. If the calculated DF and ADF statistics are less than their critical values from Fuller's Table, then the null hypothesis (H_0) is rejected and the series are stationary or integrated or order one, i.e. $I(1)$. The lengths of the lags included in the tests were determined by the Akaike information criterion. These tests are applied to the log of the variables as well as to their first and second differences (to check for the presence of an order of integration higher than 1). We also compute the test statistics without the constant and trend. According to the results of Table 5, all data pertinent to Usa foreign trade, in logarithmic form, seem to contain at least one unit root, at 5% of confidence. In reverse all data involving Japanese financial and macroeconomic data flow are apparently trend-stationary (also if ambiguous appears the perron test on first difference on the real Japan cross rate and Japan GDP). Thus, the results show that the null unit roots hypothesis cannot be rejected for variables involving Usa, meaning that these variables are non stationary in their level forms while ADF and PP tests exceed their corresponding critical values at 5% level of significance when the variables are first differenced which imply that these variables are stationary in first differences and therefore integrated in order 1, i.e. $I(1)$. Another way to distinguish the short-run effects from the long-run effects, involving incorporate the short-run adjustment mechanism into Eq. 1 by specifying it in an error-correction format. The specification that we adopt in this paper is based on the ARDL error-correction model of Pesaran et al. (2001):

$$\begin{aligned} \Delta \ln X_{i,t} = & a_i + \sum_{j=1}^{n1} b_j \Delta \ln X_{i,t-j} + \sum_{j=0}^{n2} c_j \Delta \ln Y_{t-j} + \sum_{j=0}^{n3} d_j \Delta \ln ER_{t-j} + \sum_{j=0}^{n4} e_j \Delta \ln IR_{t-j} + \\ & \lambda_1 \ln X_{i,t-j} + \lambda_2 \ln Y_{t-j} + \lambda_3 \ln ER_{t-j} + \lambda_4 \ln IR_{t-j} + v_{i,t} \end{aligned} \quad (9)$$

These equations allow us not only to test for a long-run cointegrated relationship among the variables, they provide both short-run and long-run coefficient estimates within a single equation. In addition, this modelling approach has been shown to have superior small-sample properties (see Pesaran and Shin, (1998) and Panopoulou and Pittis, (2004)), which make it a good choice for our sample (small size) of than other cointegration techniques. Testing for cointegration is also simpler than in other procedures. The “bounds testing” ARDL approach has been shown to be valid for both $I(0)$ (stationary) as well as $I(1)$ (first-difference stationary) variables. Thus, there is no need for pre-unit-root testing. This is one of the

main advantages of the bounds testing approach which makes it relatively more applicable to our topic because in our sample we have that some measure appear to be stationary whereas other variables could be non-stationary. The underlying idea behind combining both stationary and non-stationary variables within a single equation involves the fact that the variables together can form a stationary combination. If there is a stationary relationship among them in a long-run steady state, we can say they are cointegrated. Cointegration is shown with a single F -test for the joint significance of the long-run variables. They show that for cointegration, the calculated F statistic should be greater than the upper bound critical value. The critical value for this test, see Banerjee et al. (1998) and based on our sample size and the number of regressors, is 3.77. In an equilibrium state, all of the short-run variables (first differences) in Eqs. (9) are zero. The only terms remaining are the lagged level terms. Thus, in equilibrium, if these terms are all non-zero, we can say that there is a long-run relationship among trade flows, income, prices, and interest rate in the long run. If at least one term is insignificant, however, then there is no long-run relationship. The procedure is undertaken as follows. First, the lag lengths of lagged terms are chosen to minimize the Akaike Information Criterion (AIC), and the equations are estimated. The F -test is then used to test the null hypothesis of $\lambda_1 = 0, \lambda_2 = 0, \lambda_3 = 0, \lambda_4 = 0$, against the alternative of at least one equal to zero. Because there is an “intermediate” range between these bounds, we perform a secondary cointegration test. We take the fitted values of the long-run variables, $\lambda_1 \ln X_{i,t-1}, \lambda_2 \ln Y_{t-1}, \lambda_3 \ln ER_{t-1}, \lambda_4 \ln IR_{t-1}$ for Eq. (9) to form a single error-correction term for each as follow:

$$\Delta \ln X_{i,t} = \lambda_1 + \lambda_2 EC_{ijt-1} + \sum_{j=1}^{n1} \lambda_3 \Delta \ln Y_{t-j} + \sum_{j=1}^{n1} \lambda_4 \Delta \ln ER_{t-j} + \sum_{j=1}^{n1} \lambda_5 \Delta \ln IR_{t-j} + \varepsilon_{ti} \quad (10)$$

If the variables in Equation 1 are not cointegrated, the EC term, EC_{ijt-1} , is eliminated from Equation 10.

If, when each equation is re-estimated, the coefficient for ECM_{t-1} is negative and significant, this indicates that the variables are moving together toward equilibrium and there is a long-run relationship among them. Note that this will be verified only if the adjustment dynamics operating through the dependent variable over the next quarterly is sufficiently strong. This term, ECM_{t-1} , then replaces the individual variables in an equation that then corresponds to the traditional specification of Engle and Granger (1987). Granger (1988) claims that a prerequisite for two variables to establish a long-run equilibrium relationship is the existence of a dynamic causal relationship between them. Such a dynamic causal association of variables is a reflection of their short-run relationship. Engle and Granger (1987) show that if two variables are cointegrated then the variables follow a well-specified error-correction model. The error correction term in this model stands for the short-run adjustment to long-term equilibrium trends. Therefore, the error-correction model provides a means of testing the dynamic relationship between the variables. The coefficient λ_i represents the proportion of the disequilibrium in real exports in one period corrected in the next period. In addition, many estimation experiments are performed to find a parsimonious structure of Equation (10). In other words, we rely on information criteria and look at the statistical significance of the lagged variables in the model and variables which are insignificant and do not generate, even though omitted, any noticeable difference in the estimation results are eliminated from Equation (10).

EMPIRICAL RESULTS AND INTERPRETATIONS

We calculated long run impacts using the model provided from the Equation (6) for European country exports to the United States and to Japan. After reached for a good specification by choosing a combination of lags that minimizes the AIC, for the period January 1999 through December 2008, the estimated results, shown in Table 4-5, suggest that in 3 cases of 5 for US exports and in 5 cases of 5 for Japan Exports, when the coefficients on the long-run relationship are significantly different from zero at least at the 10% level, they show expected signs in regard to the GDP (with the only exceptions of France

in the equation that relate export and US macroeconomic and finance variables) and the bilateral exchange rate (except two cases corresponding to German and Spain). In this sense the estimated coefficients of the explanatory variables show the effects of the variables clearly as is the case in other studies in this research area. Since the GDP measures the economic activity of an importing country and the increase of the bilateral exchange rate means the decrease of exporting prices, both variables are expected to have positive impacts on the exports from European countries to Japan and the US. Indeed the tables show that an increase in the bilateral exchange rate, i.e. depreciation of the exporting country's currency value, generally leads to an increase in exports. Again, this confirms the importance of the exchange rate in trade flows, which influences country's competitiveness. As is seen from Tables 4 and 5, the coefficients of the GDP are all positive and significant at least at the 10% significance level (one exceptional case is France's exports to US, in which the effect of the GDP is negative). The coefficients of bilateral exchange rates are also positive in the most of cases. The estimated coefficients for the long run relationships regard to the BCE official Interest Rate are significant for the same country for which consistent and reasonable from a theoretical point of view result parameter of long run elasticity to GDP and foreign term of trade. In general the signs of these coefficient are negative for the equation when explanatory variables are US exports (German represented only deviation from expected sign) and Japan exports (with Italy export as only one exception).

A meanings of this findings could lie in the macroeconomic implications about interest rate, GDP and bilateral real exchange rate. Indeed it could be reasonable thinking to an high official discount rate as a depressive effect on real GDP and in that way on export flow too, as obtained in many studies in literature, while is widely accepted that an increase in interest rate cause an appreciation of real exchange rate and this could lead a fall in exports due to the relative price effects. A country-by-country analysis reveals some interesting differences. In Germany, the interest rate is not significant in the long-term relationship with export to Japan as explanatory variable, the coefficient of the interest rate is negative but insignificant. This is in stark contrast with the rest of the country considered in our sample. In EU27, France, Italy and Spain, the interest rate is significant at least at the 10% significance level in the cointegration equation with Japan exports. As it could be seen from result showed in Table 5 in the long-run equilibrium equation for US exports interest rate is not significant when Italy is taken into account. In the meantime, GDP turns out to have a significantly positive impact on the exports of all country except France whether the importing country is Japan or the USA. We obtain same evidences with regard to bilateral cross rate. Indeed the impact of cross rate is positive and significant in the exports both from European country to the USA and to the Japan. The effects of the interest rate are more complicated. The estimated results, suggest that the long-term elasticity of the Export to the BCE official discount rate ranged (as absolute value) between 9.37 of Spain and 0.6 of Ue27 when Japan is considered as commercial partner, and between 2.69 and 1.01 when Us are taken into account (without considering Italy since not showed a significative long run linkage).

These result point out that Spanish external trade is the most sensitive to changing in BCE official interest rate level. In other words, a 1% deviation in the BCE interest rate decreases the Spanish international commerce more than other European country. Whereas the long-term elasticity of export to foreign GDP, when Japan is considered, is included into an interval of 2.85 (Spain) and 0.29 (Italy), and between 1.42 (Spain) and 0.94 (France) when US GDP is taken into account, highlighting the sensitive of Spain to change in foreign GDP. The estimated results also suggest that the long-term elasticity of the export with respect to the Yen exchange rate amounts to 4.8 for Spain, 1.07 for Ue27, 0.75 for Italy and 0.94 for France, emphasizing, once again the extreme value of Spanish long term elasticity. This peculiar evidence is confirmed once the analysis is focused on long term elasticity versus Us dollar, the highest value, 0.84, is pertinent, once more, to Spain. Interestingly enough, the whole sample medium term of long-term elasticity of the export to interest rate is large than both bilateral cross rate and GDP ones, and the mean long term of elasticity of export to cross rate is quite similar than that GDP showed underlying a relative major sensitivity of European external trade flow to changing in interest rate that in changing in cross rate

or foreign GDP. The size of the long-run income elasticity does not accord with Riedel's observation (Riedel, 1988) that most estimates of income elasticities in export demand functions whether for developed or developing countries, or for country aggregates or in individual countries, generally lie in the range between 2.0 and 4.0. We think that this low elasticity to GDP (sample mean elasticity amount about to 1.5) lie in the evidence that a very large part of external trade for European country is pertinent to flow internal to Ue. When a long run relation is proven true, by analysing the significance level of all the coefficients in equation (6), that is to say that the indirect cointegration tests in the previous section detected one long-run equilibrium relationship for each of the export equations, EC models (ECM) were estimated to see the short-run dynamics of the export equations.

The ECM shows how the system converges to the long-run equilibrium implied by export demand function provided by Equation 1. The estimated coefficient values for the error corrected models (EC terms) were computed by the cointegration equations, for those country for which the long term are statistically significant, and they are reported in Table 6 for the exports to Japan and in Table 7 for the exports to the USA. In the same tables we also report estimate for country which long relationship is not proven. When the adjustment speed coefficients are significantly different from zero, they also show the expected signs in all cases. As is seen from the tables, the coefficient values of the EC terms (EC_{t-1}) are all negative and significant quite all at the 10% significance level, further confirming that the variables are cointegrated and reconfirming the presence of a long-run equilibrium relationship among the variables in each export function. In this sense the absolute value of the coefficient of the error-correction term indicates how much of the disequilibrium in the real exports demand is offset by short-run adjustment in each quarter, or in other words, the magnitudes of the error correction terms indicate the change in real exports per quarterly that is attributed to the disequilibrium between the actual and equilibrium levels. Observing the results we note that we have large variability in our sample since we have obtained small absolute values indicating a rather slow dynamical adjustment, some bigger denoting a fast re-equilibrium, and some more that implicate an overreaction (typically coefficients large then 1). The adjustment of speed to the last period's disequilibrium varies across countries substantially implying that, for example, for Export to Japan while 24% of the adjustment occurs in one quarterly for the Spain, 66% of the adjustment occurs in one quarterly for EU27. Instead in the case of Us Export, for example 67% of the adjustment occurs in one quarterly for the EU27, 77% of the adjustment occurs in one quarterly for France. To summarize, the estimates of the short-run dynamics of the ECM indicate that interest rate has a significant short-run negative effect on export demand, in addition to its long-run effect. The results of the various diagnostic tests carried out on the error-correction model of real exports demand are reported in the lower panel of Tables 6 and 7. The coefficient of determination (Adjusted R²) that measures the goodness-of-fitness of the model are quite near to 0.8 for the model considering as explanatory variables exports to Japan, and above 0.7 for EC model with Us exports as regressor, these findings shows that more than 70%, considering cross-sample evidences, of variations in real exports demand are explained by the fundamentals.

CONCLUSION AND POLICY IMPLICATION

The purpose of this article was to investigate the impact of BCE official discount rate on exports in EU27 and in four European country namely: Spain, France, German and Italy. Considering the dominant roles of the US and Japan as trading partners of those European countries, this article has focused on the quarterly export volumes of European countries to the US and Japan. More specifically, this article has attempted to explain the exports of European countries to Japan and the US by three economic variables, the GDP of an importing country, the bilateral exchange rate and the BCE official discount rate. The time series methodology used in this paper, after considering the time series properties of our data, is based on the bounds testing approach to cointegration and error-correction modelling. Applying the ARDL cointegration technique to quarterly data from 1999:01 to 2008:04, we are able to generate some further empirical evidence regarding the dynamic relationships between exports, trade and Official Interest Rate,

assessing the short-run and long-run impact of export to BCE Official Discount Rate. This goal represents the primary interest of this article and could represent an effort to partially fill the gap in the literature. The results of the cointegration analysis, in a so-called indirect approach or Amended Granger Causality Test, reveal that there exists a long-run equilibrium relationship among the variables of the real exports demand function. The results of the long run parameter estimates are consistent with economic theory in the most of the cases. In the meantime, (except in the case of France's exports to US) increase in the real foreign income has a significantly positive impact on real exports demand; while improvement in the terms of trade (declines in the real exchange rate) was found to encourage exports in the most of the cases. Therefore, given the existence of a stable long-run export-interest rate relationship in the data for some European countries, this study then provides some tests of the short-run dynamics underlying the export-growth relationship using an Error-Correction (EC) framework. In this context the statistically significant error-correction term confirms that a long-run cointegration relationship exists between real exports, real foreign income, relative prices, proxied by real cross rate and interest rate for these countries.

The short-run estimates of the error correction model corroborate the results of the long-run parameter estimates and suggests that overlooking the cointegrating relationship among the variables would have introduced misspecification in the underlying dynamic structure. Such knowledge of whether monetary policy depresses exports should result in policies that aid the attainment of interest rate stability, which in turn, promotes economic growth. Furthermore, this may help to lessen the potential adverse effects of BCE monetary policy actions. More identification of causality can help policy makers to obtain a better insight of economic growth in every country and to formulate effective economic policies and development strategies. Therefore, the magnitude of relationship has significant policy implications. For example, the finding of linkage running from interest rate to export signifies that this economy has to investigate to carrying on a monetary policy based on certain interest rate levels. This means that export can be supported by specific strategy of monetary policy. Export growth might affect output growth by generating positive externalities on other sectors of the economy via more efficient management styles, improved production techniques and economies of scale. The recent literature on "endogenous" growth theory also emphasizes the role of increasing returns to scale, dynamic spillover effects and the complementarities between physical capital (both foreign and domestic) and human capital in boosting the long-run growth rate due to greater allocative efficiency, the use of new technology and dynamic competitiveness.

REFERENCES

- K. Aristotelous, (2002), "The impact of the post-1972 floating exchange-rate regime on US exports", *Journal of Applied. Econometrics*, Vol. 34, Issue 13, p. 1627–1632.
- A. C. Arize, T. Osang, T., D. J. Slottje, (2000) "Exchange rate volatility and foreign trade: evidence from thirteen LDC", *Journal of Business & Economic Statistics*, Vol.18, p.10–17.
- M. Bahmani-Oskooee, (2002). "Does black-market exchange rate volatility deter the trade flows?", *Journal of Applied Econometrics*, Vol. 34, Issue 13, p. 2249–2555.
- M.Bahmani-Oskooee, Z.Ardalani (2006), "Exchange rate sensitivity of U.S. trade flows: evidence from industry data", *South Economic Journal*, Vol.72, p. 542–559.
- M. Bahmani-Oskooee, W. Hegerty, Scott., (2007), "Exchange rate volatility and trade flows: A review article", *Journal of. Economic. Studies*, Vol. 34, Issue 3, p. 211–255.
- A. Banerjee, J.Dolado, R. Mestre, (1998), "Error-correction mechanism tests in a single-equation framework", *Journal of Time Series Analysis*, Vol. 19, Issue 3, p. 267–285.

- A. R. Chowdhury, (1993), "Does exchange rate volatility depress trade flows? Evidence from error correction models", *The Review of Economics and Statistics*, Vol.75, p. 700–706.
- B. Coric, G. Pugh, (2006), "The effects of exchange rate variability on international trade: a meta regression analysis", *Institute for Environment & Sustainability Research, Working Paper*.
- P. De Grauwe, (1988), "Exchange rate variability and slowdown in growth of international trade", *IMF Staff Papers*, Vol. 35, p. 63–84.
- G. De Vita, A. Abbott, (2004), "Real exchange rate volatility and US exports: An ARDL bounds testing approach", *Econometrica*, Vol.1, Issues 9, p. 69–78.
- R. F. Engle, W. J. Granger, (1987), "Cointegration and error correction: representation, estimation, and testing", *Econometrica*, Vol. 55, p. 251–76.
- W. J. Granger (1988), "Some Recent Developments in a Concept of Causality", *Journal of Econometrics*, Vol. 39, Issue (1/2), p. 199–211.
- W. J. Granger (1969), "Investigating causal relationship by econometric models and cross-spectral methods", *Econometrica*, Vol. 37, p. 424–38.
- S. Johansen, J. Katarina, (1990), "Maximum likelihood estimation and inference on cointegration with applications to the demand for money", *Oxford Bull Economic Statistics*, Vol. 52, Issue 2, p. 169–210.
- M. McKenzie, R. Brooks, (1997), "The impact of exchange rate volatility on Germany-US trade flows", *Journal of International Financial Markets, Institutions and Money*, Vol.7, p.73–87.
- E. Panopoulou, N. Pittis, (2004), "A comparison of autoregressive distributed lag and dynamic OLS cointegration estimators in the case of a serially correlated cointegration error", *Journal of Econometrics*, Vol.7, Issue 2, p. 585–617.
- H. Pesaran, Y. Shin, (1998), "An autoregressive distributed-lag approach to cointegration analysis", in: *Econometrics and Economic Theory in the 20th Century. The Ragnar Frisch Centennial Symposium*. Cambridge University Press, p. 371–413.
- M.H Pesaran, Y. Shin., R.J.Smith, (2001), "Bounds testing approaches to the analysis of level relationships", *Journal of Applied. Econometrics*, Vol. 16, Issue 8, p 289–326.
- J. Riedel, (1988), "The demand for LDC exports of manufactures: estimates from Hong Kong", *The Economic Journal*, Vol. 98, p.138–48.
- H. Shahrestani, N. Anaraki, (2008), "How does the canadian stock market react to the u.s. fed.s policy within nafta?", *Proceedings of Global Business Conference of Finance Research*, Atlantic City, January, 2009.
- A. C. Sims (1972), "Money, income and causality", *American Economic Review*, Vol.62, p.540–52.
- J.P. Singh, L. Kónya, (2006), "Cointegration and causality between Indian export, import, and GDP", *Asia Pacific Journal of Economics and Business*, Vol. 10, p. 20–35.

Table 2 Unit Root Statistics

	LIREU	LEXJDE	LEXJES	LEXJEU27	LEXJFR	LEXJIT	LEXUSDE	LEXUSES
Level ADF Test Statistic	-0.279	-0.279	-2.790	-5.097	-5.619	-5.604	-2.979	-1.988
First Difference ADF Test Statistic	-1.926	-1.926	-6.669	-6.038	-7.261	-6.102	-4.495	-4.395
Level PP Test Statistic	-0.420	-0.420	-3.682	-3.923	-4.019	-5.297	-3.974	-3.060
First Difference PP Test Statistic	-3.260	-3.260	-12.249	-5.639	-7.847	-10.074	-6.574	-15.714

Table 2 report unit root statistics following ADF and Philips Perron Test. The list of variables is as follow: LIREU represent natural logarithm of BCE Official Discount Rate, LEXJDE stand for natural logarithm of German export to Japan, EXJES is natural logarithm of Spain export to Japan, EXJEU27 represent natural logarithm of Eu27 export to Japan, EXJFR is natural logarithm of France export to Japan, EXJIT stand for natural logarithm of Italian export to Japan, EXUSDE stand for natural logarithm of German export to USA, EXUSES is natural logarithm of Spain export to USA. MacKinnon critical values for rejection of hypothesis of a unit root are: -3.612 - 1% Critical Value, -2.940 - 5% Critical Value and, -2.608 - 10% Critical Value for ADF test (-3.617, -2.942, -2.609 respectively for first difference test). -3.607 - 1% Critical Value, -2.9385 - % Critical Value and, -2.607 - 10% Critical Value for PP test both for level and first difference.

Table 3 Unit Root Statistics

	LEXUSEU27	LEXUSFR	LEXUSIT	LGDPJP	LGDPUS	LRERJP	LRERUSD
Level ADF Test Statistic	-4.116	-1.444	-2.617	-1.525	-2.449	-2.353	-0.965
First Difference ADF Test Statistic	-3.296	-3.891	-3.929	-2.537	-2.932	-2.457	-2.979
Level PP Test Statistic	-4.874	-2.569	-4.589		-2.829	-2.542	-0.679
First Difference PP Test Statistic	-8.434	-7.642	-11.338	-3.115	-4.250	-3.808	-4.154

Table 3 report unit root statistics following ADF and Philips Perron Test. The list of variables is as follow: EXUSEU27 represent natural logarithm of Eu27 export to USA, EXUSFR is natural logarithm of France export to USA, EXUSIT stand for natural logarithm of Italian export to USA, GDPJP represent natural logarithm of USA GDP, GDPUS is natural logarithm of Us'GDP, RER_JP is natural logarithm of real bilateral cross rate Euro-Yen as computed following expression (2), RER_USD is natural logarithm of real bilateral cross rate Euro-Yen as computed following expression (4). MacKinnon critical values for rejection of hypothesis of a unit root are: -3.612 - 1% Critical Value, -2.940 - 5% Critical Value and, -2.608 - 10% Critical Value for ADF test (-3.617, -2.942, -2.609 respectively for first difference test). -3.607 - 1% Critical Value, -2.9385 - % Critical Value and, -2.607 - 10% Critical Value for PP test both for level and first difference.

Table 4 – Long run Export Demand Function Estimate - Export to Japan

Spain			EU27			Italy			German			France		
LGDPJP (-1)	Coeff	2.85	LGDPJP (-1)	Coeff	0.74	LGDPJP (-1)	Coeff	0.29	LGDPJP (-1)	Coeff	1.98	LGDPJP (-1)	Coeff	0.56
	Dev.St	-0.76		Dev.St	-0.09		Dev.St	-0.10		Dev.St	-0.96		Dev.St	-0.07
	T-stat	-3.77		T-stat	-8.11		T-stat	-2.84		T-stat	-2.07		T-stat	-7.88
LRER_JP (-1)	Coeff	4.80	LRER_JP (-1)	Coeff	1.07	LRER_JP (-1)	Coeff	0.75	LRER_JP (-1)	Coeff	5.93	LRER_JP (-1)	Coeff	0.94
	Dev.St	-1.38		Dev.St	-0.15		Dev.St	-0.18		Dev.St	-3.35		Dev.St	-0.13
	T-stat	-3.47		T-stat	-7.02		T-stat	-4.12		T-stat	-1.77		T-stat	-7.07
LIREU(-1)	Coeff	-9.37	LIREU(-1)	Coeff	-0.59	LIREU(-1)	Coeff	2.01	LIREU(-1)	Coeff	-1.11	LIREU(-1)	Coeff	-1.55
	Dev.St	-2.72		Dev.St	-0.36		Dev.St	-0.37		Dev.St	-1.78		Dev.St	-0.32
	T-stat	-3.44		T-stat	-1.65		T-stat	-5.40		T-stat	-0.62		T-stat	-4.89
C		-36.95	C		-34.51	C		-36.63	C		-71.12	C		-24.93

Table 4 show coefficient estimate of long run export to Japan demand function as we have in equation (6) . All intercept are statistical significance.

Table 5 – Long run Export Demand Function Estimate - Export to USA

France			EU27			German			Italy			Spain		
LGDPUS (-1)	Coeff	-0.94	LGDPUS (-1)	Coeff	1.40	LGDPUS (-1)	Coeff	1.32	LGDPUS (-1)	Coeff	2.09	LGDPUS (-1)	Coeff	1.42
	Dev.St	-0.18		Dev.St	-0.07		Dev.St	0.02		Dev.St	0.58		Dev.St	0.09
	T-stat	-5.12		T-stat	-19.08		T-stat	-68.76		T-stat	-3.63		T-stat	-16.24
LRER_USD (-1)	Coeff	0.16	LRER_USD (-1)	Coeff	0.40	LRER_USD (-1)	Coeff	-0.54	LRER_USD (-1)	Coeff	0.00	LRER_USD (-1)	Coeff	-0.84
	Dev.St	-0.04		Dev.St	-0.03		Dev.St	-0.01		Dev.St	-0.06		Dev.St	-0.03
	T-stat	-4.29		T-stat	-13.69		T-stat	-83.44		T-stat	-0.08		T-stat	-25.63
LIREU(-1)	Coeff	-1.64	LIREU(-1)	Coeff	-0.62	LIREU(-1)	Coeff	1.02	LIREU(-1)	Coeff	-6.90	LIREU(-1)	Coeff	-2.69
	Dev.St	-0.58		Dev.St	-0.24		Dev.St	-0.14		Dev.St	-2.13		Dev.St	-0.69
	T-stat	-2.82		T-stat	-2.65		T-stat	-7.07		T-stat	-3.25		T-stat	-3.87
C		-5.61	C		-7.59	C		41.53	C		13.468	C		13.468

Table 5 show coefficient estimate of long run export to Usa demand function as we have in equation (6) . All intercept are statistical significance.

Table 6 – Error Correction Model Estimate – Export to Japan

Error Correction:	D(LEXJES)	Error Correction:	D(LEXJEU27)	Error Correction:	D(LEXJIT)	Error Correction:	D(LEXJDE)	Error Correction:	D(LEXJFR)
ErrCorr (EC)	-0.31 -0.14 (-2.22)	ErrCorr (EC)	-0.66 -0.23 (-2.82)	ErrCorr (EC)	-2.36 -0.36 (-6.51)	ErrCorr (EC)	-0.15 -0.09 (-1.64)	ErrCorr (EC)	-2.28 -0.59 (-3.85)
D(LEXJES(-1))	-0.35 -0.16 -2.15	D(LEXJEU27(-1))	-1.34 -0.32 (-4.22)	D(LEXJIT(-1))	0.83 -0.28 (-2.97)	D(LEXJDE(-1))	-1.04 -0.23 (-4.63)	D(LEXJFR(-1))	1.03 -0.44 (-2.31)
D(LGDPJP(-1))	7.57 -3.19 (-2.37)	D(LGDPJP(-1))	1.74 -0.99 (-1.76)	D(LGDPJP(-1))	-2.61 -1.31 (-1.99)	D(LGDPJP(-2))	5.01 -1.68 (-2.97)	D(LGDPJP(-1))	3.09 -1.54 (-2.00)
D(LRER_JP(-1))	5.71 -2.89 (-1.98)	D(LRER_JP(-3))	1.63 -0.92 (-1.76)	D(LRER_JP(-2))	-2.45 -1.07 (-2.29)	D(LRER_JP(-2))	3.84 -1.49 (-2.56)	D(LRER_JP(-1))	3.66 -1.55 (-2.36)
D(LIREU(-1))	-10.53 -8.45 (-1.24)	D(LIREU(-1))	11.80 -3.87 (-3.05)	D(LIREU(-1))	12.58 -4.88 (-2.58)	D(LIREU(-2))	8.35 -6.06 (-1.37)	D(LIREU(-2))	8.70 -4.81 (-1.81)
C	0.07 0.03 (-2.01)	C	0.06 -0.02 (-2.78)	C	-0.09 -0.02 (-4.08)	C	0.09 -0.04 (-2.16)		
R-squared	0.34	R-squared	0.78	R-squared	0.87	R-squared	0.81	R-squared	0.84
Adj. R-squared	0.23	Adj. R-squared	0.64	Adj. R-squared	0.80	Adj. R-squared	0.63	Adj. R-squared	0.75
Sum sq. resids	0.74	Sum sq. resids	0.02	Sum sq. resids	0.05	Sum sq. resids	0.04	Sum sq. resids	0.04
S.E. equation	0.15	S.E. equation	0.03	S.E. equation	0.05	S.E. equation	0.05	S.E. equation	0.04
F-statistic	3.24	F-statistic	5.87	F-statistic	11.73	F-statistic	4.38	F-statistic	9.11
Log likelihood	21.04	Log likelihood	80.29	Log likelihood	68.26	Log likelihood	69.51	Log likelihood	69.59
Akaike AIC	-0.79	Akaike AIC	-3.68	Akaike AIC	-3.01	Akaike AIC	-2.94	Akaike AIC	-3.09
Schwarz SC	-0.53	Schwarz SC	-3.07	Schwarz SC	-2.40	Schwarz SC	-2.14	Schwarz SC	-2.47
Mean dependent	0.01	Mean dependent	0.00	Mean dependent	0.00	Mean dependent	0.00	Mean dependent	0.00
S.D. dependent	0.17	S.D. dependent	0.06	S.D. dependent	0.10	S.D. dependent	0.08	S.D. dependent	0.09

Table 6 show coefficient estimate and summary statistics of ECM model for export to Japan following equation (10). Number in parenthesis are t-statistic. D in every variable label stand indicate difference.

Table 7 – Error Correction Model Estimate – Export to Usa

Error Correction:	D(LEXU SFR)	Error Correction:	D(LEXU SDE)	Error Correction:	D(LEXU SIT)	Error Correction:	D(LEXU SES)	Error Correction:	D(LEXUSE U27)
ErrCorr (EC)	-1.35 -0.63 (-2.14)	ErrCorr (EC)	-0.87 -0.23 (-3.78)	ErrCorr (EC)	0.37 -0.21 (-1.76)	ErrCorr (EC)	-0.81 -0.19 (-4.21)	ErrCorr (EC)	-0.67 -0.32 (-2.08)
D(LEXUSFR (-2))	0.90 -0.48 (-1.89)	D(LEXUSDE (-1))	0.31 -0.18 (-1.67)	D(LEXUSIT(-1))	-1.21 -0.31 (-3.95)	D(LEXUSES (-1))	-0.48 -0.12 (-4.09)	D(LEXUSEU 27(-2))	0.60 -0.23 (-2.66)
D(LGDPUS(-1))	-0.73 -2.52 (-0.29)	D(LGDPUS(-1))	2.63 -0.77 (-3.43)	D(LGDPUS(-1))	-0.90 -2.76 (-0.32)	D(LGDPUS(-1))	-4.67 -1.89 (-2.46)	D(LGDPUS(-2))	3.25 -1.21 (-2.68)
D(LRER_US D(-1))	-0.66 -2.31 (-0.28)	D(LRER_US D(-1))	2.83 -0.82 (-3.47)	D(LRER_US D(-2))	-3.52 -2.76 (-1.27)	D(LRER_US D(-1))	-4.92 -1.76 (-2.78)	D(LRER_US D(-2))	3.46 -1.19 (-2.90)
D(LIREU(-1))	-0.34 -7.13 (-0.04)	D(LIREU(-1))	2.66 -1.35 (-1.97)	D(LIREU(-1))	3.74 -4.23 (-0.88)	D(LIREU(-1))	12.29 -4.10 (-3.00)	D(LIREU(-2))	2.46 -1.16 (-2.12)
				C	0.10 -0.07 -1.44			C	-0.06 -0.02 (-2.63)
R-squared	0.70	R-squared	0.33	R-squared	0.69	R-squared	0.79	R-squared	0.63
Adj. R-squared	0.25	Adj. R-squared	0.24	Adj. R-squared	0.50	Adj. R-squared	0.77	Adj. R-squared	0.51
Sum sq. resids	0.04	Sum sq. resids	0.07	Sum sq. resids	0.09	Sum sq. resids	0.14	Sum sq. resids	0.04
S.E. equation	0.06	S.E. equation	0.05	S.E. equation	0.07	S.E. equation	0.06	S.E. equation	0.04
F-statistic	1.55	F-statistic	3.99	F-statistic	3.74	F-statistic	31.67	F-statistic	5.15
Log likelihood	65.53	Log likelihood	64.84	Log likelihood	55.82	Log likelihood	52.92	Log likelihood	73.74
Akaike AIC	-2.62	Akaike AIC	-3.15	Akaike AIC	-2.32	Akaike AIC	-2.52	Akaike AIC	-3.45
Schwarz SC	-1.68	Schwarz SC	-2.93	Schwarz SC	-1.71	Schwarz SC	-2.31	Schwarz SC	-3.01
Mean dependent	-0.01	Mean dependent	0.01	Mean dependent	0.00	Mean dependent	0.01	Mean dependent	0.01
S.D. dependent	0.07	S.D. dependent	0.05	S.D. dependent	0.09	S.D. dependent	0.13	S.D. dependent	0.06

Table 7 show coefficient estimate and summary statistics of ECM model for export to Usa following equation (10). Number in parenthesis are t-statistic. D in every variable label stand indicate difference.

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DYNAMIC ASSET ALLOCATION WITH COMBINED CRITERIA DECISION SYSTEM

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ABSTRACT

We investigate predictability of asset returns by developing an approach that combines quantitative methods of forecasting, based on technical analysis. As innovative elements with regard to almost all the previous literature we introduce a multiple criteria decision system stand in involving the simultaneous use of trend indicators and other confirming indicators. By combining trend indicators with confirming indicators it is possible to construct a superior technical trading strategy that captures a more comprehensive aspect of predictability in past prices. This study also proposes a test for weak form efficiency based on combining approach wherever the previous ones typically make inferences based on the empirical results of testing only one class of technical rules. Applying the combining criteria decision system the evidence suggests that such a strategies have predictive ability on a data sample based on 3 European stock Index Markets. Our results rejects the null hypothesis that the returns to be earned from applying trading rules are equal to those achieved from a naive buy and hold strategy even after the deduction of transaction costs. Evidences also suggest that oscillators capture some aspect of predictability in past prices that moving averages do not detect.

KEYWORDS: Technical Analysis, Market Timing, Efficient Market Hypothesis

INTRODUCTION

Technical analysis involves the prediction of asset price movements from inductive analysis of past movements using either qualitative methods (e.g. the recognition of certain patterns in the data for visual inspection of a time-series plot) or quantitative techniques (e.g. based on an analysis of moving averages), or a combination of both. Pring (2002), a leading technical analyst, provides a more specific definition: “the technical approach to investment is essentially a reflection of the idea that prices move in trends that are determined by the changing attitudes of investors toward a variety of economic, monetary, political, and psychological forces”. Despite its widespread acceptance and adoption by practitioners, technical analysis has been described by Malkiel (1981) as an “anathema to the academic world”. This is due to its conflict with market efficiency, one of the central pillars of academic finance. Jensen (1978) developed a detailed definition: ‘A market is efficient with respect to information set θ_t if it is impossible to make economic profits by trading on the basis of information set θ_t ’. In an efficient market, prices are said to reflect information to the point where the potential risk-adjusted excess returns of acting on information do not exceed the cost of doing so. Jensen’s definition implies that market efficiency may be tested by considering the net profits and risk of trading strategies based on information set θ_t . Early academic studies of technical analysis by Alexander (1964) find that technical analysis profitability is eroded by transaction costs. This finding, which is consistent with market efficiency, resulted in few further technical analysis studies over the next twenty years.

In 1990s with the easier accessibility to financial data banks and greater computer power, a thorough demonstration of the benefits of technical trading rules, and consequently the possibility of forecasting financial asset returns were studied by many researchers. There has been a growing recognition that the introduction of nonlinearities in the modelling approach could allow one to explain certain price moves that seemed previously random. Our skeletal review literature focuses on paper published in 2000s.

Although the impact of single technical trading rules over major financial markets worldwide have been studied extensively, combined technical trading systems have rarely received sufficient attention. Fang and Xu (2003), investigate predictability of asset returns by developing an approach that combines technical analysis and conventional time series forecasts. While exploiting predictable components as functions of past prices or returns, technical trading rules and time series forecasts capture different aspects of market predictability: the former tends to identify periods to be in the market when returns are positive and the latter is capable of identifying periods to be out when returns are negative. Applied to daily Dow Jones Averages over the first 100 years, the combined strategies outperform both technical trading rules and time series forecasts. The predictability can be explained largely by non-trivial low-order serial correlations in returns. Chen and Li (2003) uses daily stock prices and the trading volume of 39 constituent companies in the Shenzhen Stock Exchange Index to examine the usefulness of technical analysis. It finds very weak evidence to support the view that traders and/or technical analysts can learn more about the future pattern of returns by actively using volume in conjunction with returns than those who only watch price movements. In the article of Rogovska-Ischuk, (2006) the author offers a new classification of technical methods, which includes a synergetic approach as one of the forecasting instruments, selects the most effective methods for every pair, and suggests a way of using the synergetic approach together with classical methods. Marshall and Cahan, (2005) examines trading strategies for predicting stock price movements by applying a combination of technical analysis and time series forecasts to the five Asian-Pacific stock markets of Australia, Indonesia, Japan, Malaysia and Singapore. Evidences shows how technical analysis may be improved by incorporating forecasting approaches. Fock, Klein, and Zwergel (2005) put one very popular charting technique, the "candlestick" method, to the test. They start by developing specific criteria for a set of basic candlestick patterns, and then measure predictive performance with intraday data from two major futures, the DAX stock index contract, and the Bund interest rate future. The authors find no evidence of predictive ability from candlestick patterns alone, or in combination with other common technical indicators, like momentum.

However more attention in literature, also in 2000s, has been paid to single rule approaches. The study of Mitra (2002) employs the Simple Moving Average (SMA) and the Displaced Moving Average (DMA) trading rules to test the weak form efficiency of the Indian equity markets. Results provide sufficient evidence that the DMA indicator is a highly successful trading rule that generated profitable signals even after adjusting for transaction and other costs. The purpose of Park and Irwin (2007) paper is to review the evidence on the profitability of technical analysis. The empirical literature is categorized into two groups, 'early' and 'modern' studies, according to the characteristics of testing procedures. Early studies indicate that technical trading strategies are profitable in foreign exchange markets and futures markets, but not in stock markets. Modern studies indicate that technical trading strategies consistently generate economic profits in a variety of speculative markets at least until the early 1990s. Among a total of 95 modern studies, 56 studies find positive results regarding technical trading strategies, 20 studies obtain negative results, and 19 studies indicate mixed results. Atmeh and Dobbs, (2006) investigate the performance of moving average trading rules in an emerging market context, namely that of the Jordanian stock market. The conditional returns on buy or sell signals from actual data are examined for a range of trading rules. These are compared with conditional returns from simulated series generated by a range of models (random walk with a drift, AR(1), and GARCH(M)). The empirical results show that technical trading rules can help to predict market movements, and that there is some evidence that (short) rules may be profitable after allowing for transactions costs. Glezakos and Mylonas (2003) investigates the forecast power of technical analysis in the equity markets by applying simple technical trading rules to the Athens General Index and DAX.

The results produce evidence that technical analysis is a valuable investment tool even after the deduction of transaction costs, especially in the case of the Athens Stock Exchange. Reitz, (2006) provides a possible explanation for the Technical Analysis puzzle that goes beyond the standard self-fulfilling prophecy argument. If at least some of the asset price fundamentals are not currently observable, the oscillator model is able to infer regime shifts in the

process of these variables through past asset prices. From this point of view, technical analysis can be interpreted as a cheap proxy for Bayesian learning. In this paper we investigate whether by combining some typical technical rules named “oscillators” with moving averages, a superior technical trading strategy can be developed. In this sense the use of so called confirming indicators, from oscillators significantly improves forecast power and could make possible to capture the information content in past prices more effectively. If the hypothesis is true, technical analysis should enable a trader to earn profits larger than those come from a naïve buy and hold strategy. The remainder of the paper is organized as follows: data employed in this study and methodology are presented in Section 2 where outlines the technical trading rules. These rules also form the basis of the test for weak form efficiency (*EMH*). Section 3 reports and compares the empirical results of testing the different technical trading strategies for three European Stock Index and Section 4 concludes the paper.

DATA AND METHODOLOGY

This paper mainly differentiates itself from previous studies in the literature in the following aspect. Most empirical work has studied technical approaches in isolation. This is ultimately not satisfactory because, as shown in this, study, different technical trading rules are able to identify different predictable components. Literature and heuristic evidence show that market action reflect his behaviour in two ways: trending and trading. A trending market refers to the presence of a strong price trend while in a trading range markets, the price is going no-where. During a period of time when the market is in a strong trend tools like moving averages give a clue for timing to generate a market order. Another widely used device is the class of indicators, or so called oscillator functions which range from over bought to oversold territory, they not provide much evidence of a trending market while their useful is large in trading range market..The fact that technical trading rules, and particularly moving average and oscillator, are asymmetric in the opposite directions during trending and trading periods provides a striking evidence of their complementary properties. Because this study is based on jointly use of different technical analysis approaches, we focus on the most commonly used basic trading strategy employed by technical analysts – a combination of moving averages and oscillators. By combining trend indicators with confirming indicators that are also based on the detection of trends in past prices, it is possible to construct a superior technical trading strategy that captures a more comprehensive aspect of predictability in past prices. According to authors of popular practitioner guides to technical analysis such as Patel(2000), Bail (2005) and Nison (2005), most technical analysts use at least one momentum indicator when trading. In this study we have applied strategy involving the following indicators: RSI, Stochastic, ADX, MACD and Price Oscillator. A simple moving average rule would signal an imminent break in trend, or the emergence of a new trend, when the moving average is crossed by the spot price or by a shorter moving average. Thus, an imminent upward break in trend for the stock price, p_t , might be signalled by a short moving average of length $m > 1$, $MA_t(m)$, intersecting from below a longer moving average of length n ($n > m$), $MA_t(n)$, i.e.

$$MA_t(j) = \frac{1}{j} \sum_{i=0}^{j-1} p_{t-i}, j = m, n \quad (1)$$

Conversely, a downward break in trend would be signalled by the short moving average crossing the long moving average from above. Indicators of this kind will tend to be profitable in markets exhibiting definite trends and so they are generically known as “trend following” or “momentum” indicators. The following describes the way in which the MA rules emit buy and sell signals. A buy (sell) signal is emitted when the SMA_t intersects the LMA_t from below (above):

$$b_t : SMA_t > LMA_t \quad \text{and} \quad SMA_{t-1} < LMA_{t-1} \quad (2)$$

$$s_t : SMA_t < LMA_t \quad \text{and} \quad SMA_{t-1} > LMA_{t-1} \quad (3)$$

For the cross signal like previous studies in literature we use 1-day moving average (the raw price). The calculation of the *RSI* t,p at time t of period p uses only closing prices and is the ratio of up-closes, U_i , to down closes, D_i , over the time period selected, expressed as an oscillator that has a range of 0 to 100. The calculation start with defining an index set $I_{t,p} = \{i : t - p \leq i \leq t\}$ allowed by defining the up-closes and the down-closes such that:

$$U_i = \begin{cases} C_i - C_{i-1} & \text{if } C_i > C_{i-1} \\ 0 & \text{otherwise} \end{cases} \quad \text{and} \quad D_i = \begin{cases} C_{i-1} - C_i & \text{if } C_{i-1} > C_i \\ 0 & \text{otherwise} \end{cases} \quad (4)$$

for any $i \in I_{t,p}$ and C_i is the closing price for period i . The next step is to define:

$$\overline{U}_{t,p} = \text{Average of } U_i \text{ over } I_{t,p} \quad \text{and} \quad \overline{D}_{t,p} = \text{Average of } D_i \text{ over } I_{t,p} \quad (5)$$

and thereafter the relative strength (*RS*) and the *RSI* at time t for period p is given as follows:

$$RS_{t,p} = \frac{\overline{U}_{t,p}}{\overline{D}_{t,p}} \quad \text{and} \quad RSI_{t,p} = 100 - \frac{100}{1 + RS_{t,p}} \quad (6)$$

The *RSI* thus attempts to measure the strength of “up movements” relative to the strength of “down movements”, and is normalised to lie between 0 and 100; common values at which a particular stock is deemed to have been overbought (signalling an imminent downward correction which it could be associated a sell signal) or oversold (signalling an imminent upward correction which it could be associated a buy signal) are 70 and 30, respectively (see, e.g. Henderson, 2002).

Developed by Gerald Appel, Moving Average Convergence/Divergence (*MACD*) is one of the simplest and most reliable indicators available. These lagging indicators are turned into a momentum oscillator by subtracting the longer moving average from the shorter moving average. The resulting plot forms a line that oscillates above and below zero, without any upper or lower limits. The most popular formula for the “standard” *MACD* (*differential line*) is the difference between a security's 26-day and 12-day Exponential Moving Averages (*EMA*):

$$DL_t = EMA_{12,t} - EMA_{26,t} \quad (7)$$

where:

$EMA_{12,t}$ = exponential moving average with time span of 12 period;

$EMA_{26,t}$ = exponential moving average with time span of 26 period.

Usually, a 9-day *EMA* of *MACD* is plotted along side to act as a trigger line. The most common signal for *MACD* is the moving average crossover. A Bearish Moving Average Crossover occurs when *MACD* declines below its 9-day *EMA*. A Bullish Moving Average Crossover occurs when *MACD* moves above its 9-day *EMA*, or trigger line.

The Price Oscillator is an indicator based on the difference between two moving averages, and is expressed as either in absolute terms

$$PO_t = MAf_t - MAS_t \quad \text{or as a percentage: } PO_t = [(MAf_t - MAS_t) / MAf_t] \times 100 \quad (8)$$

where: PO_t = Price oscillator, MAf_t = fast moving average, MAS_t = long moving average.

The DMI, Directional Movement Index, is a trend following system. Wilder defines directional movement as the largest part of the current trading range that is outside the previous trading range. From a mathematical view, it is the largest value of the following differences; $High_t - High_{t-1}$ or $Low_t - Low_{t-1}$. This is only true when the current low is less than the previous low, or the current high exceeds the previous high. Please note that both of these conditions do not have to be met, only one. It is the largest portion of the trading range outside of the previous trading range. You must first compute the directional movement, DM, for the current trading interval. Directional movement can be up, down or zero. When used with the up and down directional indicator values, $(dm+)$ and $(dm-)$, the DMI is an exact trading system.

State with $t-1$ and t two sequential temporal units, we have prior to define:

- Positive Directional Movement $(dm+)$ for which $(H_t - H_{t-1}) > 0$ and $(L_t - L_{t-1}) \geq 0$;

in this case we have: $dm_t = (H_t - H_{t-1})$ and $dm_i = 0$

- Negative Directional Movement $(dm-)$ for which $(H_t - H_{t-1}) \leq 0$ and $(L_t - L_{t-1}) < 0$;

in this case we have: $dm_i = |L_t - L_{t-1}|$ and $dm_t = 0$

- Zero Directional Movement for which $(H_t - H_{t-1}) \leq 0$ and $(L_t - L_{t-1}) \geq 0$

in this case we have: $dm_t = dm_i = 0$

- Double Directional Movement for which $(H_t - H_{t-1}) > 0$ e $(L_t - L_{t-1}) < 0$ in this case we have:

$$(H_t - H_{t-1}) > |L_t - L_{t-1}| \rightarrow dm_t^+ = (H_t - H_{t-1}) \text{ and } dm_i = 0$$

$$(H_t - H_{t-1}) < |L_t - L_{t-1}| \rightarrow dm_t^- = |L_t - L_{t-1}| \text{ and } dm_t = 0$$

Wilder the DMI creator state for an average process, based on a 14 time span, of the previous amounts obtaining two variables:

$$DM_{14+n}^+ = \frac{\sum_{i=1}^{14} dm_i^+}{14} \quad \text{and} \quad DM_{14+n}^- = \frac{\sum_{i=1}^{14} dm_i^-}{14} \quad (9)$$

This is the same span Wilder used on daily data. His logic for using this value is that it represented an average half-cycle period. After epoch for $t=14$ $DM+$ and $DM-$ values are computed by:

$$DM_{14+n}^+ = \frac{1}{14} \left[\left(\frac{13}{14} \right)^n \sum_{i=1}^{14} dm_i^+ + \sum_{j=1}^{14} \left(\frac{13}{14} \right)^{n-j} dm_{14+j}^+ \right] \text{ and } DM_{14+n}^- = \frac{1}{14} \left[\left(\frac{13}{14} \right)^n \sum_{i=1}^{14} dm_i^- + \sum_{j=1}^{14} \left(\frac{13}{14} \right)^{n-j} dm_{14+j}^- \right] \quad (10)$$

Wilder prefers to use an accumulation technique rather than computing a pure moving average. The next step in determining the DMI is to compute the true range. According to the author, the true range is the largest value of the following equations:

$$tr_t = \text{Max}[(H_t - L_t); |C_{t-1} - H_t|; |C_{t-1} - L_t|] \quad (11)$$

Following Wilder (1978) a synthetic measure come true:

$$TR_{14} = \frac{\sum_{i=1}^{14} tr_i}{14} \quad \text{and} \quad TR_{14+n} = \frac{1}{14} \left[\left(\frac{13}{14} \right)^n \sum_{i=1}^{14} tr_i + \sum_{j=1}^{14} \left(\frac{13}{14} \right)^{n-j} tr_{14+j} \right] \quad (12)$$

Once you have the average values it is possible to compute the directional indicator. Again, it can either be up or down, depending upon the directional movement:

$$DI_{14}^+ = \left[(DM_{14}^+) (TR_{14})^{-1} \right] 100 \quad \text{and} \quad DI_{14}^- = \left[(DM_{14}^-) (TR_{14})^{-1} \right] 100 \quad (13)$$

And for $t > 14$ we have:

$$DI_{14+n}^+ = \left[(DM_{14+n}^+) (TR_{14+n})^{-1} \right] 100 \quad \text{and} \quad DI_{14+n}^- = \left[(DM_{14+n}^-) (TR_{14+n})^{-1} \right] 100 \quad (14)$$

Once you compute above amounts you can calculate the DX or directional movement index. Again, you use the absolute value of this difference. This value is always a percentage. The formula is:

$$DX_{14+n} = \left| \left[(DI_{14+n}^+ - DI_{14+n}^-) (DI_{14+n}^+ + DI_{14+n}^-)^{-1} \right] \right| 100 \quad (15)$$

The DX is always a value between 0 and 100. Wilder was not comfortable using just the directional movement index. It could become very volatile during periods of extreme price movement, especially when markets that rise and fall quickly. Again, he implements his accumulated moving average technique to smooth the DX. The result is the ADX or average directional movement index.

The stochastic oscillator compares the closing price to the price range for the price range (high minus low) for the window period. To construct the stochastic oscillator, the following variables are first

defined; $CL_t = P_t - \min(P_{t-1}, P_{t-2}, \dots, P_{t-m})$ measures the difference between two values, the latest closing price and the lowest observed price over the window period, m , $HL_t = \max(P_{t-1}, P_{t-2}, \dots, P_{t-m}) - \min(P_{t-1}, P_{t-2}, \dots, P_{t-m})$ computes the difference between the highest

closing price and the lowest observed price over the window period and $K_t = \frac{CL_t}{HL_t} \cdot 100$ which is simply

the ratio of the latest closing range to the most recent trading range. To determine if an asset price is slowing down, K_t is compared against a signal line, D_t , which is simply a moving average of K_t . Practitioners view D_t as the signal line that separates 'overbought' and 'oversold' levels. A security is said to be overbought(oversold) when buying (selling) pressure increases its price to a high (low), which is expected to reverse soon. When the oscillator K_t rises above (falls below) D_t , technical traders believe that demand for the asset is increasing (decreasing) as the asset has moved from an oversold (overbought) to an overbought(oversold) position and a buy (sell) signal is then emitted. Therefore, the stochastic oscillator confirms a buy (sell) signal when K_t is above (below) D_t .

Focusing on primary target of this study a trading strategy based on both trend and oscillators then emits buy and sell signals as follows:

$$b_t : SMA_t > LMA_t \quad \text{and} \quad O_t = 1 \quad (16)$$

$$s_t : SMA_t < LMA_t \quad \text{and} \quad O_t = -1 \quad (17)$$

where:

$$O_t = \begin{cases} 1 \rightarrow \text{oscillator buy signal} \\ 0 \rightarrow \text{oscillator neutral signal} \\ 1 \rightarrow \text{oscillator sell signal} \end{cases}$$

Following the emission of a buy (sell) signal, the buy(sell) position is then maintained until the two indicators emit a sell (buy) signal or inconsistent signals. In system (16)-(17) buy and sell signals for oscillators are generating according to entry method proper of each indicator. Specifically, the following moving averages were tested: 3,5 and 9-day simple MAs corresponding to short term, 21 days for medium term and 55 days for long term. Oscillator time span for short strategy are 3,5 and 9 days, 14 and 21 days for both medium and long term. We obtain daily price data for a sample of equity of Spmib Index, Mib30 Index, Eurostoxx50 Index for the 1/1/2000–23/03/2007 period. We use open, high, low and close data that has been adjusted for capital structure changes. All data are sourced from Bloomberg.

The profitability of technical trading rules depends on the trading strategy and, in particular, on what position should the trader take when the rule emits buy and sell signals. For each strategy (X(bs)), we estimate the daily return and then subtract from it the daily return from the buy-and-hold strategy to get the daily difference return. The null and alternative hypotheses are the following:

$$H_0 : X(bs) - X(h) = 0 \text{ and } H_A : X(bs) - X(h) \neq 0 \quad (18)$$

where $X(h)$ is the mean return for the buy-and-hold strategy. The test statistic for the mean buy returns over the mean buy-and-hold strategy is:

$$t = \frac{X(bs) - X(h)}{\sqrt{\frac{Var(bs)}{N_{bs}} + \frac{Var(h)}{N_h}}} \quad (19)$$

where $Var(bs)$ and $Var(h)$ are the variance of combined rules system and buy-and-hold returns respectively. We have considered round-trip transactions costs as a measure of 0,0019 for every trading signal. Moreover a strategy return higher than the return of the BH policy indicates market inefficiency in the weak form. It should be noted that all results presented in this paper are based on tests that are conducted on the assumption that if a particular rule has given a signal and the holding period has not expired, then any subsequent signals are ignored.

EMPIRICAL RESULTS

This section reports the results of applying the previous technical trading strategies to European stock market data. To determine if the combined criteria's approach to technical analysis captures the information content in past prices more effectively, the performance of two technical trading strategies is compared: (a) simple trading rules working alone with a Moving average (MA) trading signal method and (b) MA rules with confirming oscillators. Table 1 reports the empirical results, for all sample period, by applying the previous simple, not considered in conjunction between them, trading strategies on the stock markets (Mib30, Mibtel and Eurostoxx50). In Table 2 column % profit reports the proportion of returns following both buy and sell signals performing the simple trading rules that are greater than zero. The column % over performance reports the proportion of simple trading rules that conduct to an over performing respect to a naïve buy and hold investment strategy. The column % t-test reports the

proportion of trading rules which return performance are greater than buy and hold strategy zero and that are statistical significance. Last column report the best rules label.

Table.1: Simple Trading Rules Average Results

Stock	Return	Return Bh	Excess Return	Average Return	Average Return Bh	Variance	Variance Bh	T Test	N° Trades	Sharpe
Alitalia	-17.15	-27.08	9.93	-0.15	-0.01	0.39	0.05	-0.97	90	-0.81
Alleanza	5.81	25.06	-19.25	0.04	0.05	0.54	0.00	-0.88	77	-0.04
Capitalia	2.75	34.33	-31.58	0.01	0.00	0.14	0.01	0.31	100	-1.70
Enel	-14.02	4.74	-18.76	-0.02	0.00	0.39	0.01	-0.68	82	-0.58
Fiat	8.81	-30.50	39.31	0.15	-0.03	0.68	0.16	1.21	43	0.54
Mediobanca	43.14	119.48	-76.34	0.26	-0.01	0.82	0.04	4.61	89	0.29
Pirelli	1.31	3.93	-2.62	0.00	0.00	0.03	0.00	0.27	104	-5.95
Aedes	12.57	66.93	-54.36	0.11	0.00	0.05	0.01	2.23	101	1.19
Brioschi	3.14	4.25	-1.11	0.02	0.00	0.02	0.00	1.05	104	-3.30
Cam-fin	-0.62	10.93	-11.55	0.01	0.00	0.05	0.00	0.27	99	-0.67
Marzotto	3.93	29.98	-26.05	0.03	0.00	0.06	0.00	1.30	109	-0.10
Snai	33.57	58.84	-25.27	-0.05	-0.02	0.32	0.33	-0.01	89	-0.86
Unipol	-2.29	12.27	-14.56	0.03	0.00	0.14	0.00	-0.05	113	-0.36
Zucchi	-13.66	-7.84	-5.82	-0.02	0.01	0.05	0.01	-1.59	100	-1.66
Allied Irish Banks	3.63	122.59	-88.96	0.54	0.00	0.57	0.07	3.79	44	1.07
Bbva	8.05	42.23	-24.18	0.15	0.01	0.12	0.04	2.42	31	0.26
Deuscth Telekom	7.07	-595.87	612.94	0.35	-0.04	0.37	0.06	3.18	12	2.49
France Telecom	5.40	-952.67	1008.07	1.27	-0.04	1.19	0.32	3.62	19	1.74
Iberia	8.51	25.68	-17.17	0.10	0.00	0.03	0.00	3.04	60	3.17
Nokia	4.39	-297.39	311.78	0.92	-0.03	1.53	0.05	2.45	6	0.29
Telefonica	2.22	-94.19	106.41	0.17	-0.01	0.33	0.08	0.43	27	-0.18

Tab.1 show results on average of simple trading rules for the whole sample

Results from combining different strategy, compared by holding period, are reported in tables 3 and 4. Looking at results reported in Table 1 France Telecom appears as the stock showing more evident signs of inefficiency in weak form, since high is excess return respect to a BH strategy, then we have Deuscth Telekom and Nokia, all of them pertinent to Ex50 Index. This evidence is confirmed also by *t-test* results. Italian stocks: Mediobanca, Aedes, Marzotto and Snai appear on the contrary, more efficient since mean return conditional on trading rules are lower than the unconditional BH mean return. Wanting to make a first summary analysis, we can look at Table 2 which shows that for each of the 21 stocks taken into account, there is at least one profitable trading rule, and at least one is able to generate *overperformances* versus a buy and hold strategy; the same way at least one *t-test* is significant. This suggests, based on the empirical test of the generation of excess return, to reject the hypothesis of weak-form market efficiency. An analysis by basket (not represented but available on request) reveals that for the basket Mib30 basket, on average 50% of the strategies were profitable; 40% of them *overperformed*, but in reality are only 19% of them assure the some signs of market inefficiency. For the equity in the Mibtel basket, on average, around half (52%) of the strategies applied to such titles allow profit making; 27% allow the realization of positive *overperformance*, but among these, those that actually make a profit from market inefficiency are just 21%. The securities from the European basket allow the creation of profits in 73% of cases, of *overperformance* in 64% of cases, and assure that these possibilities are real in 62% of cases: observation shows much higher percentages, compared to the Mib30 and Mibtel indices, which suggests that the shares from Ex50 show, during the period considered elements of inefficiency greater than those that are found in the Italian market. This is mainly due to the worse trend of European Stock Market. Summarize making a comparison between Index Stock Market it could be noted (Tab. 2) that, on average, Italian stocks mean returns conditional on simple trading rules signals are positive even not enough to exceed a BH strategy.

Table2: Simple trading rules results – All Sample % Results

Stock	% Profitable Rules	% Excess Return Rules	% Significant Excess Return Rules	Best Rule
Alitalia	0.32	0.68	0.07	RSI5
Alleanza	0.57	0.14	0.04	RSI21
Capitalia	0.46	0.18	0.29	MA21
Enel	0.29	0.18	0.11	ADX21
Fiat	0.50	0.96	0.21	RSI21
Mediobanca	0.75	0.14	0.50	MACD21
Pirelli	0.61	0.50	0.11	MACD21
Average	0.50	0.40	0.19	
Aedes	0.61	0.04	0.46	ADX9
Brioschi	0.86	0.54	0.18	MACD5
Cam-Fin	0.43	0.18	0.11	RSI21
Marzotto	0.50	0.04	0.25	MACD5
Snai	0.57	0.50	0.39	MA21
Unipol	0.46	0.11	0.04	RSI21
Zucchi	0.21	0.50	0.07	MACD9
Average	0.52	0.27	0.21	
Allied Irish Banks	0.79	0.07	0.68	Rsi21
Bbva	0.71	0.21	0.68	ADX5
Deuscth Telekom	0.61	1.00	0.57	Rsi21
France Telecom	0.82	1.00	0.75	Rsi21
Iberia	0.79	0.21	0.57	RSI21
Nokia	0.75	1.00	0.54	RSI9
Telefonica	0.68	1.00	0.54	ADX9
Average	0.73	0.64	0.62	

Tab.2 show the percentage of profitable rules, of rules that earned excess return and those of which *t*-test reject null hypothesis of equality between rules return and Buy and Hold strategy. Best simple rules for all stock are also showed.

Indeed excess returns are not positive and also *t*-statistic reveal average out a not statistically significance. By contrast in the European market, given that BH strategies on average perform very poorly, making heavily negative percentage profits, even small profit percentages are sufficient to produce even very high *overperformances*; the *t*-test is significant in confirmation. Advocates of the weak-form market efficiency hypothesize that investors cannot drive profits above a buy-and-hold policy using any trading rule that depend only on past market information such as prices. Our results cast doubts on weak-form market efficiency and support the notion that moving average trading rules exploit substantial information to predict stock price changes As demonstrated in Neftci (1991), technical trading rules can only be exploited usefully if the underlying process is non-linear. Indeed, results in Fernandez-Rodriguez et al. (2003) suggested that the data used in this paper exhibit non-linear dependencies. So we can say as first conclusion, that on the basis of the sample analyzed the Italian market appears, on average, more efficient than the European. An important point, even if partial and based on sample, is given to the type of "best rule" (i.e. the most *overperforming*) because it was found that 38% of the best rules is found with an RSI of 21 days. Is of some interest to note that the temporal span of the optimum rule, is different for the 3 markets, with a tendency for the index Mib30 of 21 periods, and somewhat lower (where there are more periods 5 and 9 present) than for the other two. Summarize the weight of the evidence now suggests that excess returns have been available to technical foreign exchange traders over long periods. There is no guarantee, of course, that technical rules will continue to generate excess returns in the future; the excess returns may be bid away by market participants. Indeed, this may already be occurring. Once the significance of the returns generated by the trading rules is verified, we can approach the main purpose of our article, that consists in applying joint trading rules, moving averages and oscillators to examine

whether improvements are obtained. Looking at results in Table 3 stocks with best positive tracking errors are Fiat and Alitalia; for Fiat the combined rules trading system excess return is lower than simple rules profit, but for Alitalia a drastic increase is reached in the second approach, in fact the average excess return passes from 9.93 obtained with the simple strategy to 23.68 (average of extra performance for each time period), undertaken with the combined strategy. Also in the case of Zucchi, the use of strategies involving the joint use of moving averages and oscillators improves the result, in fact it passes from negative excess return (achieved with strategies that involve use of a single indicator) to positive excess return. As for the shares belonging to the European basket, the most inefficient is France Telecom, as indicated also by the simple test, but in the case of the combined test the extra return is much higher, so it is possible to understand that the combined strategy has allowed an improvement performance relative to the simple strategy. As regards the analysis between baskets, keeping distinct the time horizon where the combined strategies are performed, it can be seen from Table 3 that the shared listed on the Italian market are on average profitable; of course we refer to small profits that do not allow one to exceed those recorded with the B & H strategy, so do not make extra profits, which is confirmed by the fact that significant values of t-test do not appear. Even the shares in the basket Eurostoxx50 present very low profits that, however, compared with those (even lower) made with a BH strategy, allowing the production of excess return, as is confirmed with a significant t-test rejecting the null hypothesis of equality to zero.

Table 3 Combined Trading Rules Results on Average - Mib 30 Sample

Stock	Time Span	Return	Return Bh	Excess Return	Average Return	Average Return Bh	Variance	Variance Bh	T Test	N° Trades	Sharpe
Mib30 Sample											
Alitalia	Short Term	1.17	-27.08	28.25	-0.02	-0.01	0.65	0.05	0.07	50	-0.10
	Medium Term	-6.89	-27.08	20.19	-0.05	-0.01	0.13	0.05	-1.24	8	-1.03
	Long Term	-4.47	-27.08	22.61	-0.08	-0.01	0.15	0.05	-1.76	5	-2.08
Alleanza	Short Term	11.39	25.06	-13.67	0.07	0.05	0.38	0.00	0.27	31	0.37
	Medium Term	6.88	25.06	-18.18	0.14	0.05	0.01	0.00	2.42	3	5.42
	Long Term	1.94	25.06	-23.12	0.02	0.05	0.01	0.00	-0.26	2	-1.07
Capitalia	Short Term	-8.03	34.33	-42.36	0.00	0.00	0.15	0.04	-0.15	58	-1.14
	Medium Term	4.97	34.33	-29.36	0.05	0.00	0.02	0.01	1.23	8	-1.25
	Long Term	-1.22	34.33	-35.55	-0.01	0.00	0.02	0.01	-0.30	4	-3.36
Enel	Short Term	-17.38	4.74	-22.12	-0.04	0.00	0.18	0.01	-1.64	39	-1.67
	Medium Term	-3.90	4.74	-8.64	-0.01	0.00	0.08	0.01	-0.20	6	-0.28
	Long Term	-2.72	4.74	-7.46	-0.03	0.00	0.07	0.01	-0.64	3	-1.42
Fiat	Short Term	0.50	-30.50	31.00	0.02	-0.03	0.65	0.16	0.35	22	0.02
	Medium Term	-0.58	-30.50	29.92	0.00	-0.03	0.12	0.16	0.14	2	-0.38
	Long Term	-0.22	-30.50	30.28	0.00	-0.03	0.11	0.16	0.18	2	-0.82
Mediobanca	Short Term	16.06	119.48	-103.42	0.02	-0.01	0.45	0.04	0.55	38	-0.09
	Medium Term	13.22	119.48	-106.26	0.12	-0.01	0.11	0.04	1.47	2	0.81

Stock	Time Span	Return	Return Bh	Excess Return	Average Return	Average Return Bh	Variance	Variance Bh	T Test	N° Trades	Sharpe
Mib30 Sample											
Pirelli	Long Term	0.09	119.48	-119.39	-0.01	-0.01	0.17	0.04	-0.11	2	-1.09
	Short Term	0.76	3.93	-3.17	0.00	0.00	0.01	0.00	0.32	53	-2.08
	Medium Term	-0.14	3.93	-4.07	0.00	0.00	0.00	0.00	-0.06	7	-41.00
	Long Term	-0.21	3.93	-4.14	0.00	0.00	0.00	0.00	-0.34	3	-86.08
Mibtel Sample											
Aedes	Short Term	-8.26	66.93	-75.19	-0.02	0.00	0.04	0.01	-1.14	56	-1.29
	Medium Term	0.29	66.93	-66.64	0.05	0.00	0.02	0.01	1.76	7	1.64
	Long Term	7.18	66.93	-59.75	0.13	0.00	0.01	0.01	1.08	4	-42.71
Brioschi	Short Term	2.19	4.25	-2.06	0.00	0.00	0.00	0.00	1.38	54	-15.98
	Medium Term	1.31	4.25	-2.94	0.01	0.00	0.00	0.00	2.16	7	-94.41
	Long Term	0.35	4.25	-3.90	0.00	0.00	0.00	0.00	0.70	4	-299.11
Cam-Fin	Short Term	1.25	10.93	-9.68	0.00	0.00	0.04	0.00	-0.07	58	-0.83
	Medium Term	-0.75	10.93	-11.68	0.00	0.00	0.00	0.00	-0.19	11	-5.96
	Long Term	1.01	10.93	-9.92	0.00	0.00	0.00	0.00	0.01	6	-15.56
Marzotto	Short Term	0.07	29.98	-29.91	0.00	0.00	0.04	0.00	0.06	52	-1.17
	Medium Term	1.36	29.98	-28.62	0.05	0.00	0.01	0.00	2.56	9	-3.83
	Long Term	-1.07	29.98	-31.05	0.00	0.00	0.01	0.00	-0.48	7	-14.53
Snai	Short Term	0.85	58.84	-57.99	0.00	-0.02	0.43	0.04	0.37	51	0.06
	Medium Term	15.84	58.84	-43.00	0.13	-0.02	0.10	0.04	2.44	12	1.45
	Long Term	10.22	58.84	-48.62	0.03	-0.02	0.07	0.04	1.75	7	0.48
Unipol	Short Term	-5.51	12.27	-17.78	-0.01	0.00	0.10	0.00	-0.40	52	-0.47
	Medium Term	-0.88	12.27	-13.15	-0.02	0.00	0.01	0.00	-1.09	12	-8.28
	Long Term	-1.47	12.27	-13.74	-0.02	0.00	0.01	0.00	-1.03	7	-18.85
Zucchi	Short Term	-2.54	-7.84	5.30	0.00	0.01	0.05	0.01	-0.21	53	0.01
	Medium Term	-2.51	-7.84	5.33	-0.02	0.01	0.01	0.01	-1.05	10	-6.12
	Long Term	-5.41	-7.84	2.43	-0.05	0.01	0.01	0.01	-2.30	6	-9.44
Ex50 Sample											
Allied Irish Banks	Short Term	-0.38	122.59	-122.97	-0.05	0.00	0.05	0.07	-0.10	-4	-3.98
	Medium Term	-1.30	122.59	-123.89	-0.03	0.00	0.01	0.07	-2.11	-21	-20.67
	Long Term	0.00	122.59	-122.59	0.00	0.00	0.00	0.07	0.00	0	0.00
Bbva	Short Term	9.96	42.23	-32.27	0.11	0.01	0.19	0.04	1.92	1	0.57

Stock	Time Span	Return	Return Bh	Excess Return	Average Return	Average Return Bh	Variance	Variance Bh	T Test	N° Trades	Sharpe
Mib30 Sample	Medium Term	1.00	42.23	-41.23	0.07	0.01	0.03	0.04	1.26	0	0.41
	Long Term	4.63	42.23	-37.60	-0.04	0.01	0.02	0.04	-0.77	-5	-4.55
	Short Term	3.19	-595.87	599.06	0.21	-0.04	0.29	0.06	1.80	2	2.39
Deuscth Telekom	Medium Term	4.03	-595.87	599.90	1.27	-0.04	0.04	0.06	17.05	21	21.35
	Long Term	0.00	-595.87	595.87	0.00	-0.04	0.00	0.06	0.00	0	0.00
	Short Term	10.56	-952.67	963.23	0.59	-0.04	0.98	0.32	3.64	1	0.61
France Telecom	Medium Term	0.00	-952.67	952.67	0.00	-0.04	0.00	0.32	0.00	0	0.00
	Long Term	0.00	-952.67	952.67	0.00	-0.04	0.00	0.32	0.00	0	0.00
	Short Term	-2.18	25.68	-27.86	0.00	0.00	0.03	0.00	0.21	-1	-1.04
Iberia	Medium Term	0.94	25.68	-24.74	0.02	0.00	0.00	0.00	1.07	-24	-23.71
	Long Term	1.41	25.68	-24.27	0.08	0.00	0.00	0.00	3.39	-14	-13.80
	Short Term	0.53	-297.39	297.92	0.05	-0.03	0.10	0.05	0.65	0	0.31
Nokia	Medium Term	4.38	-297.39	301.77	0.14	-0.03	0.03	0.05	2.86	7	6.77
	Long Term	0.00	-297.39	297.39	0.00	-0.03	0.00	0.05	0.00	0	0.00
	Short Term	0.51	-94.19	94.70	0.01	-0.01	0.06	0.08	-0.12	-2	-1.72
Telefonica	Medium Term	-1.66	-94.19	92.53	-0.03	-0.01	0.06	0.08	-0.12	0	-0.13
	Long Term	-1.44	-94.19	92.75	-0.06	-0.01	0.06	0.08	-0.91	0	0.05

Tab.3 show results for jointly strategy for Eurostoxx50sample

Looking at Table 4, we can see that on average, for the securities belonging to the Mib30 basket, the trading rule based on the joint moving average and oscillators related to the short term can make profits in 40% of cases, more than in medium (32%) and long term (22%), and are also on average more *overperforming* in the short (22%) compared to medium (17%) and the long period (14%). But in the short term the t-test is, on average, significant only in 10% of cases. The presence of many more significant *t-test* values in relation to medium term (19%) can be seen, and similarly a corresponding greater number of improvements of the simple strategy against the combined (14% of cases, compared with an average improvement of 10% in the short term and 5% in long). From Table 8 in relation to securities in the Mibtel basket there are a larger number of realizations of profits in the short term (43%) compared to the average (29%) and the long period (25%). Excess returns are achieved more in the medium term than in the short and long; in confirmation there are corresponding percentages of significant tests. The greater number of improvements in *performance* by the joint strategy is realized in the medium term. From Table 4 in relation to European shares it is apparent that there are more opportunities to profit in the short, but unlike in the Italian case, the largest number of *overperformances* actual manifests themselves in the short term; always in short term we see the greatest number of "improvements" achieved by combined strategies. In summary the most important result shows that on average, without distinction of basket of provenance, the joint rules allow the avoidance of false signals (*whipshaw*) which adversely affect the *performance* of a security, and allow an improvement over the *buy* and *hold* strategy. Moreover, the Mib30 shares registering the highest number of improvements through

the use of a combined strategy compared to a single strategy are Capitalia for the short term, Alliance for the medium and Alitalia for the long.

Table 4: MA-Oscillators trading rules results – All sample & All Holding period – Synthesis

Equity	Time Span	% Profitable Rules	% Excess Return Rules	% Significant Excess Return Rules	% Improvement	Best Rule
Aedes	Short Term	0.06	0	0.16	0.16	Stoc5,Ma9
	Medium Term	0.63	0	0.33	0.33	Adx21,Ma21
	Long Term	0.44	0.11	0.44	0.44	Po14-21,Ma55
Brioschi	Short Term	0.88	0.16	0.16	0.16	Adx5,Ma5
	Medium Term	0.63	0.13	0.44	0	Adx14,Ma21
	Long Term	0.67	0	0.11	0	Macd21,Ma55
Cam-Fin	Short Term	0.50	0.19	0.09	0.09	Adx5,Ma9
	Medium Term	0.11	0.11	0.11	0.11	Po14-21,Ma21
	Long Term	0.33	0	0.22	0.22	Po14-21,Ma55
Marzotto	Short Term	0.47	0	0.06	0.06	Stoc5,Ma9
	Medium Term	0.44	0	0.33	0.33	Macd21,Ma21
	Long Term	0.11	0	0.33	0.11	Macd21,Ma55
Snai	Short Term	0.53	0.00	0.16	0.06	Adx9,Ma9
	Medium Term	0.60	0.20	0.33	0.22	Stoc21,Ma21
	Long Term	0.44	0.11	0.22	0.22	Stoc14,Ma55
Unipol	Short Term	0.13	0	0	0	-
	Medium Term	0.11	0	0.33	0.33	Stoc21,Ma21
	Long Term	0.22	0	0.11	0.11	Po14-21,Ma55
Zucchi	Short Term	0.50	0.63	0.44	0.16	Rsi9,Ma9
	Medium Term	0.11	0.89	0.33	0.22	Stoc14,Ma21
	Long Term	0.00	0.67	0.33	0	Stoc14,Ma55
Average	Short Term	0.43	0.14	0.13	0.08	
Average	Medium Term	0.29	0.19	0.27	0.17	
Average	Long Term	0.25	0.11	0.19	0.10	
Alitalia	Short Term	0.31	0.94	0.13	0.13	Rsi9,Ma5
	Medium Term	0.00	1	0.33	0.33	Po14-21,Ma21
	Long Term	0.00	1	0.44	0.44	Po14-21,Ma55
Alleanza	Short Term	0.91	0.19	0.09	0.09	Macd5,Ma9
	Medium Term	0.70	0.10	0.44	0	Macd21,Ma21
	Long Term	0.33	0	0.33	0	Macd21,Ma55
Capitalia	Short Term	0.28	0.09	0.19	0.19	Macd5,Ma9
	Medium Term	0.44	0.11	0.44	0.11	Macd21,Ma21
	Long Term	0.33	0	0.22	0.00	Macd14,Ma55
Enel	Short Term	0.00	0	0.16	0.16	Rsi3,Ma5
	Medium Term	0.22	0	0.11	0.11	Macd21,Ma21
	Long Term	0.00	0	0.00	0.00	-
Fiat	Short Term	0.50	1.00	0.06	0.06	Rsi9,Ma5
	Medium Term	0.22	1.00	0	0	-

	Long Term	0.33	1.00	0.22	0.11	Macd21,Ma55
	Short Term	0.63	0	0.13	0.13	Stoc9,Ma9
Mediobanca	Medium Term	0.38	0	0.33	0.33	Stoc21,Ma21
	Long Term	0.33	0	0	0	-
	Short Term	0.50	0.25	0.09	0.09	Rsi5,Ma9
Pirelli	Medium Term	0.25	0	0	0	-
	Long Term	0.22	0	0	0	-
Average	Short Term	0.40	0.22	0.10	0.10	
Average	Medium Term	0.32	0.17	0.19	0.14	
Average	Long Term	0.22	0.14	0.11	0.05	
	Short Term	0.25	0	0.38	0.34	Po5-9,Ma5
Allied Irish Banks	Medium Term	0	0	0.11	0.11	Adx14,Ma21
	Long Term	0	0	0	0	-
	Short Term	0.72	0.06	0.63	0.50	Macd5,Ma3
Bbva	Medium Term	0.22	0	0.11	0.11	Stoc14,Ma21
	Long Term	0.11	0.11	0	0	-
	Short Term	0.50	1.00	0.09	0.09	Rsi9,Ma9
Deuseth Telekom	Medium Term	0.33	1.00	0.11	0.11	Stoc21,Ma21
	Long Term	0	1.00	0.22	0.22	-
	Short Term	0.59	1.00	0.38	0.38	Stoc5,Ma9
France Telecom	Medium Term	0	1.00	0	0	-
	Long Term	0	1.00	0	0	-
	Short Term	0.28	0.00	0.06	0.03	Po5-9,Ma9
Iberia	Medium Term	0.56	0.00	0.33	0.11	Macd21,Ma21
	Long Term	0	0.00	0.56	0.11	Adx21,Ma55
	Short Term	0.22	1.00	0.13	0.13	Macd5,Ma3
Nokia	Medium Term	0	1.00	0	0	Macd21,Ma21
	Long Term	0	1.00	0	0	-
	Short Term	0.47	1.00	0.31	0.28	Po5-9,Ma9
Telefonica	Medium Term	0.11	1.00	0.22	0.11	Po14-21,Ma21
	Long Term	0	1.00	0.00	0.00	-
Average	Short Term	0.40	0.58	0.23	0.20	
Average	Medium Term	0.21	0.57	0.14	0.10	
Average	Long Term	0.08	0.59	0.11	0.05	

Tab.4 exhibit results for combined trading rules according all time span for equity in All Stock Market Index.

The share in the Mibtel basket that allows for the greatest number of "best performances" is Aedes, across all the time periods. Across the Eurostoxx50 basket the share with the highest number of improvements is BBVA. Another result consist in observing that in the Italian market on average greater improvements come from a combined strategies in the medium term, whereas in the European market more improvements from joint strategies come in the short term. In any case in the long run there are few improvements. Indeed, an element to note is that for many shares (7 in Europe and 4 in Italy) what happens in the long run is that you can not get the improvements through the use of a combined strategy versus a strategy that derives its operating signals from a moving average. This leads us to conclude that the European market in the long term it is cheaper to use a trading strategy based on a simple moving average. This is easily inferred from the fact that the false trading signals, are related to volatility, which affect more in the short term, so simply it could be sufficient extend the span of the moving averages in order to reduce volatility and therefore misleading signals. Considering all sample the evidence suggests

that trend indicators, when applied in isolation, possess some predictive ability, when Moving Averages–Oscillators rules are applied jointly, however, the Oscillator component filters out weak signals emitted by the MA rules inducing neutral days where investors are recommended to ‘wait-and-see’. These results therefore suggest that the simultaneous use of MA and OS indicators leads to improved forecast power because allowance to catch the information content in past prices more effectively.. In general, one can conclude that by combining oscillators with moving averages, a superior technical trading strategy is developed. It is thus not surprising that most financial firms do have their own trading team that rely heavily on technical analysis.

CONCLUSION

This paper mainly differentiates itself from previous studies in the literature in the following aspect. Most empirical work has studied technical approaches in isolation. This is ultimately not satisfactory because, as shown in this, study, different technical trading rules are able to identify different predictable components. Following this thinking the primary purpose of this paper is to demonstrate how one can develop trading strategies which combine different technical analysis approaches. Applied to daily three European Stock Index over the 2000–2007 period, we obtained a set of combined strategies outperform both simple technical trading rules and naïve buy and hold strategy even after accounting for transaction cost. In general, one can conclude from the results that technical indicators can play a useful role in the timing of stock market entry and exits. It is thus not surprising that most member firms do have their own trading team that rely heavily on technical analysis. The technical analyst’s approach, on the other hand, typically involves the simultaneous use of trend indicators and other confirming indicators because trend indicators do not sufficiently capture the information content in past prices. The fact that technical trading rules, and particularly moving average and oscillator, are asymmetric in the opposite directions during trending and trading periods provides a striking evidence of their complementary properties and empower to construct a superior technical trading strategy that captures a more comprehensive aspect of predictability in past prices. Summarize we conclude that the use of confirming indicators in a moving average signal system significantly improves forecast power. As second goal of our research we found evidence of inefficiency signs in some European Stock Market.

REFERENCES

- Alexander, S. (1964) “Price movements in speculative markets: trend or random walks”, in, *The Random Character of Stock Market Prices*, P. Cootner (ed.), MIT Press, Cambridge, MA.
- Atmeh, M. A., Dobbs I. (2006), “Technical Analysis and the Stochastic Properties of the Jordanian Stock Market Index Return”, *Studies in Economics and Finance*, v. 23, Iss. 2, pp. 119-40.
- Bail, M. (2005) “The stochastic oscillator: technical Tuesday with mark bail”. *Penny Sleuth*, 2006. Moving Average Comparison”, *International Journal of Business*, v. 8, Iss. 3, pp. 267-84.
- Chen, K.; Li, X., (2003), “Is Technical Analysis Useful for Stock Traders in China? Evidence from the SZSE Component A-Share Index”, *Pacific Economic Review*, v. 11, Iss. 4, pp. 477-88.
- Fock H.; Klein C.; Zwergel B. (2005), “Performance of Candlestick Analysis on Intraday Futures Data”, *The Journal of Derivatives*.
- Fang, Y.; Xu, D. (2003), “The Predictability of Asset Returns: An Approach Combining Technical Analysis and Time Series Forecasts”, *International Journal of Forecasting*, v. 19, Iss. 3, pp. 369-85.

Fernandez-Rodriguez, F.; Sosvilla-Rivero, S.; Andrada-Felix, J., (2003), "Technical Analysis in Foreign Exchange Markets: Evidence from the EMS", *Applied Financial Economics*, v. 13, Iss. 2, pp. 113-22.

Glezakos, M.; Mylonas, P., (2003), "Technical Analysis Seems to Be a Valuable Investment Tool in the Athens and Frankfurt Stock Exchanges", *European Research Studies*, v. 6, Iss. 1-2, pp. 169-92.

Henderson, C. (2002), "*Currency Strategy: The Practitioner's Guide to Currency Investing, Hedging and Forecasting*", John Wiley and Sons Ed..

Jensen, M. C. (1978), "Some Anomalous Evidence Regarding Market Efficiency." *Journal of Financial Economics*, pp 695-101.

Malkiel, B.G.(1981), "*A Random Walk Down Wall Street*", W. W. Norton and Company Ed.

Marshall, Ben R.; Cahan, (2005), "Does Intraday Technical Analysis in the U.S. Equity Market Have Value?", *Journal of Empirical Finance*, v. 15, Iss. 2, pp. 199-210.

Mitra, S., (2002), "Profiting from Technical Analysis in Indian Stock Market", *Finance India*, v. 16, Iss. 1, pp. 109-20.

Neftci S., (1991), "Naïve Trading Rules in Financial Markets and Wiener-Kolmogorov Prediction Theory: A Study of "Technical Analysis", *Journal of Business*, v. 64, Iss.4, p.594-71.

Nison, S. (2005), "East Meets West-Candlesticks and Oscillators". *Smart Trade Digest*. 2006.

Park, C.; Irwin, S. (2007), "What Do We Know about the Profitability of Technical Analysis?", *Journal of Economic Surveys*, v. 21, Iss. 4, pp. 786-826.

Patel, A. (2000), *Trading Online*, 2nd edn, Pearson Education Ltd, London.

Pring, M. (2002), "The Successful Investor's Guide to Spotting Investment Trends and Turning Points", McGraw-Hill Companies.

Ready, M.J., (2002), "Profits from Technical Trading Rules", *Financial Management*, v. 31, Iss. 3, pp. 43-61.

Reitz, S., (2006), "On the Predictive Content of Technical Analysis", *North American Journal of Economics and Finance*, v. 17, Iss. 2, pp. 121-37.

Rogovska-Ischuk, I. (2006), "Practical Aspects of Technical Analysis at the Forex Market", *Journal of European Economy*, v. 5, Iss. 3, pp. 317-27

Wilder W. (1978), "New concepts in technical trading systems", Trend Research Ed.

STOCHASTIC REENGINEERING OF HUMAN CAPITAL STRATEGIES IN THE DIGITAL ENVIRONMENT

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ABSTRACT

In the actual context of ensuring quality of human activity in a digital environment, promoting the human performance factor must be supported by an user interface that enables improved efficiency and reduced mental application. Also known is the tendency to balance the man-machine-environment system, from the perspective of maintaining and improving quality of life, also the implementation of interfaces in order to optimize the computerized automated systems must be done in order to reduce the physical effort of the human operator, and from the psychological point of view, is needed the maintenance of the mental models of systems that operate with the human factor, which creates the necessary control where the complexity is too large to allow identification of system status in real time.

Therefore the optimization models for human performance factor contain complex algebraic expressions that depend on several exogenous variables. Parameters and their values specified in other models can be generated from the model of mental computerized interface designer. Such are considered as input data into the system, mental and anthropometric characteristics of the human operator, subject to the diversity according to the mental capacities of the human factor in the linear programming, taking into account the average weight of their ergonomic principles of activities at work and the factors evidencing technological operating system. The analysis of permanent methods of ensuring the right environment for the intellectual capital leads to a superior quality management.

INTRODUCTION

The contemporary transition from a traditional working environment to a digitalized work environment has revolutionized technology in a unique manner in which transactions of financial capital, information and last but not least human capital is realized. The experience reveals although that the business itself is adapting slowly to new opportunities. The successful implementation of strategies for e-business involves, first, a reengineering of the culture and management of the entire organization starting with the methods for initiating and conducting the affair, and continuing with the redesign of new business models based on strategies for optimizing the management of human capital in the context of stochastic spreading of the opportunities and benefits.

Moreover, awareness of the need for sizing the rethinking methods and techniques for management of intellectual capital is materializing in Rethinking organization itself - whether large or small - to see where technology can make a beneficial change. A manager of e-business must be determined and willing to change every aspect of the business processes through technology. The continuous improvement and adaptation is the ability of concrete strategies redesign in the e-business way.

In this sense, the adoption of e-business paradigm leads to considerable increases in productivity and lower costs in virtually all segments of the traditional strategy. On the other hand however, the digital revolution means not only using the Internet as a platform to support Reinventing strategies for managing human capital. The real challenge for companies is reengineering organization and processes for managing human capital, as to increase their productivity by using the Internet in a competitive market and make their presence felt on the world market. The primary appearance is adding value to processes

and products and regarding this is recognized that well-trained employees increase the quality of the work done.

Presenting the implications of implementing economic human resources management strategies, in the context of a deeply digitized environment for businessmen, and the specific characteristics of products and services is the fundamental pillar of the awareness role and keeping accurate information in a timely manner (Nica, 2009).

The technologies used in redesigning of management strategies and its benefits for businesses men and customers are found among the following: more information, lower costs of production and distribution lower costs for buying or selling, addressing a particular market, benefits of virtual communities.

Moreover, the fundamental step in the professional policies and strategies design and implementation materializes into the locating and hierarchy, according to indices of severity and probability of exogenous variables, known as risks, which human factors are exposed to in an enterprise in order to create efficient measures for prevention of structural threats.

Of course, the main differentiating factors of enterprises, in terms of rates and indices of severity and probability are represented by the size and economic activity of the company which determines, in turn, the degree of complexity, time and resources allocated to evaluation of management strategies. Assessment of strategies, in the context of digital redesigning of labor environment must be considered a continuous process that involves periodic update in order to reflect the true change of working conditions and the maintenance of encoding exogenous variables.

From this point of view the advance towards the informational society, based on knowledge is considered worldwide as a necessary evolution for ensuring sustainable development in the new re-technologized economy, based mainly on product and intellectual-intensive activities and to achievement of an advanced socio-human civilization (Mironescu, 2009).

The human capital development strategies focuses on their dimensions in terms of strategic and operational needs of the national economy and ensuring efficient use of these resources. They will help formulate strategies for economic development through the establishment of future human capital requirements, by identifying ways to top use of this capital, where human capital will be available to support the implementation of plans for economic development. But it must be shown that there are stringent limits on the use of human capital, such as shortages of qualified personnel, difficulties in recruitment of labor, low labor productivity, lower flexibility and adaptability to climate or insufficient discourages cooperation and committed staff.

Informational society involves intensive use of information technologies and communications in all spheres of human existence and activity, with significantly economic and social impact. Considered an essential vector into the informational society, but also as a globalization factor, revolutionary strategies of human resources bring value and quality, promoting the competitive advantage resulted in obtaining a larger quota into the specialized economic markets.

Therefore the accelerated dynamics of social change, especially the depth of these changes, require directions also for restructuring of reality of human activity aimed to aligning the objectives of the instructive- educational requirements of the concrete requirements of the super-technologized society.

Considering the perpetual development of human capital in this new economic context we can underline that the use of new technologies is an evolutionary process, which enables improved business processes, with the condition that there is a review of the strategies, techniques and tools to companies who choose

the path to this new digital economy. A particular role it plays, of course, the globalization through generalized technological changes creating a substantial dimension of the competitiveness of firms. At the same time, in this context can be obtained sustainable competitive advantages, on the long term, as the examples from the world market, demonstrates the validity of this concept.

In this sense, competitive advantage can not be described as integrated into some limitations given that the activities of the digital market are varied in terms of size and shape, as it does not exist only one set of information technologies which will be valid for the whole number of companies, although most are based on relationships and communication with customers, suppliers and employees (Nica, 2009).

New technologies for the human resources management are a direct consequence of the evolution of psycho-pedagogy education methods and new IT & C technologies (Web technologies, multimedia and communication technologies).

We are referring, primarily, to reformat the characteristics of training modules, which involve organizational integration of new employees and improvement of existing employees, being also a form of non-financial motivation of the staff, being as part of the variable components Electronic Learning, is proving to be often a valuable opportunity for corporations in maintaining a high rate of profit. A key factor of prosperity of a company is satisfaction of employees. Since the activities of a company have a high degree of sameness, a number of increasingly large employers are trying to provide opportunities for professional development, thereby contributing to increased satisfaction of employees, gives them the opportunity to professional grow, opening new prospects and eliminating tension of new responsibilities.

Thus, the analysis of stochastic variables that reflect the migration of human capital shows that at macro social level, human capital is estimated by aggregating the individual stocks of human capital. Aggregate human capital at national level has been used in particular to characterize the development of a country or to explain its growth.

So, a proper management of human capital allows not only the decrease of management personnel cost, but also the increase of individual profitability. The central pillar should be the positioning of the employee in the company strategy and the integration of all functions into traditional human resources management.

From this point of view, a technologized enterprise that accepts and uses strategies for collaborative training can be functional if is taken into account the knowledge level of employees in IT & C technologies, operating conditions of the study, performance workstations, operating systems use, the type, connection and speed of Internet, the individual online activity of each employee.

So the manager or team leader economic contribution must be both synchronous and asynchronous in order to manage interaction, to eliminate the feeling of isolation and to ensure the integration of employees into work groups, responding more quickly to their needs (Nica, 2008).

Therefore, the role and responsibilities of staff in the new economic context must be established since the time of prognosis of need of staff, which debuts with the job tasks analysis. Then it is foreseen the necessity of discussing them during the recruitment process and selection of potential candidates to enter the job. Regarding the organizational integration of new-entry employee, the digitalization of work processes shows that during both learning platforms like Moodle and in chat sessions, forums or video, the manager or team leader plays the role of a moderator. The wiki or blog platforms underline the two categories of people-manager and team leader- becoming mediators, companions or even teammates.

But bear in mind that the endogenous parameters that generates migration of highly qualified human capital to other companies materializes in the human need to dimension their quality of living environment, social factors, economic and policy related to the company, have a major impact to decision to leave the mother. At the same, exogenous parameters, resulted in the idea of a better life provided by another company, solidified by the Financial Paradise advertised outside the limits of the mother enterprise, promotes the intention of migrating to a place of work which is more beneficial.

However, the exodus of specialized brains is determined not only by respect for democratic principles, equality and nondiscrimination, but the amount of salary offered by other companies, in accordance with the recognition of employees of quality work. Thus, the wage gap between companies and strength advertising generates a flow of migrant brains (Popescu, 2009).

In order to prevent these threats accompanying the economic digital era, on these times being easily to migrate from one company to another using only the online sites in the field. The financial offers from valuable companies for employees can achieve unimaginable odds, so the strategies for managing intellectual capital have to reach the optimal for maintenance of personnel.

Thus, in the context of permanent digital improvement, top management must be aware and redesign human resource management strategies from the perspective of maintaining intellectual capital in the company. An increased flow of workers arriving and leaving the company can only produce economic imbalance, and that imbalance will be reflected directly in the profit share of the company.

Therefore considering a stochastic analyze of companies from the internal market it is to foresee the need for reengineering using four stages of development (Nica, 2006).

The core in the team work is the variable socialization, so it will be necessary to use a strategy of socialization, first, to emphasize the integration of newly recruited employees and selected in the organization and familiarity with the company culture.

Continuing on a pure logic line, the management will have to allocate resources for optimal development specialization variable, so it will be needed to use strategy to make special reference to identifying those necessary skills to perform tasks for occupied position and sizing of job skills needed.

Up his professional life, employee must personal develop in order to add value to its work, so using the strategy of development will follow a career development support in the human factor ascent in the organization.

And the climax of redesigning the human resources management process will be implementing a strategy that will value the employees foreground having the know-how and experience to provide mentoring activities and coaching staff over the rest of the firm so that they can access information more quickly (Mironescu, 2007).

Redesign of stochastic strategies for the human resources management, in the context of digital environment, leads to the final conclusion materialized in the implementation of personnel strategies, and also involves a continuous surveillance of the managers and team leader development, so they can assess effectiveness at any time the strategy chosen in accordance with strategic planning organization.

Therefore a new economic context demands the refresh and reinforcement of policies and strategies for managing human capital. Benefit can be observed both in the short term and the long term. Maintaining employee satisfaction is the result of quality management. And the committed employees offer the

organization the required increase of company's competitive advantage in a market characterized by a fierce competition.

REFERENCES

Nica, Elvira, Mironescu, Alexandra, Profiroiu, Alina Georgiana (2009) "Encoding of Human Errors Risk Assesment" *Metalurgia International- Economic Review* vol XIV, ISI.

Gheorghe, Popescu H., Nica, Elvira, Mironescu, Alexandra (2009) "Brain Drain effects over Romanian Economy" *Metalurgia International -Economic Review* vol XIV, ISI.

Nica, Elvira, Mironescu, Alexandra (2009) "Digital Economy Consequences over human capital "Global Conference on Business and Finance, Atlantic City, New Jersey.

Mironescu, Alexandra (2007) "Performance Standards - criteria and procedures for evaluating the performance of human resources" , *University Publishing House, Bucharest*.

Nica, Elvira, Mironescu, Alexandra (2008) "Access to Information-The Key to New Learning Technologies", *International Conference Innovation, Competitiveness and Ethics in Business, Romanian-American University*

Nica, Elvira (2006), "The principal strategies and concepts of the European Union in terms of employment and reducing unemployment, *Supplement of the journal" Theoretical and Applied Economics, The Annual Symposium AGER Romania in the European Union. The potential for convergence.*

THE PARADIGMATIC CHANGES IMPLICATIONS OVER THE HUMAN RESOURCES MANAGEMENT

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ABSTRACT

This study presents a present-day issue of the transition from the MHR based on the technocentric vision of the type to a new paradigm on management as a whole, that of anthropocentrism. The management crisis of type expresses reveals the adequacy of this kind of management to the processes of transition to the knowledge-steered society. The new management of the human resources will have the task to achieve the connection between the new image about man as goal of business and the economic practice itself. This management is based on the negotiated competencies.

Man has the mission to generate „a sense” for „future”, analysing what could be possible, relating the opportunities, taking (accessible) steps to generate new opportunities.

But, while the theoretic thinking has performed a good analysis on the knowledge-steered society, offering an image thereof, giving many competent answers, the practitioners in economy did not succeed in adapting themselves sufficiently to the requirements of the new paradigm. “What is necessary” refers to the creation and application of a new type of business management, especially to a new model of management of the human resources based on the understanding of the role of knowledge as main factor of production.

INTRODUCTION

A universally accepted truth is the fact that management is, first of all, a conception about the human behaviour in business, about the relationship between the requirements of the company and those of people. In a word, management is the theory and practice of conceiving the business in relation with the vision about man (as citizen, employee, and consumer).

If we stopped at this general statement, we would not be able to change the management from a „mind-set” into a multidimensionate practice. It is necessary to go further from this truth. As K. Popper said, “the most durable contribution a theory can bring to the development of the scientific knowledge consists in the new issues it generates”. The process of knowledge starts from an issue and arrives at other issues, „more and more profound issues which are more and more fruitful in suggesting new issues”. Thus, „knowledge starts with an issue and ends (as far as it ever ends) with issues” (Brödner, 2000).

Consequently, the new question that is put is: „if so far management is a conception about business, man and his needs, what kind of conceptions have been promoted?” This is the place our study fits in.

The United States of America were, some time ago, in a broad and rapid process of industrialization which generated a mass movement of the rural population (former farmers) to the cities and factories. The workers of that time were professionally unqualified, wishing to find work in order to earn money, with reduced demands towards work and consumption. With these people, Taylor understood that the way in which they could be used was to give them a less qualified work, the competition between companies developing by the progress on technologic level.

This is how the labour and production were projected on the vision centred on technology: In former days, when a manual work was performed, a single craftsman used to make a thing from the beginning to the end. As the first machines developed, then appeared also the interest to divide the operation so that each machine and each man should perform a single and small operation. The fundamental difference between the industrial method and the modern one consists in the fact that the first considered the machine a mere servant of man, while the new one regards man as an assistant (servant) of the machine (Popper, 1970).

The use of this type of management had good results: the production was growing, the productivity was achieved by improving the machines, and the workers could perform the simple operations and earned the desired income.

But as time passed, the taylorist management became more and more inadequate. The workers of the economic developed countries increased their qualification, and at the same time they had greater demands towards work and life. The income (important for their life) did not represent any more the sole nor the main motivating factor of work (Popescu, 2009).

The new stage of capitalism reveals its specific feature clearly by the syntagm of „society of knowledge” (Bell) or „knowledge-steered society”. A new and complex process began to develop. On the one hand, the old paradigm of taylorism did not correspond to the society’s requirements any longer. „The traditional concept of management has come to an end. The term of management, as an idea significant by itself, and as a major element of the organization, is out-of-date”. The old paradigm specific to the industrial society used to express the mind-set of an epoch which, nowadays, is no longer viable. And the management model of the industrial era, especially in the USA, has destroyed its bolt and rivets (Taylor, 1911).

The sociologic and economic theories have noticed this process of the paradigmatic crisis. The first to draw the attention was P. Drucker, who highlighted the process „of jumping in the trend” (D. Bell) by the fact that the number and importance of the workers began to decrease within the American population, and the importance of specialists began to grow. Since then, a very rich literature has been worked out, covering the numerous aspects of the new society. The European Union pays special attention to the theoretical clarification of the contemporary issues, just in the first paragraph of the „Lisbon Strategy 2000” the more correct sense of the new era we are entering is pointed out: The European Union is facing a whole change resulting from the globalization and the challenges of the new economy steered by knowledge (European Communities Report, 2004).

A new paradigm specific for the society (economy) steered by knowledge needs working out and practically promoted. But the transition from one paradigm to the other is not a linear process, on the contrary, it implies a break, a discontinuity.

The future paradigm won’t be able to be conceived by using a linear model, based on extrapolation because, reality changes by the process of „jump in the trend”, what implies a discontinuity. It is not an isolated „break”, only in one particular „zone” of society, but „system break”, a “jump in the trend”.

From the paradigm that has as central element the technology, and man is „an ultimate residue” which has to be removed whenever the technology allows this, we pass – by break – to a new paradigm centred on man. On the level of theoretic thinking, the knowledge-steered economy is studied with good results .

Having as main resource the knowledge, that becomes the main factor of development, the knowledge-steered society is, necessarily, one that places man in the centre of its new paradigm. Knowledge cannot be separated from man. The material resources exist by themselves, they have an objective reality.

Knowledge is present only „in man's head" (as a „tacit knowledge"). The books, theories, knowledge can externalize the cognition, but in order to express knowledge itself, they must be assimilated by people. „The knowledge-based economy highlights the special role of the tacit knowledge (that existing „in the case of people").

Taking into account the modern vision on society, that motivates a non-determinative understanding (but in which man's freedom is achieved within some constraints), future is, to a great extent, an invention of man (Bell, 1973).

From the theoretical point of view, we have seen that the new paradigm of the knowledge-based society implies, as an important aspect – a similar approach of the „human resource". Since the knowledge-steered society statutes the central role of the human factor, on the level of business management, it is imperatively necessary to work out and practice a man-centred management, passing from the technocentric management to the anthropocentric one (Brödner, 2000). Such a model of management of the human resources has been worked out now and is expanding in the economic practice.

The putting into operation of such a model is meant to establish „the missing link" between the theories connected with the economy of knowledge and business practices in the economy of knowledge. The old paradigm of the management of human resources expresses a functionalist vision on the enterprise, in other words it is considered that the latter, by its „nature", has to fulfill certain functions, the manager being obliged to act in compliance with them. The functional organization of the enterprise was generated (as mentality and practice) and divided (according to the same taylorist principle „divides and simplify") the functionary activities into several departments, each of them with a specific functioning (Piolet, 1994):

- Managing operations (planning, organization, decision, control, punishment etc.);
- Staff operations (recruiting, selection, distribution, promotion, qualification, motivation etc.);
- technical operations (the use of raw materials and energy, functioning of the machinery, production);
- Scientific operations (factory laboratories, projects, studies and documentation, technical offices, technical-scientific libraries etc.);
- Administrative operations (secretariate, correspondence, typing, archives etc.);
- Commercial operations (supplying, selling, warehousing, transportation etc.);
- Bookkeeping operations (payments, salaries, evidence, inventory, profitability calculation etc.);
- Recruiting operations (guard, fire, protection of persons and goods);
- Hygienic-sanitary operations (hygiene of the working place, cleaning, first aid services, services of medical consultation, accidents);
- Social operations (canteens, hostels, clubs, sports halls, libraries, organization of activities during the spare time).

In this labour division, the personnel departments have a secondary functionality, depending on a manager who is on an intermediary level of the hierarchy. The dependence of the whole personnel activity on the organization chart leads to the fact that the concerns are only of execution, without power of decision on the staff's profile. The transition to the management of negotiated competencies changes the whole activity radically. The negotiation of the competencies is capable of changing not only the organization chart but also the performed activities, the companies becoming flexible, with dynamic profiles, the hierarchy being reduced. The personnel department acquires a main importance, being able to modify to a great extent the company's strategy. Therefore the personnel activities are usually led by a vice-president or (in smaller companies) by a director who is in direct relation with the company leader.

As a rule, in the activities of negotiation of competencies, the „coaching team” is created, a team of „coaches”, of (multidisciplinary) experts who help the manager in the negotiation practice. The manager changes his concerns radically, because “he is no longer a « functional expert», but an «unlocker» („debloquer”), in other words he facilitates the change by surpassing directly the obstacles in the way of the harmonious management of the exchange”. The reorganization of companies on the basis of negotiated competencies determines new types of activities such as those of the personnel „chief”:

- to intervene, whenever necessary, by a procedure of „repairs” with a view to ensuring good work relations;
- to be able, assisted by the coaching team, to identify certain risks correctly and in due time and to take steps to lower their negative effects on the mind-set of the employees;
- to establish suitable relations between the measures taken by other departments and the problems of human resources, creating, in due time, a series of competencies necessary for the future, anticipating some changes in the staff structure etc.;
- to establish relations of partnership between the employers and the trade unions, to cooperate based on the principle of „the game with positive amount” (in which everybody can win due to the good performance of the company) instead of „the game with null amount” (by which conflictive relations are created, since a „part” is going to win and “the other” is going to loose).

The organization of the management of negotiated competencies is carried out in different manners according to the specific features of the organizations (Nica, 2009).. First of all, this is necessary in the knowledge-intensive organizations that are characteristic for the new economy of knowledge. In 1990, the organizations were studied on three paradigms: traditional (pre-rational), modern (rational) and postmodern (post-rational). Within the organizations of the postmodern type, Clegg introduced the „knowledge-intensive-organizations” and „the organizations based on competencies”. Nonaka uses the term of „organizational creation of knowledge” as an equivalent of the knowledge-intensive-organizations. The knowledge-intensive-organizations (research institutes, consulting organizations, documentation centres, public opinion poll institutes, centres for data collecting and processing) are those which have as activity „object” knowledge and are working on the basis of the „intellectual capital”. The model of competencies is also present in the enterprises based on „intangible assets” (human capital, knowledge capital, institutional social capital).

The working out of the management of human resources specific for the new era of global competition in which we enter is able to achieve the link (we were talking about at the beginning of the study) between the theoretical, general approaches, of the knowledge-steered society and the practical activity in „the world of business”. The frame-programme of development of the EU for the years 2000-2010 (with a view to achieving the re-actualized strategy worked out in Lisbon in 2000, draws the attention of all the member countries to the necessity to improve „the non-technologic aspects and the entrepreneurs”. In this respect, one of the actions fixed as necessary to all the member countries refers to the management problems, in general, to those regarding the human resources in particular. It is necessary to encourage the „entrepreneurship mind-set” and the exploitation of its potential, the entrepreneurial education of people with a view to stimulating the initiatives, the creativity and taking into account their proposals (Lisbon European Council, 2000).

The insufficient link between the EU policies regarding the creation of the knowledge-steered society and the business practice is felt especially in the field of the small and medium-sized enterprises. The specific feature of the model of the European Union economy consists in the prevalence of the small and medium-sized enterprises. In the EU, the small and medium-sized enterprises represent 99,7% of all the enterprises, offering about 66% of the jobs (as compared to the USA where they have a share of 99,7% and, respectively, of 49,1 % and Japan 99,7% and, of 67%). The working out and application of a

management of the human resources specific for the small and medium-sized enterprises is an imperative demand in their transformation into competitive entities.

Analysing the manner of performance of the „Lisbon Strategy 2000” was drawing the attention to the weak link between the theoretical working out of the strategy and its application in the economy: one of the most disappointing present-day aspects regarding the Lisbon strategy consists in the fact that the importance of research and development still remains very little understood and, as a result of this fact, so little progress has been made. It shows that to an increasing extent, the companies and the small and medium-sized enterprises represent the main sources regarding the economic growth and creation of new jobs. The entrepreneurship is, thus, a profession of fundamental importance, but Europe does not provide, to a sufficient extent, „an entrepreneurial atmosphere”, it is not sufficiently attractive as place where business can be done.

The application of the principle „Think small first” implies a specific management vision. In Romania, the small and medium-sized enterprises have a share of about 98% of all the enterprises and offer jobs for 41% of the manpower. The entrepreneurial training of the small and medium-sized enterprises is an essential issue with a view to providing the competitiveness of our entire economy.

REFERENCES

Brödner Peter, Fabrik (2000), “The Scope of Future Technology. The Anthropocentric Alternative” *English ed. Berlin, London, Springer Verlag.*

Gheorghe, Popescu H., Nica, Elvira, Mironescu, Alexandra (2009) “Brain Drain effects over Romanian Economy” *Metalurgia International -Economic Review* vol XIV, ISI.

Popper, Karl (1970) „Truth, ration and scientific knowledge programm” *Logic of science*, vol.7, Political Publishing House Bucharest .

Green Paper, (2003) „Entrepreneurship in Europe COM”<http://europa.eu.int/comm/enterprise/entrepreneurship/Green-paper/index-htm>.

Taylor, Frederick W. (1911) “The Principles of Scientific Management”, *New York Harper.*

Bell, Daniel (1973) “ The Coming of Post-Industrial Society. Venture in Social Forecasting”, *New York Basic Books, Inc.*

Presidency Conclusion Lisbon European Council (2000), [http://www. Europarl.eu.int/summits/lis/eu.htm](http://www.Europarl.eu.int/summits/lis/eu.htm)

Piolet, Françoise, Sainsoulien, Renaud (1994) “Méthodes pour une sociologie de l’entreprise” *Paris, Press de la Fondation National des Sciences Politique.*

European Communities Report (2004) “The Lisbon strategy for growth and employment Facing the Challenge”, *Report from the High Level Group chaired by Wim Kok,Luxembourg*, 2004.

Nica, Elvira, Mironescu, Alexandra, Profiroiou, Alina Georgiana (2009) “Encoding of Human Errors Risk Assesment” *Metalurgia International- Economic Review* vol XIV, ISI.

AN EMPIRICAL ANALYSIS OF UPWARD AND DOWNWARD PHASES IN LATIN-AMERICAN STOCK MARKETS

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ABSTRACT

In this work the development of the Stock Market in Latin-America from Dec. 1987 is analyzed. We identify the cycles, the upward and downward phases of the market, and analyze a number of their features: the period or length of the cycle, the duration of the upward and downward phases, the relative position of the highs, the rate of return during periods of upward and downward trends and the percentage of retracement of movement from low to high. The degree of similarity of in the cycle periods is also compared with those of the US, the international market of reference. We find that the cycles in Latin-American markets are relatively similar to those of the U.S. stock market and that stock market phases tend to coincide across the U.S.

INTRODUCTION

The characteristics of returns in equity markets are a particularly relevant topic for both practitioners and academics. To this end, the study of patterns in graphs of prices is important since a viewing of the graphs often suggests the presence of a cycle in the series. Studies on their nature have changed from a graphical orientation towards quantitative measures extracted from different models. Many theories have been developed as an attempt to explain these cycles. A cycle is a complete up-and-down movement in economic or market conditions and is recognized from its turning points in the series. These turning points are peaks and troughs and the periods between them are classified as expansions (bull phases) and contractions (bear phases).

BACKGROUND

In the recent literature, the study of cycles in stock prices has received considerable attention as a consequence of the direct applicability of business cycle techniques to identify and characterize prices of commodities and stock market cycles, especially the work of the National Bureau of Economic Research (NBER). Many papers have analyzed the bull and bear markets by following the algorithm suggested by Bry and Boschan (1971) which is already used in stock markets: Pagan and Sossounov (2003); Abad, Cristobal and Quilis (2000); and Gomez Biscarri and Perez de Gracia (2004) among others.

METHODOLOGY

The detection and description of any cycle is accomplished by first isolating turning points in the series, after which those dates are used to mark off periods of expansions and contractions. The procedure used in this work for programmed determination of cycles (turning points) has these phases:

1. Calculation of the natural logarithm of the original series.
2. Estimation of the permanent component (long-term trend) using the Hodrick Prescott filter (HP filter). When a temporal series in the long-term is analyzed, the seasonal variation and the irregularities are irrelevant and the series can be expressed as the sum of the trend and the cycle.
3. Determination of the deviations of the log of the series from this trend in order to determine the cyclical components that are known as "HP-Cycles".

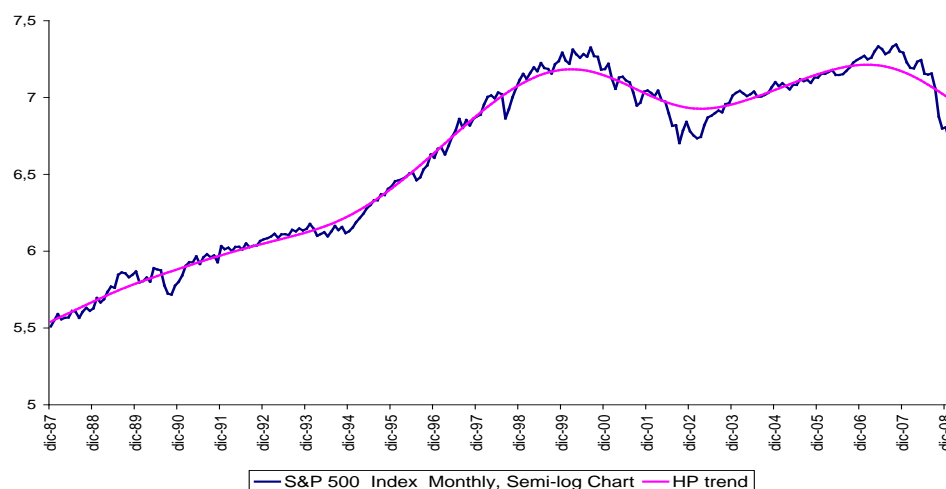
4. Determination of turning points and cycles in these deviations which involves: Identification of the lowest value (trough) within every period where the cyclical component is below the zero line; elimination of troughs whose cyclical component value is less than 8% or whose distance from the previous lowest point is less than 30 months; elimination of troughs whose distance from the next lowest trough is less than 30 months and whose value is more; elimination of troughs next to the endpoints of the series if the trough is higher than the endpoint; identification of the cycles, that is to say, the periods between any two remaining consecutive troughs; identification of the highest value within every cycle defined by two consecutive troughs (peak).

5. Statement of final turning points, troughs and peaks, in the original series and determination of the final cycles and their phases.

RESULTS

In the figures and tables we present the results of applying this algorithm to the natural logarithm of the evolution of the Latin-American and US stock market.

Figure 1: Monthly MSCI Latin-America Index



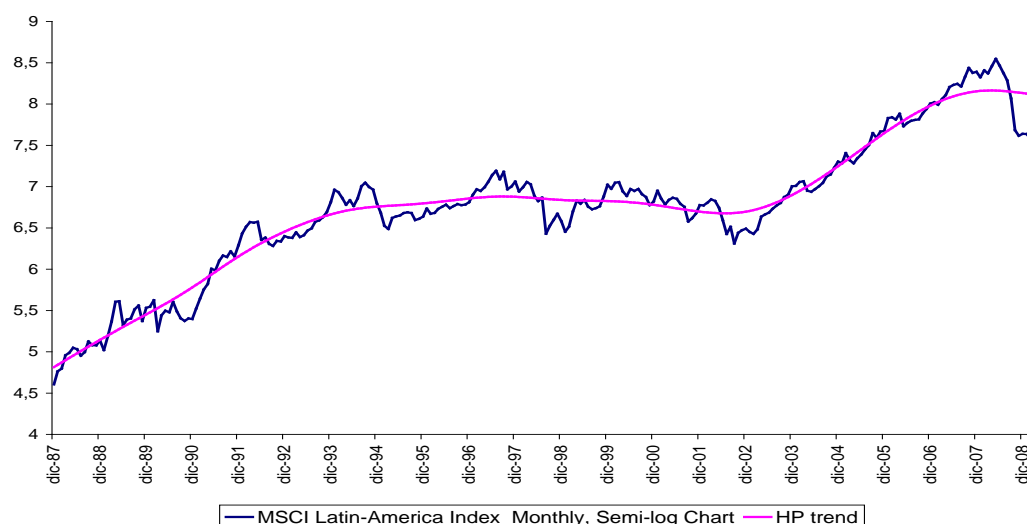
This figure shows the results of HP filter to the natural logarithm of the evolution of Monthly MSCI Latin-America Index from 12/1987.

Tabla 1: Dating Stock Market Cycles of Latin-American Market MCSI index

Date of Low Close	Low Close	Low HP Cycle	Date of High Close	High Close	Period Cycle (years)
Dec-87	100.00	-20.89%	May-89	273.90	3.0
Dec-90	220.83	-38.16%	Sep-94	1148.54	4.2
Mar-95	656.71	-27.94%	Jul-97	1327.19	3.4
Aug-98	620.14	-42.00%	Feb-00	1149.73	4.1
Sep-02	550.97	-36.80%	May-08	5148.87	6.4
Feb-09	1,962.50	-53.77%			
Average					4.2

This table shows the results of the cycles of the Monthly MSCI Latin-America Index from Dec. 1987 to 2009. The figure at the bottom of the table shows that the cycle averaged 4.2 years from low-to-low (the period or length of a cycle).

Figure 2: S&P 500 Monthly Index



This figure shows the results of HP filter to the natural logarithm of the evolution of the s from 1987

Tabla 2: Dating Stock Market Cycles in S&P 500 index

Date of Low Close	Low Close	Low HP Cycle	Date of High Close	High Close	Period Cycle (years)
Dec-87	247.08	-17.19%	May-90	361.23	2.8
oct-90	304.00	-14.64%	Jan-94	481.61	4.1
Nov-94	453.69	-10.17%	Jun-98	1133.84	3.8
Aug-98	957.28	-16.03%	Aug-00	1517.68	4.1
Sep-02	815.28	-34.12%	Oct-07	1549.38	6.4
Feb-09	735.09	-37.87%			
Average					4.2

This table shows the results of the cycles of the S&P 500 index from 1987 to 2009. The figure at the bottom of the table shows that the cycle averaged 4.2 years from low-to-low (the period or length of cycle).

Once the cycles have been identified, a battery of statistics is calculated in the next tables which describe the behaviour of stock prices in each of the cycles.

Table 3: Characteristics and statistics for Latin-American Markets MCSI index cycles

Date of Low close	Period Cycle (years)	Years Low to High	Year High to Low	Position High	% Move L-Lnext	% Advance L-H	% Decline M-Lnext	% Decline/ % Advance
Dec-87	3.0	1.4	1.6	0.47	120.8%	173.9%	19.4%	30.5%
Dec-90	4.2	3.7	0.5	0.88	197.4%	420.1%	42.8%	53.0%
Mar-95	3.4	2.3	1.1	0.68	-5.6%	102.1%	53.3%	105.5%
Aug-98	4.1	1.5	2.6	0.37	-11.2%	85.4%	52.1%	113.1%
Sep-02	6.4	5.7	0.8	0.88	256.2%	834.5%	61.9%	69.3%
Average	4.2	2.9	1.3	0.66	111.5%	323.2%	45.9%	74.3%

This table summarizes the results of the eight characteristics of the phases of the MSCI Latin-American Index from 12/1987 to 2/2009.

Table 4: Characteristics and statistics for S&P 500 index cycles

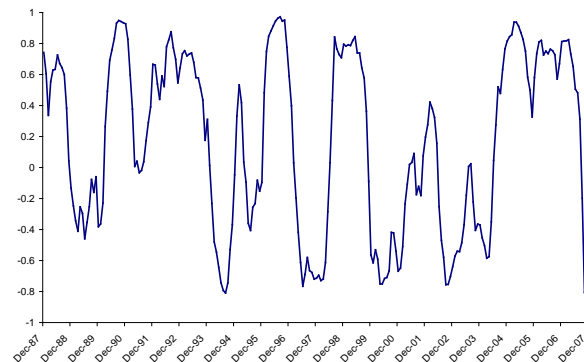
Date of Low Close	Period Cycle (years)	Years Low to High	Year High to Low	Position High	% Move L-Lnext	% Advance L-H	% Decline M-Lnext	% Decline/ % Advance
Dec-87	2.8	2.4	0.4	0.85	23.0%	46.2%	15.8%	50.1%
oct-90	4.1	3.3	0.8	0.80	49.2%	58.4%	5.8%	15.7%
Nov-94	3.8	3.6	0.2	0.95	111.0%	149.9%	15.6%	26.0%
Aug-98	4.1	2.0	2.1	0.49	-14.8%	58.5%	46.3%	125.3%
Sep-02	6.4	5.1	1.3	0.79	-9.8%	90.0%	52.6%	110.9%
Average	4.2	3.3	1.0	0.78	31.7%	80.6%	27.2%	65.6%

This table summarizes the results of the eight characteristics of the phases of the S&P 500 Index from 12/1987 to 2/2009.

The averages show that the cycle period averaged 4.2 years from low-to-low for Latin-American and US Market. It is also possible to observe that the dates of low close are close together.

If correlation analysis is carried out, statistically the relationship between the two series can be measured. The resulting value of this analysis, the correlation coefficient, shows that changes in the US markets not result in changes in the Latin-American Markets. The figure shows no relationship except short periods of time.

Figure 3: Correlation coefficient between S&P 500 and MSCI Latin-America Indexes



This figure shows the results of the correlation coefficient between S&P 500 and MSCI Latin-America Indexes from 1978

CONCLUSIONS

In the previous sections, we have seen how the financial market movement follows time cycles. This work uses monthly stock market data to study the characteristics of cycles and trends of the Latin-America and U.S. stock markets during the period 12/1987-02/2009. In order to detect cyclical patterns in stock price movements, the HP filter is employed. Some characteristics in the stock price cycles are identified. We compare these characteristics with those of the US. Our results show that both markets are not synchronous. Assuming the cycle remains fairly constant, it can then be used to predict future peaks and troughs.

REFERENCES

- Abad, A.; Cristobal, A. y Quilis E.M. (2000): "Fluctuaciones económicas, puntos de giro y clasificación cíclica"; Instituto Nacional de Estadística, documentos de trabajo, octubre de 2000.
- Bry, G. y Boschan, C. (1971): "Cyclical Analysis of Time Series: Selected Procedures and Computer Programs", National Bureau of Economic Research (NBER), New York.
- Gómez, J. y Pérez, F. (2004) "Stock market cycles and stock market development in Spain". Spanish Economic Review, 6, pp. 127-151.
- Pagan, A.R. y Sossounov, K.A. (2003): "A Simple Framework for Analyzing Bull and Bear Markets", Journal of Applied Econometrics, vol. 18 (1), pp. 23-46.
- Ruíz, R. y De La Torre, A. (2007): "Determinación y análisis de la tendencia y el ciclo en las series bursátiles". Análisis Financiero, nº 1004, 2, pp. 14-23.

THE PERFORMANCE OF FUNDS INVESTING IN EUROPE VERSUS LATIN-AMERICA

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ABSTRACT

In this work we do a comparative analysis of the performance of Mutual funds commercialized in Spain invested in Europe and mutual funds commercialized in Spain invested in Latin-American markets and show that there is significant variation in performance. To estimate the performance of the mutual funds, historical data from the last ten years was analyzed using Treynor's index, Sharpe's index and Jensen's index. The results showed that the Latin-American market funds had a better performance during the period studied. The result showed, in addition, that the European and Latin-American funds outperformed the MCSI indexes, although the difference is more significant in the case of European funds.

INTRODUCTION

Investors have always been interested in evaluating their portfolio performance and as the enthusiasm in investing in mutual funds grows the interest of evaluating the fund performance will also increase. This gives real purpose to this research, endeavouring to answer the following questions: Considering risk and return factors, is it more profitable to invest in European equity funds or invest in equity funds from Latin-American markets?; was performance of the European mutual funds better than the performance of the European index?; was performance of the Latin-American market mutual funds better than the performance of the Latin-American markets index?

BACKGROUND

A large number of fund performance evaluations, based on the theories of Treynor (1965) Sharpe (1966) and Jensen (1968), have been carried out. Treynor, Sharpe and Jensen, from different theoretical perspectives, propose and apply diverse measures of performance affected by different factors, for example risk. They endeavour, through their theories and evaluations, to answer the complex question of whether the returns achieved during a period of time are deemed reasonable or not. Evaluation of the performance portfolios of risky investments has been a central problem in finance and portfolio management (Jensen, 1968). The result being that investors in any country need not be limited to their domestic financial market (Fabozzi, 1998).

METHODOLOGY

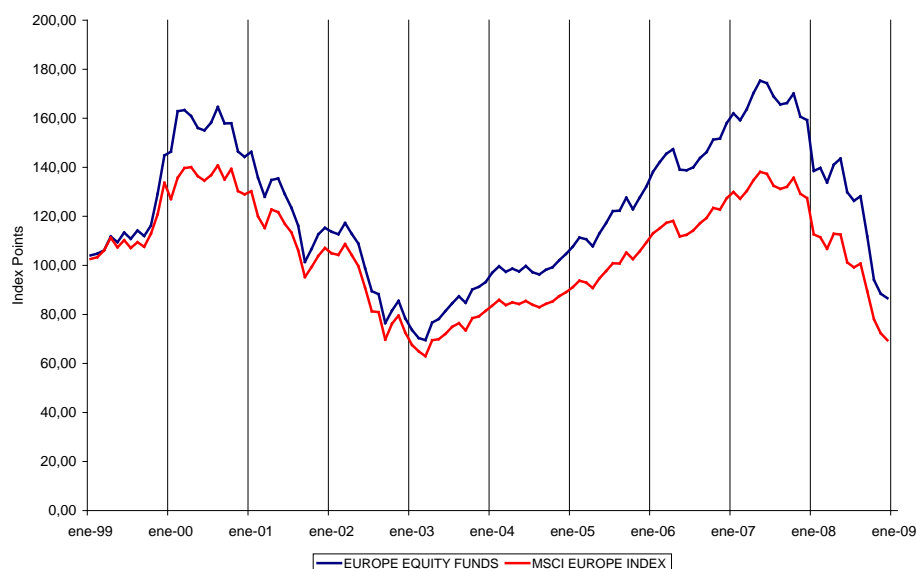
The main purpose of this study is to perform a comparative analysis from 1999 to 2008 between mutual funds commercialized in Spain invested in Europe, and mutual funds commercialized in Spain invested in Latin-American markets. Three different periods are considered: from 01/99 to 12/08, from 01-00 to 12/02 (bear market) and from 01/03 to 12/07 (bull market). The research focused on analyzing risk and returns. Treynor's Index, Sharpe's index and Jensen's Index were used in this research to find out if the returns achieved from the funds invested in Latin-American market surpassed the results from the mutual funds invested in Europe. The research also analyzed whether the investment in mutual funds outperformed the market, through comparison with the European index and the Latin-American market index. Treynor's Index is a measure of the excess return per unit of risk. The excess return is defined as the difference between the portfolio's return and the risk-free rate of return over the same evaluation

period. Sharpe developed a composite index which is very similar to the Treynor measure, the only difference being the use of standard deviation, instead of beta, to measure the portfolio risk. In other words, it uses the total risk of the portfolio rather than just the systematic risk. Jensen's Index is the difference between the expected return as predicted by the CAPM and the actual return.

RESULTS

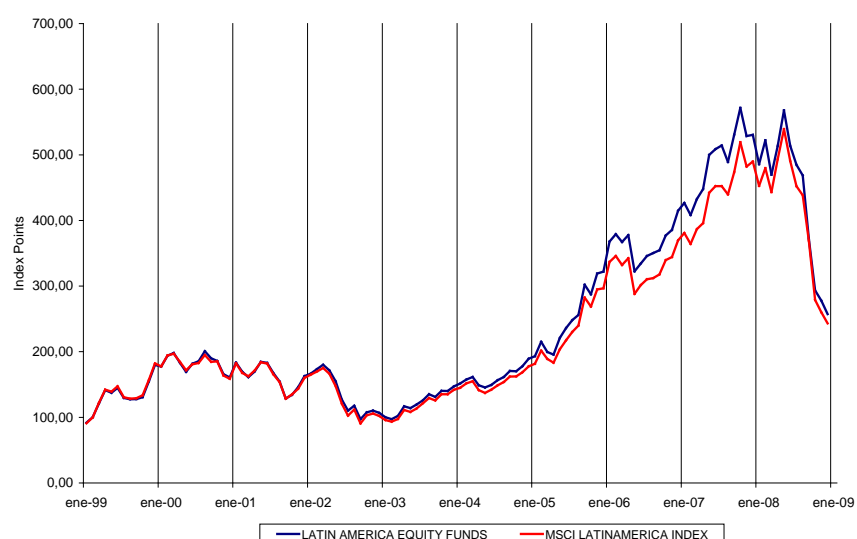
In the next figures and tables we present the results:

Figure 1: Europe equity funds vs MSCI Europe index



This figure shows the evolution of Europe equity vs MSCI Europe index from January 1999 to December 2008. The Europe equity funds outperformed the MSCI index.

Figure 2: Latin-America equity funds vs MSCI Latin-America index



This figure shows the evolution of Latin-American funds vs MSCI Latin-America index from January 1999. The Latin-America equity funds outperformed the MSCI index by a short margin.

Tabla 1: Analysis of Return

	From Jan 99 to Dec 08	From Jan 00 to Dec 02	From Jan 03 to Dec 07
Expected Monthly Return (%)			
Europe Equity Funds	0.01%	-1.53%	1.24%
MSCI Europe Index	-0.19%	-1.53%	0.99%
Latin America Equity Funds	1.14%	-1.06%	2.88%
MSCI Latin America Index	1.10%	-1.20%	2.82%
Total Returns (%)			
Europe Equity Funds	-13.42%	-45.87%	103.11%
MSCI Europe Index	-30.57%	-45.70%	75.52%
Latin America Equity Funds	157.28%	-40.57%	396.03%
MSCI Latin America Index	143.23%	-43.90%	379.32%
Total Returns Annualized (%)			
Europe Equity Funds	-1.43%	-18.50%	15.22%
MSCI Europe Index	-3.58%	-18.41%	11.91%
Latin America Equity Funds	9.91%	-15.93%	37.75%
MSCI Latin America Index	9.30%	-17.52%	36.81%

This table shows the results during the three different periods of the expected monthly return, total return and total annual return. The expected monthly return is positive in all the periods except one. The returns during the total period were positive for the Latin-American market and negative for the European market.

Tabla 2: Analysis of Risk

	From Jan 99 to Dec 08	From Jan 00 to Dec 02	From Jan 03 to Dec 07
Annualized Standard Deviation			
Europe Equity Funds	17.35%	19.42%	10.82%
MSCI Europe Index	16.25%	18.87%	10.37%
Latin America Equity Funds	28.71%	29.88%	20.57%
MSCI Latin America Index	28.89%	30.19%	20.49%
Coefficient of Variation			
Europe Equity Funds	572.44	-3.66	2.53
MSCI Europe Index	-24.59	-3.56	3.03
Latin America Equity Funds	7.28	-8.12	2.06
MSCI Latin America Index	7.60	-7.26	2.10

This table shows the results for the three different periods of Annualized Standard Deviation and the Coefficient of Variation. The Standard Deviation on the overall periods is higher for the Latin-American Markets and illustrate that there was more risk involved in investing in Latin-American Market than in the European Market.

Tabla 3: Beta, Alpha and R2 Coefficients

	From Jan 99 to Dec 08	From Jan 00 to Dec 02	From Jan 03 to Dec 07
Beta Coefficient			
Europe Equity Funds	1.0342	0.9747	1.0213
Latin America Equity Funds	0.9840	0.9395	1.0176
Annualized Alpha			
Europe Equity Funds	2.4484	0.4402	3.1197
Latin America Equity Funds	0.7831	0.6423	0.2640
Coefficient of determination: R2			
Europe Equity Funds	93.84%	86.80%	95.83%
Latin America Equity Funds	98.09%	95.21%	98.18%

This table shows the results for the three different periods of Beta coefficient, annualized alpha and the coefficient of variation. The beta for the Europe equity funds is higher in the all periods. The Alpha coefficient is positive in all the periods but greater in the Europe equity funds. The R2 has values near 100 which indicates that fund movements are highly correlated with their benchmark.

Tabla 4: Analysis of Performance

	From Jan-99 to Dec 08	From Jan-00 to Dec 02	From Jan-03 to Dec 07
Annualized Sharpe's Index			
Europe Equity Funds	-0.1785	-1.1477	0.0342
Latin America Equity Funds	0.3644	-0.5566	1.5460
Annualized Treynor's Index			
Europe Equity Funds	-0.0086	-0.0660	0.0342
Latin America Equity Funds	0.0307	-0.0511	0.0902
Jensen's Index			
Europe Equity Funds	0.0022	-0.0005	0.0023
Latin America Equity Funds	0.0005	0.0005	0.0001

This table shows the results for the three different periods of annualized Sharpe's Index, Annualized Treynor's Index and Jensen's Index. During all three periods the Europe equity funds had lower performance according to Sharpe's and Treynor's indexes. The Europe and Latin-America equity funds outperformed the market in all the periods except one.

CONCLUSION

The analysis on risk and return using Treynor's and Sharpe's indexes illustrate that the Latin-American market funds performed better than the Europe funds. The results from Jensen's Index illustrate that the Europe and Latin-America equity funds outperformed the market and by a great margin for the Europe funds. This result shows that the management in Europe is better at dealing with Europe equity funds than with those from Latin-America equity fund.

The conclusions which can be drawn by from the three different periods analyzed, is that the Sharpe's Index shows that the reward per unit of risk is greater in the bull period than in the total and bear period. In the total period the reward is 52.29 % greater in the Latin-American market funds than in Europe equity funds. In the 3-year period the difference is 42.80 % in the bullish market and 59.11% in the bearish period. Treynor's index shows that the reward per unit of systematic risk is smaller in the total period than in the short period. In the total period, the reward is only 3.59% greater in the Latin-American market funds than in Europe equity funds. In the short periods the difference is greater in the bullish market, 1.57 % and 1.49% in the bearish period. Using Jensen's index, the difference between a portfolio's actual returns and its expected performance determined by the Capital Asset Pricing is greater in the bullish period than in the others periods. In the total period the difference is 0.16% greater in the Europe equity funds than in Latin-America equity funds. In the bullish periods the difference is 0.22% less and in the bearish period is 0.09 in the Latin-America equity funds than in Europe equity funds.

REFERENCES

- Jensen, M. (1968): The performance of Mutual Funds in the Period 1945-1964, the journal of Finance Vol. 23, No. 2, p. 389-416.
- Markowitz H. (1952): Portfolio Selection, Journal of Finance, 7 pp. 77-9.
- Sharpe, W. (1994): The Sharpe ratio, Journal of Portfolio Management, 21,1; ABI/INFORM Global p. 49.
- Treynor, J. (1965): How to Rate Management of Investment Funds, Harvard Business Review, Vol. 44, January-February 1965 p. 63-75.

ONE, TWO, FREE: DESIGNING A FREE ONLINE TRAINING PROGRAM

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ABSTRACT

The purpose of the study was to examine how business professionals can provide training in an online environment with no additional costs for software and support. Due to budget and financial constraints employees must work outside the box as many instructional design tools may not be available. This paper outlines free tools that available when designing online training material. The authors of this paper are seeking to find free tools and a platform that will provide and support online content delivery. These tools include Web links, text, PowerPoint Presentations, video, interactive tools, and other learning applications. The tools and platform must also promote interaction and learning in an online setting. Incorporating tools in an online training program to mirror those of a traditional training program are essential to satisfy all learning types. Unfortunately these costs might be outside the financial constraints of some organizations, thus free alternatives must be sought.

Keywords: Online training tools, free training development programs, instructional design

INTRODUCTION

The Internet has changed the face of training as businesses have many options when choosing how to present and share information. The decision to use an online training platform and programs results in a new learning curve that is very difficult for both the trainer and the trainee as the options and environment drastically change from face to face training sessions. This paper addresses the methods and tools that can be utilized to make online training more interactive and consistent while eliminating costs. All of the tools and platform options discussed in this paper are a free alternative for organizations that wish to provide their employees with online training material without taking on the high reoccurring yearly costs.

There are numerous means to communicate and train individuals in both the classroom and virtual business arena. The Encyclopedia of Educational Technology attests to this abundance of means. Distance education has been around in one form or another for over a hundred years. Correspondence courses, training files, radio, television, and most recently the Internet have all been a part of the history of distance education (Blake, Blackwell, & Gibson, 2005). By the same token, online training can be done via e-mail, instant messenger, company intranets, or on popular online platforms such as Yugma, Lotus Sametime, Placeware and Webex (IBM, 2009). While each program may be similar, the content, communication, and methods will ultimately impact the employee's success within the training program.

When comparing the quality of traditional training to virtual training many debates may arise. These debates not only encompass the quality of training, but also the pedagogy and tools that are necessary to deliver quality instruction (Singh & Pan, 2004). Technological changes may dictate that online training must go beyond simply posting text and PowerPoint slides (Kachel, Henry, & Keller, 2005). The content must be designed in small manageable pieces that will hold the learner's attention while effectively delivering the necessary content. As compared to traditional training sessions, the online learning environment offers an area that is available 24 hours a day, seven days a week regardless of the learner's location. Thus every aspect of interaction needs to be planned for and examined to facilitate this continuous learning process.

This research study opens with a review of related literature that details the financial challenges facing both small companies and nonprofit organizations. The paper then focuses on the free design and free development tools available to trainers who wish to deliver their programs in a virtual environment. The paper will finally outline a synopsis of the processes used to develop material for online training and recommendations for future research.

LACK OF FUNDING AND TECHNICAL EXPERTISE

Unlike many large organizations, small companies have a more difficult time offsetting the high reoccurring costs that are associated with producing and maintaining material in an online setting. A commitment to an online training environment such as Lotus Sametime or Microsoft Live Meeting can run into the thousands of dollars for one conference room. Costs range from \$400 for Adobe Acrobat Connect, \$1200 for IBM Lotus Sametime Unyte Meeting, and \$55 per seat per month for Elluminate Live. As one can see these costs can add up quickly (Hartog, 2008).

While many large institutions can justify these costs as travel is not required, the same cannot be said for small companies and nonprofit organizations. The lack of funding for a platform is only one cost associated with placing training material online. Institutions must also pay for the programs that will be used to design and deliver the content. These can be simple programs such as PowerPoint to provide a presentation, or more advanced programs such as Camtasia to record audio and the image captured from the designers screen. Additional programs such as Webex, Yugma, GoToMeeting, or Elluminate may also be used to provide virtual meetings that offer both sound and Web camera capabilities.

Technical professional will also be needed to provide support and training for the training designers, trainers, and employees. Free online learning platforms such as Moodle or Skai require expensive dedicated telecommunication lines and servers as well as a technical staff to configure and administer the site. While many refer to these options as “free”, there are numerous hidden costs that can make them just as expensive as managing an intranet site.

COMPONENTS OF DISTANCE TRAINING

Online training can be developed using tools such as e-mail, discussions, chat rooms, web casts, videos, and calendars available through an online learning platform. While each platform will have a different look and feel, the content, communication methods, and tools used to deliver the material will be similar.

The tools chosen to convey the training material should be presented in small manageable pieces that will hold the learner's attention while effectively delivering the necessary content. The online learning environment offers a means to share information twenty-four hours a day, seven days a week regardless of the learner's location. As a result the individual designing the training material must make careful decisions regarding the platform and tools used to facilitate this continuous learning process.

DISTANCE TRAINING TOOLS AND APPLICATIONS

There are numerous tools that can be used to incorporate and enhance a virtual training session. Customized tools such as Flash based programs, screen captures, Web casts, simulators, and voice and video chat rooms enhance distance training programs. These tools provide unlimited possibilities when moving traditional training sessions into an online environment. However, it is more difficult to find quality programs and tools that are affordable to the organizations and departments designing and providing the training.

Study cards, training material, and concepts can be designed using Flash interactive programs to help in the learning the training material. These tools are designed to increase an employees knowledge of the material shared by the trainer. Live meetings and screen sharing programs offer trainers the opportunity to interact with trainees in real time (Manczuk & Scordato, 2004). The tools provide learners with additional options to study material outside of just reading notes or a manual. The same dilemmas that plague academic online learning apply to distance training in the business world. As Salter, Richards, and Carey note:

“As institutions attempt to meet the demand for online courses, many offerings still focuses on presenting online content resources with minimal opportunity for interactions and active learning”.

Stow also notes:

“One problem seen in distance education is the incorporation of only one type of interaction. Educators need to find a way to incorporate multiple methods of interaction in order to keep dialogue and structure at a suitable, level for both the students and the instructor”.

Screencast programs are extremely helpful when covering difficult concepts such as step-by-step procedures or processes. These tools provide recorded computer screen activities along with corresponding audio that the designer can use to help reinforce or explain certain concepts (Dragan, 2005 & McMahon, 2007).

Web casting, or podcasting, allows trainers the opportunity to record presentations and training seminars so that employees can review the material whenever they like, and as often as they choose. Web casting provides the opportunity to convert traditional online text notes into streaming digital video and audio files. While it is not recommend for all situations, short videos and clips can be a great aid in delivering difficult concepts or material that cannot be explained with a text manual or digital presentation (Philpot, 2006).

FREE ONLINE COURSE DEVELOPMENT PLATFORM AND TOOLS

There are many free options available to the trainer when designing a virtual training room. While some platforms such as PageOut require the designer to use a vendor specific manual or text, others provide more freedom. MyiCourse allows for the use of text, audio, video and/or images to be used on their free site. MyiCourse allows the trainer to customize the learning environment by choosing the colors, company logos, and format that will be used within each training session. The course material ownership is retained by the designer of the material who can choose to let anyone or specific users into their training room.

While MyiCourse is free to place content, various programs will be required to populate the room with the desired training material. As discussed earlier the online training program should satisfy a variety of learning styles through tools such as videos, presentations, text, email, and a chat room. The designer must ensure that the programs used within the training program can be accessed by the employees viewing the material. By using free alternatives the designer of the course room can ensure that all material can be accessed and viewed correctly. MyiCourse can be accessed through their Web site <http://www.mycourse.com/welcome>.

While many programs involve a cost, free alternatives are available. OpenOffice provides the end user a free word processor, spreadsheet, and presentation program that are similar to the Microsoft Office Suite. Adobe PDF files can also be shared with learner as this is also a free program that can be installed over

the Internet. These tools can be used to design and convey the material being covered. The OpenOffice program can be downloaded from <http://www.openoffice.org>. The training designer can also choose to use Google Docs which also provides a free documents, spreadsheets and presentation program. Google Docs can be downloaded from <http://docs.google.com>. One major drawback to both programs is its incompatibility with the Office 07 Suite. However the trainer can have all participants download the same program as a software requirement prior to the launch of the training program.

These programs can then be incorporated into a free storage space such as SkyDrive that is offered by Microsoft. This service allows users to share up to 25GB of storage. This site also allows for sub folders to be made and can be secured by the employees email address. The site can be accessed and configured on the Web site <http://skydrive.live.com>.

Screen and audio captures are also beneficial when showing a step by step process on a computer screen, a virtual fieldtrip, software demonstrations, and Web site reviews. Adobes' CamStudio can be used to capture the screen and audio activity on a computer and will create "AVI video files using its built-in SWF Producer." These files can then be saved as streaming flash videos and incorporated into the online training room. This tool is free and can be downloaded online. Screenshots can also be taken through numerous free programs or through a Microsoft operating system such as 2000 Professional, XP, or Vista. Is a free tool that can be downloaded from <http://camstudio.org>.

Anytime anywhere virtual chat sessions can also be conducted through the free conference program Skype. This program allows for the use of chat sessions where the employees can both see and hear the trainer if they use a web camera and microphone. Skype also allows the presenter to share files such as PDF's and OpenOffice, or they can share their screen with other users. This type of environment is an aid to visual learners who need additional material outside of text and digital presentations. Skype can be downloaded from <http://www.skype.com>.

An effective method for sharing videos and recordings can be accomplished through the Web site YouTube. Trainers may elect to record their lessons into short manageable three to four minute sections and upload them to a video sharing website such as YouTube. Trainers can also edit the video using the free Microsoft tool Windows Movie Maker. This tool is used to create and edit videos and can be downloaded from:
<http://www.microsoft.com/windowsxp/downloads/updates/moviemaker2.msp>.

The links to site can then be placed inside the MyiCourse platform or on the SkyDrive site so employees can access and view the content through their Web browser. This method would be very beneficial for difficult subjects or those that that require repetition. User can upload and share videos be accessing their Web site <http://www.youtube.com/signup>.

SUMMARY AND FUTURE PLANS

The content and design within an online training program are to a large extent dependent on the technology. Examples of online technology can be found in oral presentations postings, streaming video, voice technology, interactive study material, and a multitude of additional distance learning tools. While these tools are traditionally very expensive, as this study shows there are multiple free alternatives for small businesses and nonprofit organizations and interact with their employees. This can also be done in a secure setting as the trainer can control which employees have access to which files and material.

This study outlined the free interactive tools and platform that can be implemented to enhance virtual training sessions and material. Small businesses and nonprofit organization must find methods to overcome both economic and technical barriers of communication online. As programs and applications

continue to change, trainers must carefully decide what technology will be used in delivering their virtual material.

REFERENCES

Blake, C. Blackwell, C. & Gibson, J. (2005). "What You Need to Know About the Web". Supervision, 66 (9), pp.3-7

Dragan, R. (2005). Captivate Your Audience with Interactive Demos, PC Magazine, Vol. 24 Issue 4, p56-56, 1/2p

Hartog, L. (2008). The Top 12 Web Conferencing Vendors, . Retrieved February 12, 2009, from InsideCRM Web site: <http://www.insidecrm.com/features/top-web-conferencing-vendors-120908/>

IBM Releases Lotus Sametime Unyte, (2009). KM World, Vol. 18 Issue 2, p22-22

Kachel, N. Henry, N. & Keller, C. (2005). "Making It Real Online". Knowledge Quest, 34 (1), p.14

Manczuk, S. & Scordato, J. (2004). Macromedia Breeze Education, Edition Library Media Connection, Vol. 23 Issue 2, p91-91, 1p

McMahon, R. (2007). Webcasting and Graphics, Digital Content Producer, Vol. 32 Issue 3, p57-58, 2p

Philpot, E. (2006). Podcasting - Education on the Go!, Community College Week, Vol. 18 Issue 16, Special section p3-3, 1/2p

Singh, P., & Pan, W. (2004). "Online education: Lessons for Administrators and Instructors". College Student Journal, 01463934, 38

Salter, D.; Richards, L & Carey, T (2004). The "T5" Design Model: An Instructional Model and Learning Environment to Support the Integration of Online and Campus-Based Courses. Customer Services for Taylor & Francis Group Journals, p. 12

Stow, R. (2005). Minimizing the Distance in Distance Learning. Athletic Therapy Today, pp.57-59.

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IMPROVING THE VIRTUAL CLASSROOM AND PEDAGOGY THROUGH INSTRUCTOR CERTIFICATION

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ABSTRACT

When developing online classrooms it is necessary to ensure that all learners will be successful in the course. This paper outlines the dilemmas faced by one university in its struggle to improve retention rates in their distance education courses. The case study will also serve as a justification for instructor certification for online courses at Indiana University of Pennsylvania (I.U.P.). While these courses span multiple facets of higher education such as technology, criminology, mathematics, business, and general studies, the core competencies to develop a structurally sound online learning environment remain unchanged. The need to have faculty who are trained both in the pedagogy of an online learning environment and the tools to deliver content will improve student success. The author of this paper currently sits on the I.U.P. University Wide Distance Education Committee that has begun to look at the necessity to implement an instructor certification program that addresses the pedagogical elements of a virtual classroom. The intent of this paper is to identify the need for such a certification by looking at recent trends in both online and face to face education at both the graduate and undergraduate levels. The data gathered for online courses is only compared to the same course that is offered in a face to face setting. Incorporating strategies of instruction in an online course to mirror those of a traditional course are essential to maintain consistency and satisfy all students.

Keywords: Instructor certification, online course design, distance education pedagogy, enrollment and retention

INTRODUCTION

This paper addresses the importance of online pedagogy that can be utilized to make the online course development successful. Specifically this paper will focus on the courses being offered at I.U.P. Like other institutions I.U.P. has a diverse student body and must take into account different learning styles. This research study opens with a review of related literature that details the challenges facing online educators and developers. The paper then focuses on the recent history of online and traditional retention rates at I.U.P. The paper will finally outline what is meant by instructor certification for online education and recommendations for future research.

Correspondence courses, training files, radio, television, and most recently the Internet have all played a key role in the history of distance education (Blake & Blackwell, 2005). The Internet has changed the face of education as traditional institutions are now in a rush to offer online courses. The number of programs and online students has increased dramatically over the last decade. Over the past decade the Internet has changed the face of distance education. The number of programs offered as well as the number of online students has skyrocketed. As the Internet has grown, programs are becoming more advanced, telecommunication speeds are increasing, and interactive applications are more readily available. During this time online institutions have searched for methods to increase enrollment and retain students. As applications and programs become more advanced the face of online learning should follow suit. Advances in online platforms, programs, and interactive tools are providing online educators the opportunity to design courses as if the instructor was in the room. As Salter, Richards, and Carey note:

“Current educational literatures stresses the importance of a task based approach to instruction, rather than an emphasis on content delivery. However as institutions attempt to meet the demand for online courses, many offerings still focuses on presenting online content resources with minimal opportunity for interactions and active learning” .

The launching of new systems, technology tools, and applications has created enthusiasm among educators and academic programs offering technology courses. This enthusiasm and need to stay abreast of new technology may sometimes blur good judgment when introducing the most recent technologies into the classroom. While the inclusion of new technologies into the classroom can be beneficial in many ways, the rush to update the curriculum and increase online enrollments may produce unforeseen and unplanned dilemmas.

Furthermore, distance education courses may need to balance between the practical use of technology as well as knowledge of the concepts behind the technology. Denning (2001) noted that:

“Learning the professional practices of a specialty of information technology is every bit as important as learning the intellectual core of computing. The mark of a well educated professional will be a balance of the two. The current academic inclination to disdain skill-specific training does not fit a profession. The education of computing professionals must count for practices as well as descriptive knowledge. It must include training as well as general education”.

INSTRUCTOR CERTIFICATION

The existence of online education is a hot debate on many traditional college campuses. These debates not only involve the quality of education, but also the tools, platform, and programs that can be used to deliver quality instruction (Singh & Pan, 2004). While academic institutions are competing against pure online universities for enrollment, many faculty have mixed opinions on online education. As Diaz notes:

“When comparing the attitudes of instructors and students towards distance learning, it was found that instructors had conflicting attitudes about distance education. While they were willing to teach a distance learning class, they rated the courses as equal or lower in quality than traditional courses taught on campus.”

One could argue that this negative stigma on online education could spill over into the online classroom design. If faculty believe that these course do not match up to traditional courses could they be led to believe that less time is needed to develop and online class? Online development may also not be for every instructor. While technology faculty have an understanding on the technology and tools available, the same cannot be said for non tech savvy faculty. As Hannay and Newvine note:

“Online instructors must have another set of skills. They must be computer literate, extremely flexible, and responsive. When developing an online course, instructors must be able to think differently about presenting course materials and able to create a totally different learning environment. Additionally, they need to be life-long learners who have a desire to update their skills and incorporate new technology into their online courses. Finally, they must be able to communicate effectively in written form and willing to communicate with students daily.”

The reasoning behind an instructor certification is twofold. This certification is meant to not only accustom the faculty member with the technology available to deliver an online class, but also the pedagogy involved with designing and delivering an online course. Online classes can be developed using tools such as e-mail, instant messenger, company intranets, or through online platforms. While each

platform will have a different look and feel, the content, communication methods, and tools used to deliver the material will be similar. As Stow notes:

“One problem seen in distance education is the incorporation of only one type of interaction. For example, the student interacts with the content of the class only, similar to an independent-study course. The student would interact with the course material, finishing assignments and turning them in for grading. This interaction might be done well, but it is only one-dimensional in how the student is stimulated and does not necessarily promote learning, thus possibly causing the transactional distance to increase. Educators need to find a way to incorporate multiple methods of interaction in order to keep dialogue and structure at a suitable, level for both the students and the instructor”.

As technology advances, the virtual classroom must change accordingly. Technological advancements drive distance education to go beyond simply posting text and assignments in the course room (Kachel & Henry & Keller, 1005). Online material should be in small manageable pieces that will hold the learner's attention while effectively delivering the necessary content. The online learning environment offers a means to share information twenty-four hours a day, seven days a week regardless of the learner's location. As a result the course designer must make careful decisions regarding the methods and tools used to facilitate this continuous learning process.

There are numerous tools that faculty can incorporate into an online class to enhance a virtual classroom. Customized tools such as Flash interactive programs, screencasts, Web casts, simulators, and virtual labs enhance distance education classrooms. These tools provide unlimited possibilities when moving traditional classes into an online environment. An ongoing instructor certification programs would insure that faculty are abreast of new educational technology trends as faculty who wish to teach online would need to keep their certification updated.

TRADITIONAL AND DISTANCE ED GRADES BY STUDENT AND CLASS LEVEL

In the fall of 2008 a request was made on the author's behalf to I.U.P's Planning and Analysis Department. The data sought was a head to head comparison of online courses that are also taught in a face to face environment. Classes offered only online or only face to face were not used in this study. The data retrieved was broken down first by the grade earned by the student and the withdrawal rate. In addition this data was also categorized by the class level of the course offered. The data gathered shoed results from the 2003 through 2008 academic years. In addition the results of each course were also provided so that specific classes and trends could be analyzed.

Traditionally drops rates are higher for online classes as compared to traditional face to face courses. As noted by Diaz that:

“Drop rates for distance education classes have been consistently higher than those of traditional classes and, according to some researchers, tend to suggest academic non-success.”

In reviewing the graduate withdrawl rate it was found that online graduate students are more likely to drop out of an online class as compared to the same traditional face to face course. Students were more than twice as likely to drop a course taken in an online format. Undergraduate withdrawl rate of online classes were also much higher as compared to face to face classes. It was found that online students are more than 53% more likely to drop out of an online class as compared to the same traditional face to face course. While it can be argued that some blame can be placed on the student, management and faculty cannot ignore the fact that they must also share some of the responsibility for the high withdrawl rates.

Traditional Course Grades by Student and Class Level - 2003-2008

	A	B	C	D	F	W	W %	Total
GRADUATE								
500 and above	861	289	48	0	5	29	2.35%	1232
Total	861	289	48	0	5	29	2.35%	1232
UNDERGRADUATE								
100-199	23650	20598	14586	6432	8279	5175	6.57%	78720
200-299	4162	4551	4028	2106	2010	2043	10.81%	18900
300-399	5272	5020	3246	998	702	771	4.82%	16009
400-499	1691	1293	706	142	100	133	3.27%	4065
Total	34775	31462	22566	9678	11091	8122	6.36%	117694

Distance Ed Grades by Student and Class Level - 2003-2008

	A	B	C	D	F	W	W %	Total
GRADUATE								
500 and above	863	172	23	0	12	56	4.97%	1126
Total	863	172	23	0	12	56	4.97%	1126
UNDERGRADUATE								
100-199	2288	1293	589	226	524	487	9.01%	5407
200-299	413	448	392	236	292	413	18.82%	2194
300-399	1096	1464	850	271	259	324	7.60%	4264
400-499	1010	652	298	82	87	82	3.71%	2211
Total	4807	3857	2129	815	1162	1306	9.78%	14076

SUMMARY

As programs and applications continue to advance, educators must stay abreast of the technology changes available in designing their online courses. This study outlined the dilemmas facing online education at I.U.P. and methods being discussed to improve the pedagogy of online classes. The study also explained the recent history of online classes at I.U.P. and their attempts to address the challenges of designing and delivering a class in the online world.

While the focus of instructor certification is still in the discussion phase within the Distance Education Committee, additional variables are also being examined. Some of these variables include the University changing from WebCT to a new online learning platform, and possible union and University conflicts with mandating such a certification. A follow up study is required to assess the effectiveness of the planning and the delivery of this certification, thus additional reviews and audits during the discussions will continue.

REFERENCES

Blake, C. Blackwell, C. & Gibson, J. (2005). "What You Need to Know About the Web". Supervision, 66 (9), pp.3-7

Denning, R.J. (2001). Computing the Profession: Practical Experiences For Undergraduate Computer Networking Students. Consortium for Computing Sciences in Colleges p. 261–270.

Diaz, D. (2002).Online Drop Rates Revisited. The Technology Source.

Hannay, M., & Newvine, N. (2006). perceptions of Distance Learning: A Comparison of Online and Traditional Learning. Journal of Online Learning and Teaching. 2,

Salter, D.; Richards, L & Carey, T (2004). The "T5" Design Model: An Instructional Model and Learning Environment to Support the Integration of Online and Campus-Based Courses. Customer Services for Taylor & Francis Group Journals, p. 12

Singh, P., & Pan, W. (2004). Online education: Lessons for Administrators and Instructors. College Student Journal, 01463934, 38

Stow, R. (2005). Minimizing the Distance in Distance Learning. Athletic Therapy Today, pp.57-59.

HOW DOES FOREIGN DIRECT INVESTMENT AFFECT GROWTH IN DEVELOPING COUNTRIES? AN EMPIRICAL INVESTIGATION

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ABSTRACT

This paper analyzes the effects of foreign direct investment on the economic growth of developing countries. The study uses annual data on a group of 85 developing countries covering Asia, Africa, and Latin America and the Caribbean for the period 1980-2007. We explore the hypothesis that foreign direct investment can promote growth in developing countries. We test this hypothesis using panel data series for foreign direct investment, while accounting for regional differences in Asian, African, Latin American, and the Caribbean countries as well as the differences in income levels. While the findings of previous studies are generally mixed, our results indicate that foreign direct investment has positive and significant effect on economic growth.

JEL: F21, F43, O40

INTRODUCTION

The role of foreign direct investment in the growth process of developing countries has been a topic of intense debate. Previous empirical studies on inward foreign direct investment (FDI) and economic growth generate mixed results. Foreign direct investment makes several contributions to the economies of host countries. Such contributions include: (a) foreign firms are making important contributions to the technological capacity of host countries; (b) the competition, standards and knowledge of foreign markets that foreign firms bring to the domestic market can have important spillover effects; and (c) many firms in developing countries have increased their access to cutting-edge technology by purchasing technologically sophisticated firms domiciled in high-income countries.

Foreign direct investment has dramatically increased in the past several decades to become a major force in the worldwide allocation of funds and technology. Prior to 1970, world trade generally grew at a greater pace than that of FDI, but in the decades since then the flow of FDI has grown at more than twice the rate of the growth of worldwide exports. According to the World Bank (2008), FDI inflows to developing countries have almost doubled as a percentage of GDP over the past 15 years. The value of FDI flows to developing countries increased from \$7.7 billions in 1980 to \$499.7 billion in 2007, a 65-fold increase. Of the total FDI flows to developing countries, nearly 65% was accounted for by Asian developing countries. As a percent of total FDI flows, the share of developing countries increased from 13.9% in 1980 to 27.3% in 2007.

Given the importance of foreign direct investment to the economies of developing countries, it is important to understand its contribution to economic growth of developing countries. This paper analyzes the effects of foreign direct investment on the economic growth of developing countries. We analyze these effects using panel data series for foreign direct investment, while accounting for regional differences in Asian, African, Latin American, and the Caribbean countries as well as the differences in income levels. The main contribution of this paper is to analyze the effects of foreign direct investment on economic growth of developing countries covering a large number of developing countries as well as a longer time period. The study focuses on the time period 1980-2007. In order to better understand the

effect of FDI on growth as well as any change of its effect over time, we also estimated three separate models for shorter time periods, namely, 1980-1989, 1990-1999, and 2000-2007.

The paper is structured as follows: The next section presents a survey of literature, whereas Section 3 presents the specification of the econometric model and data sources. The empirical results are presented and discussed in Section 4 and finally, Section 5 summarizes the main results and concludes with some policy implications.

METHODOLOGY AND DATA

Specification of Model

This section discusses the model specifications to examine the relationships between foreign direct investment and per capita GDP growth. The models specified are estimated using panel least squares estimation method.

The model is derived, in conventional manner, from a production function in which FDI is introduced as an input in addition to labor and domestic capital. FDI is the prime source of human capital and new technology to developing countries and this variable is included in the production function in order to capture the externalities, learning by watching and spill-over effects associated with FDI.

In the usual notation the production function can be written as follows:

$$Y = f(L, K, F) \quad (1)$$

where Y is gross domestic product (GDP) in real terms, L is labor input, K is domestic capital stock, and F is stock of foreign direct investment.

Assuming (1) to be linear in logs, taking logs and differencing, we obtain the following expression describing the determinants of the growth rate of real GDP:

$$y = \alpha + \beta l + \delta k + \phi f \quad (2)$$

where lower case letters denote the rate of growth of individual variables. Following the precedent set in numerous previous studies, we approximate the rate of growth of the capital stock by the share of investment in GDP. This is necessary due to the formidable problems associated with attempts to measure the capital stock, especially in the context of developing countries. In addition, we also replace the rate of change in labor input by the growth rate of population. Following Ram and Zhang (2002) and others, we also include an education variable representing human capital since it is often believed to have a favorable effect on growth. These changes yield the following growth equation:

$$GGDP_{it} = \beta_0 + \beta_1 GPOP_{it} + \beta_2 \left(\frac{INV}{GDP} \right)_{it} + \beta_3 \left(\frac{FDI}{GDP} \right)_{it} + \beta_4 EDU_{it} + \beta_5 INF_{it} + e_{it} \quad (3)$$

where $GGDP_{it}$ is the growth rate of real GDP of country i in year t , $GPOP_{it}$ is the growth rate of population of country i in year t , INV is the investment of country i in year t , FDI is the foreign direct investment of country i in year t , EDU_{it} is the mean years of educations for the population 15 years and older of country i in year t , and INF_{it} is the inflation rate of country i in year t . The growth

rate of population is a proxy for the growth rate of labor force, and the investment/GDP ratio represents the growth rate of capital stock. The FDI/GDP variable represents the growth rate of the stock of foreign direct investment. Regional dummies, a dummy variable representing ethnic wars, and a variable representing the economic freedom are also introduced. We are interested in testing whether the marginal impact of foreign direct investment on growth, β_3 , is positive and statistically significant. The expected signs of the coefficients β_1 , β_2 , β_3 , and β_4 are positive, and that of β_5 is negative. In order to see whether there is complementarity between FDI and the host country's human capital, equation (3) can be augmented by adding an education-FDI interaction term, which will have a positive coefficient if there is such a complementarity. We experimented by adding such an interaction term and the results are reported in Tables 2 and 3. In addition, equation (3) was estimated replacing the FDI/GDP variable by the growth rate of (absolute) FDI inflows.

Variable Description and Data Sources

In order to test the implications of our models, we collected a panel of aggregate data on foreign direct investment on a large number of developing countries. The entire data set includes 85 countries for which foreign direct investment and all other relevant variables are reported over the 1980–2007 period. The sample of countries consists of 26 low-income countries, 29 low-middle-income countries, 23 high-middle-income countries, and 7 high-income countries. The list of countries used in the empirical analysis is given in Appendix Table 1.

The economic growth rate is measured in this study as the growth of real GDP in constant (2000) U.S. dollars. The data on real GDP are from the World Bank, World Development Indicators database. The growth rate of population is used as a proxy for the growth rate of the labor force. The data on population are from the World Bank, World Development Indicators database. The investment/GDP ratio is used as a proxy for the growth rate of the capital stock. Since the investment/GDP ratio is not reported for the majority of the developing countries, gross fixed capital formation as a share of GDP is used to represent investment/GDP ratio. The data on investment/GDP ratio are also from the World Bank, World Development Indicators database. The data on foreign direct investment are from the United Nations Conference on Trade and Development (UNCTAD), World Investment Report 2008. Inflation rate is defined as the annual percentage change in Consumer Price Index (CPI). The data on inflation rate are from the International Monetary Fund, World Economic Outlook database, October 2008. The variable EDU is measured as mean years of education for the population aged 15 years and older and is taken from the compilation by Robert Barro and Jong-Wha Lee. The data on ethnic war variable are from the World Bank. The data on economic freedom are from the Freedom House, The Freedom in the World 2008 database.

EMPIRICAL RESULTS

In order to identify any differences in the impact of foreign direct investment on growth among countries with different time periods, we estimated separate growth models for time periods 1980-1989, 1990-1999, and 2000-2007, in addition to the model estimated for the entire sample period of 1980-2007. Models were estimated using several dummy variables to incorporate regional differences as well as the differences in income levels.

The investment ratio has the expected positive sign and is highly statistically significant in all cases. This result is similar to the finding of recent studies by Ram and Zhang (2002) and Li and Liu (2005). Population growth variable, which also represents the growth of labor force, has the expected positive sign in all four cases but statistically significant only for the period 2000-2007. These findings are also consistent with the findings of previous studies.

The growth rate of foreign direct investment has a positive impact on economic growth of developing countries. The coefficient of this variable is positive in all four models and statistically significant during the time periods 2000-2007 and 1980-2007. While the previous studies on the impact of foreign direct investment on growth have generated mixed results, our results suggest that the foreign direct investment can have a positive impact on economic growth in developing countries. For example, Ram and Zhang (2002), Li and Liu (2005), Bengoa and Sanchez-Robles (2003), Olofsdotter (1998) and Borensztein et al. (1998) show that FDI is positively correlated with economic growth. Durham (2004) fails to identify a positive relationship between FDI and economic growth.

The estimated coefficient of the education variable, which a proxy for human capital, has the expected positive sign in three of the four models estimated. However, this coefficient is statistically significant only in one case. The findings of previous studies are also consistent with the findings of this study. The evidence in favor of complementarity between FDI and the host country's human capital is lacking. In most estimates of equation (3), the interaction term has the "wrong" (negative) sign. However, the interaction term is significant in three of the four cases considered. Ram and Zhang (2002) also could not find evidence of complementarity in their study conducted using the data for the 1990s. However, Borensztein, De Gregorio, and Lee (1998), find evidence of complementarity in the 1980s which is consistent with our findings.

Inflation rate variable has the expected negative sign and it is statistically significant for all four cases. These findings are also consistent with the findings of previous studies. The variable representing the economic freedom has a negative sign in all four cases. This variable is defined as follows: 1 if free; 2 if partly free; and 3 in not free. Therefore, the negative sign can be interpreted as countries which are relatively free tend to have a higher economic growth. The ethnic war dummy variable has a negative sign in all cases and highly statistically significant, implying that ethnic wars have an adverse effect of economic growth.

Of the three regional dummy variables used in the model, Asia dummy variable consistently has a positive sign and statistically significant in three of the four cases. This result is not surprising given the fact that nearly two thirds of foreign direct investment flows to developing countries went to an Asian country. Dummy variables for the other two regions have mixed results. The dummy variables representing the different income levels indicate that the estimated coefficients are negative for low-income countries and mostly positive for low middle income and upper income countries. These findings are not surprising given that they are ones lacking less distorted market systems, more stable macroeconomic environments, and better human resources.

CONCLUDING REMARKS

This paper analyzes the effects of foreign direct investment on the economic growth of developing countries. We analyze these effects using panel data series for foreign direct investment, while accounting for regional differences in Asian, African, Latin American, and the Caribbean countries as well as the differences in income levels. The main contribution of this paper is to analyze the effects of foreign direct investment on economic growth of developing countries covering a large number of developing countries as well as a longer time period. The major point emerging from this work is that foreign direct investment has a positive impact on economic growth of developing countries. The findings of this study are, for the most part, consistent with findings of previous studies on the effects of foreign direct investment on economic growth.

The policy implications of this paper are straightforward. First, foreign direct investment may promote economic growth significantly in the process of development. Second, increase of FDI in quantity

enhances economic growth only under some conditions. A less distorted market system, more stable macroeconomic environment, better human resources, export-oriented strategy, diversified economic and export structure will improve the relationship between growth and FDI in developing countries.

REFERENCES

Balasubramanyam, V. N., Salisu, M. and D. Sapsford (1996), "Foreign Direct Investment and Growth in EP and IS Countries," *Economic Journal*, vol. 106(1), p. 92–105.

Barro, Robert J. and Jong-Wha Lee (2000), "International Data on Educational Attainment: Updates and Implications," CID Working Paper No. 42, Center for International Development at Harvard University.

Bengoa, M. and B. Sanchez-Robles (2003), "Foreign Direct Investment, Economic Freedom and Growth: New Evidence from Latin America," *European Journal of Political Economy*, vol. 19(3), p. 529–545.

Borensztein, E., De Gregorio, J. and J. W. Lee (1998), "How Does Foreign Direct Investment Affect Economic Growth?," *Journal of International Economics*, vol. 45(1), p. 115–135.

Dutt, A. K. (1997), "The Pattern of Direct Foreign Investment and Economic Growth," *World Development*, vol. 25(4), p. 1925–1936.

Hein, S. (1992), "Trade Strategy and Dependency Hypothesis: A Comparison of Policy, Foreign Investment, and Economic Growth in Latin America and East Asia," *Economic Development and Cultural Change*, vol. 40(2), p. 495–521.

Hermes, N. and R. Lensink (2003), "Foreign Direct Investment, Financial Development and Economic Growth," *Journal of Development Studies*, vol. 40(1), p. 142–163.

Li, X. and X. Liu (2005), "Foreign Direct Investment and Economic Growth: An Increasingly Endogenous Relationship," *World Development*, vol. 33(3), p. 393–407.

Ram, R. and K. H. Zhang (2002), "Foreign Direct Investment and Economic Growth: Evidence from Cross-Country Data for the 1990s," *Economic Development and Cultural Change*, vol. 51(1), p. 205–215.

The World Bank (2008), Global Economic Prospects: Technology Diffusion in the Developing World. Washington, DC: The World Bank.

APPENDIX

Table 1. List of Developing Countries Included in the Study

Income Group	Countries
Low-Income Countries	Bangladesh, Burundi, Central African Republic, Congo, Dem. Rep., Gambia, Ghana, Guinea-Bissau, Haiti, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Pakistan, Papua New Guinea, Senegal, Sierra Leone, Solomon Islands, Tanzania, Togo, Uganda, Vietnam, Zambia, and Zimbabwe.
Low-Middle-Income Countries	Algeria, Bolivia, Cameroon, China, Colombia, Congo, Rep. of, Dominican Republic, Ecuador, Egypt, El Salvador, Guatemala, Guyana, Honduras, India, Indonesia, Iran, Jordan, Kenya, Lesotho, Nicaragua, Paraguay, Peru, Philippines, Sri Lanka, Sudan, Swaziland, Syrian Arab Republic, Thailand, and Tunisia.
Upper-Middle-Income Countries	Argentina, Belize, Botswana, Brazil, Chile, Costa Rica, Dominica, Fiji, Jamaica, Libya, Malaysia, Mauritius, Mexico, Panama, Seychelles, South Africa, South Korea, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Turkey, Uruguay, and Venezuela.
High-Income Countries	Antigua and Barbuda, Bahrain, Barbados, Kuwait, Singapore, Trinidad and Tobago, and United Arab Emirates.

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MARKETING INTELLIGENCE: A SURVEY OF TOUR OPERATORS IN SOUTH AFRICA

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ABSTRACT

The continuous increase in South African tourism statistics render escalated business opportunities for tour operators, especially those who are in a position to make informed management decisions. This paper sets out to empirically research the accessibility tour operators have to marketing intelligence as a component of a marketing information system, and the importance tour operators place on an information system's ability to provide this type of information. An exhaustive review of existing academic literature directed the conceptualization of this pioneering research in South Africa. The foundation of this paper is information obtained through a pre-tested web-based self-completing questionnaire. One thousand tour operators in South Africa were invited to participate in this survey. Inferential statistics revealed that only 41.9% of tour operators in South Africa indicated that they do have marketing intelligence, although most do view this type of information as important. However, the results obtained cannot be generalized because it is unknown precisely how many tour operators there are in South Africa and additional research should include more sectors of tourism, as well as more countries for comparative purposes. Tour operators view it as important that an information system should be able to provide marketing intelligence. However, tour operators' existing information systems do not necessarily provide them with adequate marketing intelligence. Pragmatically, the recommendation is information system innovation.

JEL: M3; M31

KEYWORDS: marketing information system, marketing intelligence, tour operators, South Africa

INTRODUCTION

South Africa is experiencing a continuous increase in tourism and this, together with information technology development and increased global competition, places high decision-making demands on tour operators. Tour operators need superior marketing information to be able to survive, and to achieve and maintain a competitive advantage in today's global information-based society. Tour operators would be in a better position to manage their enterprises should they be able to make informed decisions. A research study was conducted by Wood (2001) and it was established that small enterprises (and this includes tour operators) in tourism "mainly concentrate on internal and immediate operating environment data". Gounaris, Panigyrakis and Chatzipanagiotou (2007) conducted research and stated that a tourism enterprise's functional effectiveness and adaptability to market conditions improve with the use of an information system. An exhaustive literature search did not yield any previous research conducted on South African tour operators and marketing intelligence. This paper focus on marketing intelligence as an input for management decision-making for tour operators and is based on pioneering research conducted in South Africa. One thousand tour operators received an invitation to participate and the results obtained revealed that 58.1% of the tour operators do not have access to marketing intelligence. Tour operators in South Africa view it as important that an information system should be able to provide marketing intelligence and this then leads to opportunities for information system innovation that would pragmatically contribute towards the prosperity of tourism enterprises in South Africa. This paper commences with a discussion of the purpose of the research, the methodology followed, as well as a

succinct overview of the literature applicable with an integrated presentation of the data obtained. This paper concludes with the inferences and recommendations made.

PURPOSE AND OBJECTIVES

The five sectors of tourism, and this embraces all enterprises involved in tourism (including tour operators), are globally highly competitive and dynamic in nature. The challenges that emanate from this environment are firstly, do tour operators in South Africa view it as important that their information systems should be able to provide them with marketing intelligence, and secondly, do they have access to marketing intelligence? The purpose of this paper was to investigate if tour operators do have marketing intelligence information so that they are knowledgeable about changes within their business environment. Furthermore, intelligence will enable tour operators to anticipate changes, as well as to determine the severity of these changes. Marketing intelligence would be advantages to tour operators' ability to manage their enterprises in a responsible and sustainable manner within today's incessant changing business environment.

METHODOLOGY

This study took the form of a systematic formal investigation and followed a descriptive research design. This study commenced with an intensive investigation of available and accessible secondary information sources to obtain and extract relevant secondary information needed for the purpose of this paper. An extension of this investigation was an exhaustive search for published and electronic information on tour operators and marketing intelligence. Information deficiency necessitated primary empirical research.

The research population (universe) was all tour operators in South Africa and the sample frame consisted of those tour operators whose e-mail address was obtainable from various published and electronic sources. The selection of sample units (respondents are representing the opinion of an enterprise) was a non-probability convenience sample because it is unknown how many tour operators there are in South Africa. It is not mandatory for tour operators to register their enterprises as such and up-to-date lists with contact details of all tour operators in South Africa are not available. The target sample size was 1 000 successful delivered e-mail invitations (the realized sample size) and sample drawing included all tour operations listed for the purpose of this study as possible sample units. The only parameter relevant was that sample units must have a current information system in use to be able to respond to the questions and a 42.5% completion rate realized.

The profile of tour operators in South Africa are as follows:

- 59.6% (n=131) of the tour operations do currently have an information system in use.
- 69.9% (n=153) of the tour operations operate in the international incoming tourism market.
- Tour operations are mostly enterprises with up to five staff members (61.4%, n=135).
- Tour operations have equally been in existence for up to five years and between five and ten years (31.0%, n=68 in both cases).

The research instrument utilized and managed online was a pre-tested web-based structured self-completing electronic questionnaire with accompanying electronic communications. Sample unites initially received a personalized e-mail inviting them to participate in the survey. The invitation e-mail contained a hyperlink activating the questionnaire and respondents were, when submitting the completed questionnaire, automatically directed to the 'Thank You' page. Sample units who did not respond to the first invitation received a reminder and a second and last reminder was dispatch to those sample units who not yet responded. The six sponsored prizes participants could win in a raffle draw are acknowledged as a contributing factor to the realized completion rate. The construction of the questionnaire included a

variety of question types: closed ended questions, open-ended questions, Likert scales with statements respondents had to respond to (ranging from strongly agree to strongly disagree and ranging from extremely important to extremely unimportant). Responses to closed-ended questions were directly captured into a database as responses were submitted. Further inferential statistics (cross tabulations, Chi-Square-based measures of association, MANOVA and ANOVA variance analysis and the Kruskal-Wallis test, Tukey's Studentized Range test and the practical statistical significance test) were conducted on the data. Responses to open-ended questions were grouped for data processing purposes.

INFORMATION TECHNOLOGY

The changing business and tourism environment in South Africa collectively epitomizes opportunities for tour operators, in both the domestic and international arena. Change places new demands on tour operators who unrelentingly need to innovate their offerings in an endeavor to satisfy demand for new tourism offerings (experiences). Tourism in South Africa is auspicious, and science, research, and tourism offering development petition for more attention and the allotment of applicable budgets, together with market and marketing research. Marketing intelligence would make a momentous contribution towards tour operators' endeavors to manage their enterprises more effectively, because tour operators will be knowledgeable about the effects of occurrences in the business environment within which they operate.

Tour operators are compelled to face the following omnipresent challenges: globalization; intense competition; more demanding consumers; national and international regulatory changes; and lastly, the continual advancement of technology. Managing and operating a tour operation is more intricate than ever before and a universal thread about these challenges is "the need for organizations to be flexible, adaptive and to continually reinvent themselves" because "if they don't they won't survive" (Skyrme, 2000). Marchand, Kettinger and Rollins (2000b) proclaimed the following: "what differentiate today's high-performing companies are the capabilities and behaviors associated with effective information use." This alone is adequate evidence of why tour operators should acknowledge the necessity of having access to marketing intelligence. Laudon and Laudon (2000; 2006) repeatedly state that information denotes an "important asset" which is expected to "rise above 50 percent of total private business investment". This implies that "information is a resource that can be managed" (Hinton, 2006). Marketing intelligence will in future be indispensable for the survival and success of tour operations within the prevailing and subsequent tourism business environment.

Tour operators may be of the opinion that their core business is tour operating and not information technology (IT). However, Marchand, Davenport and Dickson (2000a) unequivocally declared that "every business is an information business" and this includes tour operators. This constitutes a fundamental starting point and tour operators should integrate their business strategy with an information strategy because it is "intertwined with that of the other organizational functions" (Hinton, 2006) to ensure that the right information is available to those who need it. An increasingly complicated confluence is taking place, according to Curtis and Cobham (2006), between an enterprise's (tour operation) objectives, information technology and information systems. Gratzer, Werthner and Winiwater (2004) conducted research on electronic business in tourism and stated, "...companies need to adapt their strategies. The importance of information and communications technology (ICT), especially of the Internet in the travel and tourism industry, has increased tremendously over the past few years" because tour operators stand to gain "enormous synergy effects..." if they modify their ICT strategies. This is where a marketing information system (MkIS) that provides marketing intelligence would be an enormous benefit to a tour operator.

A tour operation and its daily functioning is an amalgamation of different components (departments) and tour operations as business enterprises are increasingly implementing information technology to assist

with marketing decision-making. Wright and Ashill (1998) concluded in a study conducted ten years ago that research, intelligence, computerized modeling and analysis systems as the only components are inadequate because this “takes too little account of the role of organization design methods and environmental contingencies in marketing information processing.” The conclusion made by Fesenmaier, O’Leary and Leppers (1999) after conducting a research study is that “an important problem with the current concept of the MIS [marketing information system] is that it lacks the means of knowledge building”. Their recommendation is that the analytical strengths of a MkIS should be integrated with the organizational knowledge creation process. Both the aforementioned findings tie in with research conducted by Daniel, Wilson and McDonald (2003). These authors advocate the development of a high-level process map of marketing as the basis of marketing information systems to enable the integration of marketing and information technology. The aforementioned suggests that the four components should be reconsidered before decision-makers (and this includes operators) could use a MkIS as a management tool for decision-making. Cant, Strydom, Jooste and Du Plessis (2006) adapted and refined the MkIS model to reflect the implementation of information technology into the marketing information system.

The model of an extensive MkIS proposed by Tustin, Ligthelm, Martins and Van Wyk (2005) corresponds only with the components of the ‘Developing Information’ section of the Kotler model. The model proposed by Kotler (1997) and Kotler, Bowen and Makens (1999; 2003; 2006) is preferred for the purpose of this paper because it is more comprehensive. The components of an extensive MkIS are: (1) internal records; (2) marketing intelligence; (3) marketing research; and (4) information analysis. The focus of this paper is on marketing intelligence for tour operators in South Africa. Numerous researchers conducted research and published articles on information technology (IT), information and communications technology (ICT), tourism, and tourism and IT and/or ICT. An exhaustive search of published material and electronic databases revealed a research gap as these sources did not yield previous studies that are applicable to tour operators and their marketing intelligence in South Africa.

MARKETING INTELLIGENCE

A marketing intelligence system, as described by Kotler (2000), Zikmund (2003) and Kotler et al. (2006), is a systematic system consisting of a network of sources and regular procedures used to obtain and analyze information about developments and nonrecurring occurrences in the external (market and macro) marketing environment. In other words, intelligence is “the interpretation given to the information through analysis” (Stokes, 2002) and a marketing intelligence system will enable tour operators to “better understand the interface between the environment and marketing activities.” The starting point of any effective planning system is environmental analysis and forecasting, because “strategy is based not only on a detailed understanding of the firm’s capacity, but also on a full knowledge and appreciation of environmental forces and changes that are likely to have an impact” (Wilson & Gilligan, 2005) on the tour operation.

Time dedicated to the proper organization of information flow is an investment for any tour operator - because of the importance of marketing intelligence for marketing decision-making. Ahituv, Zif and Machlin (1998) researched environmental scanning and information systems in relation to a business’ success in introducing new products, and the conclusion made was that “the differences are in the pattern and the frequency of conducting environmental scanning, in the number of computerized applications, and in the number of advanced marketing information systems.” It would be interesting to compare the results obtained if it would have been possible to conduct the same study amongst tour operators in South Africa today, compared to the results obtained ten years ago.

Eldon and McLeod (1993) found in their study of the Fortune 500 companies that “firms have not changed their marketing intelligence systems very much” since the 1980s, and this is “in spite of new options that are available, such as commercial databases of competitive data and database management

systems designed to handle information in a narrative form.” A later study conducted revealed that there is a need for effective market intelligence systems that incorporate comprehensive external environmental information to support strategic decision-making. The study revealed that 92% of the respondents in the USA felt that they needed a more systematic approach to computer intelligence whilst 75% of the respondents in a UK survey indicated their dissatisfaction with their current methods of organizing marketing intelligence (Marketing Intelligence Systems, 1999).

Tour operators ought to minimize the uncertainty that exists in their highly volatile environments in order to achieve responsiveness to occurrences in the market – by means of accurate and timely intelligence. The two contingencies, according to Diemers (2003), which will influence the performance of enterprises in future, are firstly, the evolution of Internet-based commerce and business; and secondly, the shift of negotiation and market power to consumers. This is especially applicable to the domain of tour operating, seeing that tourism takes place within turbulent environments where “a fast response capacity is critical” (Cats-Baril & Thompson, 1997), and this is still valid for enterprises in today’s business environment.

Tour operators ought to actuate their response to changes and be pre-emptive compared to their competitors. The two components to responsiveness are: firstly, being aware of change; and secondly, doing something about it. However, there is a propensity towards improving data collection pertaining to the marketing environment by means of environmental scanning techniques. Formal environmental scanning entails more than merely collecting environmental information. It is “the full spectrum of activities firms use in order to understand environmental changes and their implications” (Wilson & Gilligan, 2005) and “environmental scanning should be considered an ongoing part of the marketing process”, according to Kolb (2006). Using a marketing information system as a support tool will thus place a tour operator in an advantaged position, compared to those not using such a system.

A tour operator’s marketing intelligence system should enable a tour operator to be knowledgeable about the following subdivisions: the tourism industry; the tourism environment; the micro marketing environment; the market marketing environment; and lastly, the macro marketing environment.

Tour operators who participated in this survey were given the opportunity to indicate the importance they place on an information system’s ability to provide them with marketing intelligence. The options tour operators could select from ranged from extremely important to extremely unimportant. The results obtained revealed that tour operators view intelligence information about the micro marketing environment as the most important (82.7%), and this is followed by 79.6% for information about the market environment.

Further statistical tests, the results of the ANOVA tests are indicated in Table 1, did not reveal any statistically significant differences between the size of tour operations, the type of tour operations and the number of years tour operations have been in existence as determinants of the importance tour operators place on a marketing information system’s ability to provide marketing intelligence.

A delineation of these environments subsequently follows in terms of tour operating. However, a comprehensive explanation of every environment and all its factors falls outside the scope this paper and the focus of the following delineation is only on the significance of every subdivision applicable to tour operating.

Tourism industry

Tourism is dynamic and is predisposed to changes in the tourism industry. Changes influence not only tourists’ buying behavior but also the business environment within which tour operators have to function. Therefore, tour operators need to be knowledgeable about occurrences in the tourism industry. A statement was provided to tour operators who had to indicate if their current information systems do

provide them with marketing intelligence regarding the tourism industry. The options tour operators could select from ranged from strongly agree to strongly disagree.

Table 1: ANOVA: marketing intelligence *versus* participant profile

Marketing intelligence	Statistics	Size	Type	Years
Tourism industry	F	0.36	0.42	0.92
	p	0.7030	0.7400	0.4406
	KWp*	0.6713	0.7515	0.2616
Tourism environment	F	0.04	0.93	0.51
	p	0.9586	0.4330	0.6789
	KWp	0.9334	0.3933	0.6257
Micro environment	F	0.07	0.63	1.05
	p	0.9326	0.5969	0.3810
	KWp	0.8768	0.5658	0.1928
Market environment	F	0.23	0.62	0.59
	p	0.7943	0.6031	0.6252
	KWp	0.8209	0.5783	0.6610
Macro environment	F	2.66	1.69	2.38
	p	0.0797	0.1816	0.0818
	KWp	0.1375	0.1662	0.0646

*KWp - Kruskal-Wallis Test p

This table indicates that all ANOVA and Kruskal-Wallis Test p-values are >0.05 and these results are confirmed by the Hotelling-Lawley Trace test (size – p=0.0548; type – p=0.6503; years – p=0.2204). The p-value for size and the macro marketing environment is 0.080 and this is close to 0.05, although it is not a statistically significant difference.

Tour operators strongly agree and agree (55.4%) that their current information systems do provide them with marketing intelligence pertaining to occurrences in the tourism industry and there is concurrence with the importance tour operators place on an information system's ability to provide them with information about the tourism industry. Further statistical tests were conducted and the results of the ANOVA tests revealed that there were no statistically significant differences between the different sizes, types of tour operations or the number of years tour operations have been in existence (all p-values are >0.05) as determinants of whether tour operators' existing information systems do provide them with tourism industry-related intelligence. This is confirmed by the Kruskal-Wallis Test (all p values are >0.05). There is concurrence between these findings and the findings concerning the tourism industry as part of marketing intelligence.

Tourism Environment

The information tour operators need about the tourism environment is procurable through marketing intelligence. Tourism takes place within an environment and tourism cannot exist without the environment, especially the natural environment which in many instances is the reason for people going to destinations, for example mountainous areas and tropical islands. Any change in the environment could have a direct influence on a tour operator's offerings and tour packages.

Tour operators were provided with a related statement and had to indicate the importance they place on an information system's ability to provide intelligence about the tourism environment. The options tour operators could select from ranged from extremely important to extremely unimportant. The results obtained revealed that more tour operators view an information system's ability to provide intelligence about the tourism environment as extremely important and important (67.3%) than those taking a neutral and even negative stance (32.7%) in total whose selection ranged from neither important to extremely unimportant). Further statistical tests were conducted and the results of the ANOVA tests revealed that there are no statistically significant differences between the size of tour operations, the types of tour operations or the number of years tour operations have been in existence (all p-values are >0.05) as determinants of the importance tour operators place on an information system's ability to provide

intelligence about the tourism environment. This is confirmed by the Kruskal-Wallis Test results (all p values are >0.05). There is concurrence between these findings and the findings concerning information about the tourism environment as part of marketing intelligence.

Micro Marketing Environment

The micro (internal) marketing environment refers to the business organization itself (Cant et al., 2006). The information and systems in use here form part of the internal records component of a marketing information system. Most departments do have their own systems, for example a Human Resource Management System (HRMS) and interconnecting all these systems would significantly facilitate access to important and applicable intelligence as and when needed.

Tour operators had to indicate if their current information systems do provide them with intelligence about other departments, to enable them to be knowledgeable about how other departments will influence their decision-making. The results obtained revealed that only 31.0% ($0=3.09$, $z=1.10$) of tour operators strongly agree and agree that they have access to information pertaining to the internal marketing environment although a large percentage (68.4%, $0=1.32$, $z=0.47$) of the participating tour operators indicated that they are satisfied with their current information systems. Further statistical analysis did not reveal any statistically significant differences between the size of tour operations, the type of tour operations and the number of years tour operations have been in existence as determinants because all Chi-Square p-values are >0.05 , and this is confirmed by the Kruskal-Wallis Test p-values. The reasons why tour operators' information systems do not provide them with this type of intelligence should be further explored.

Two related but independent studies were conducted about the valuable role salespeople can play as marketing intelligence information gatherers. Liu and Comer (2006) recommend that salespeople ought to be trained in information retrieval whilst being motivated, supervised and supported by management (the tour operator). A study conducted by Le Bon and Merunka (2006) revealed that salespeople have a desire for upward mobility and also view "participation in decision-making" as motivational factors for gathering and transmitting marketing intelligence to management. Tour operators could only benefit by utilizing their salespeople and all staff, who form an integral part of the micro marketing environment, as information retrievers. Researching this source of marketing intelligence should be included in follow-up studies.

Market Environment

The market (external) environment, also referred to as the business environment, is an amalgamation of those factors close to the tour operation. These factors indisputably have an impact on a tour operation's capability to create value and rendering customer satisfaction (Kotler & Armstrong, 2004; Kotler et al., 2006). Tourism is an interlinked collective contribution of all five of the sectors and together it is what a tourist's perceptions and experiences are based on. This is where intelligence about the factors in this environment is of paramount importance to a tour operator and why a marketing information system is a valuable management tool. The five market environment factors are: competitors; consumers; intermediaries; publics; and lastly, suppliers. Five statements were provided and participating tour operators had to indicate if their marketing information systems do provide them with market environment-related intelligence.

Indicated in Table 2 are the results of further statistical tests that revealed that there are no statistically significant differences between the size of tour operations, the type of tour operation or the number of years tour operations have been in existence as determinants of the market environment-related intelligence tour operators obtain from their marketing information systems.

Table 2: ANOVA: marketing environment intelligence *versus* participant profile

Market environment	Statistics	Size	Type	Years
Competitors	F	1.10	0.10	1.09
	P	0.3401	0.9583	0.2869
	KWp	0.2963	0.8328	0.1767
Customers	F	0.04	0.87	0.41
	P	0.9625	0.4617	0.7450
	KWp	0.9925	0.5500	0.8215
Intermediaries	F	1.02	0.66	0.48
	P	0.3681	0.5791	0.6997
	KWp	0.2859	0.6281	0.6474
Publics	F	0.84	0.99	0.72
	P	0.4383	0.4038	0.5433
	KWp	0.3920	0.2750	0.4234
Suppliers	F	0.89	0.99	1.08
	P	0.4147	0.4045	0.3634
	KWp	0.3374	0.4025	0.3187

This table indicates that all ANOVA and Kruskal-Wallis Test *p*-values are >0.05 and these results are confirmed by the Hotelling-Lawley Trace test (size – $p=0.2434$; type – $p=0.8308$; years – $p=0.7712$).

There is concurrence between the findings above and the findings concerning information about the market environment factors as part of marketing intelligence. However, a comprehensive explanation of every factor falls outside the scope this paper and the focus of the following delineation is only on the significance of every factor applicable to tour operating.

Competitive intelligence is the systematic gathering and analyzing of information about competitors' activities and their general business trends. The aim of competitor intelligence is to “predict the likely future strategies of the [competitor] and, in particular, how these could impact” (Singer, 2000) upon the enterprise (tour operation). Competitor intelligence extend further than merely collecting information about established competitors, it also embraces prospective entrants and substitutes (Wensley, 2003). The encapsulated effectiveness of competitive intelligence is in the analysis of competitor information and making it useful, by means of intelligent agents and data mining, to a tour operator. Turban, McLean and Wetherbe (2004) proclaim that the Internet is an “important tool to support competitor intelligence” if web-based tools (‘e-spionage’ and ‘cyber sleuthing’), such as Rivalwatch.com, are used to interrogate competitor information placed on the web and Internet. Another form of competitor intelligence is industrial espionage - customarily perceive as unethical and generally illegal. The results obtained revealed that South African tour operators do not have sufficient intelligence about their competitors (39.7% indicated disagree) and this could have a negative impact on tour operators' ability to manage their enterprises.

Serving *consumers* is the reason for a tour operator's existence and they will keep a tour operator in business, provided their wants and needs are satisfied. Wilson and Gillian (2005) enunciate that tour operators should not “fall into the trap of believing that, because they deal with their customers on a day-to-day basis, they have a clear understanding of their needs and motivations.” Schultz et al. (as cited in by Yeshin, 2003) articulated the following: “Forget Product. Study Consumer wants and needs.” Consumer contact and relationship building is not enough, according to Bove (2003), who explains that consumers should be seen as co-producers (partial employees) by means of consumer participation. This is where tour operators ought to institute opportunities to engage their consumers in the form of intelligence and effort, because involvement produces quality outcomes. Tour operators should recurrently assess and reassess what their consumers really want, their levels of satisfaction and the need for new tourism offering development. This is where a tour operator should take consumer behavior and all its influencing factors (cultural, social, personal, and psychological) into consideration. A MkIS and marketing intelligence will be an indispensable management tool in this regard. The results obtained

revealed that South African tour operators do have access, although inadequate, to intelligence regarding their customers because 34.9% indicated that their marketing information systems do provide them with this type of intelligence. The low percentage is however a major concern.

Intermediaries/distributors concern all the important elements of the marketing channel contributing to making tourism offerings available and accessible to consumers. A decision pertaining to a tour operator's marketing channel systems "are among the most critical" seeing that selected channels "affect all other marketing decisions" (Kotler & Keller, 2006). Intermediaries include, for example, other tourism organizers (such as travel agencies) and the destination organization sector (such as destination marketing organizations). Also included as intermediaries are marketing services (Oldroyd, 2001), such as research and advertising agencies, the media and consultancies. Tour operators could utilize intermediaries in their endeavor to position their tourism offerings, and to establish powerful brand names, as well as obtaining a competitive advantage in the market. It is strongly recommended that tour operators create and maintain close relationships with intermediaries and involve intermediaries as participants, because "any changes to the way they [intermediaries] operate can be crucial" (Stokes, 2002) to a tour operator. Tour operators ought to take note of the following statement by Kotler and Armstrong (2004): "recognize the importance of working with....intermediaries as partners rather than simply as channels through which they sell their products." It should also be kept in mind that disintermediation can be brought about by e-Commerce and direct marketing (Drennan, 2003). Tour operators need to consider the impact this may have on the tour operation and their relationships/partnerships with intermediaries. Marketing intelligence is crucial in this regard. The results obtained revealed that South African tour operators do not have sufficient intelligence about their intermediaries (31.8% indicated neither agree nor disagree) and this could have a negative impact on tour operators' ability to manage their enterprises.

The market environment of a tour operation includes various *publics* (stakeholders) that have an actual or potential interest in or effect on the tour operation's ability to achieve its objectives (Oldroyd, 2001; Kotler & Armstrong, 2004). In other words, all those with whom a tour operation interacts and marketing intelligence concerning the publics will ensure that a tour operator is knowledgeable and empowered to effectively deal with publics (Oldroyd, 2001). Morrison (2002) identified twelve publics applicable to tourism-related organizations and a detailed discussion falls outside the scope of this paper. The results obtained revealed that South African tour operators do not have sufficient intelligence about their publics/stake holders (35.5% indicated disagree) and this could have a negative impact on tour operators' ability to manage their enterprises.

Suppliers provide resources and support and form an important connection in a tour operator's overall consumer delivery system. Two important supplier-related facets tour operators constantly ought to monitor are supply availability and supply costs (Kotler & Armstrong, 2004). These will have a direct bearing on the business operations of a tour operator. Current and potential suppliers in today's volatile tourism and marketing environment ought to be drawn in as partners in creating and delivering value to consumers. Tour operators should identify suppliers that will add value and complement their tourism offerings. Tour operators then need to monitor these relationships unremittingly, and information is required for this purpose. Marketing intelligence is consequently of incalculable value to a tour operator. The results obtained revealed that South African tour operators do have access, although inadequate, to intelligence regarding their suppliers because only 30.7% indicated that their marketing information systems do provide them with this type of intelligence. The low percentage is however a major concern.

Macro Marketing Environment

The macro (external) marketing environment is a composition of larger societal forces which influence the micro and market environments of a tour operation (Kotler & Armstrong, 2004). These forces are

globally ever present and tour operators should consider it unremittingly. These forces influence a tour operation in terms of opportunities and threats. These forces can be influenced by the collective bargaining power (lobbying) of tour operators and related associations in South Africa. However, these forces do not necessarily have a direct impact on the day-to-day operations of a tour operation but they are “extremely important in shaping the competitive situation and the actions and perceptions of relevant stakeholders” (Oldroyd, 2001). Tour operators ought to be knowledgeable about altering circumstances in the macro marketing environment in order to transform their enterprises, being it transforming the organization of the tour operation, its management style and/or its tourism offerings. The macro marketing environment extends into the broader sphere (and this includes tourism), the bigger societal environment, and also as far as the global marketplace. The challenge for all tour operators in South Africa is to manage their enterprises within this future environment. A sophisticated marketing information system which incorporates intelligence about the macro marketing environmental forces will enable tour operators to accept this challenge.

The macro marketing environment of tour operators consist of: demographic forces; economic forces; legal and political forces; the natural environment; social and cultural forces; and lastly technological development. Tour operators who participated in this survey were given six statements relating to the macro marketing environmental forces and had to indicate the importance they place on an information system’s ability to provide intelligence about these forces. The options tour operators could select from ranged from extremely important to extremely unimportant. The results obtained revealed that tour operators in South Africa view intelligence regarding all six forces as important. There is concurrence between the findings above and the findings concerning information about the macro environment forces as part of marketing intelligence. The data obtained was subjected to further statistical tests and the results are indicated in Table 3.

Table 3: ANOVA: macro environment intelligence *versus* participant profile

Macro marketing environment	Size			Type			Years		
	F	p	KWp	F	p	KWp	F	p	KWp
Demographic	1.48	0.2372	0.3035	1.71	0.1786	0.1491	1.24	0.3051	0.2960
Economic	1.61	0.2105	0.3517	1.57	0.2093	0.1605	1.21	0.3174	0.2945
Legal/political	5.58	0.0065	0.0395	1.40	0.2549	0.2317	3.97	0.0133	0.0182
Natural factors	3.32	0.0446	0.1597	1.52	0.2220	0.1388	3.12	0.0350	0.0302
Social/cultural	3.20	0.0496	0.1707	1.98	0.1301	0.0813	2.36	0.0839	0.0891
Technological	0.53	0.5393	0.8282	3.23	0.0311	0.0232	2.69	0.0578	0.0814

This table indicates that there are statistically significant differences ($p < 0.05$). There are three related differences to the size of tour operations (legal/political, natural factors and social/cultural), one related difference to the type of tour operation (technology) and two related differences to the number of years tour operations have been in existence (legal/political and natural factors).

The statistically significant differences indicated in Table 3 will now be further elaborated to indicate where precisely the statistically significant differences are.

Statistical tests were conducted to determine exactly where the statistically significant differences are regarding the *size* of tour operations and legal/political, natural factors and also social and cultural factors. The Tukey’s Studentized Range Test revealed the following:

- The statistically significant difference between the size of a tour operation and intelligence about legal and political forces lies between small and large tour operations. Small tour operations (those with up to five staff members) view this type of intelligence as more important ($0=1.9411$) than larger tour operations ($0=3.1000$), those who have eleven and more staff members. The practical statistically significance test also revealed that small tour operations view this type of intelligence as more important than larger tour operations.
- The statistically significant difference between the size of a tour operation and intelligence about natural factors lies between small and large tour operations. Small tour operations view this type of

intelligence as more important ($0=1.9696$) than larger tour operations ($0=2.9000$). The practical statistically significance test also revealed that small tour operations view this type of intelligence as more important than larger tour operations.

- The statistically significant difference between the size of a tour operation and intelligence about social and cultural factors lies between small and large tour operations. Small tour operations view this type of intelligence as more important ($0=2.0000$) than larger tour operations ($0=2.9000$). The practical statistically significance test also revealed that small tour operations view this type of intelligence as more important than larger tour operations.

Statistical tests were conducted to determine exactly where the statistically significant differences are regarding the *type* of tour operations and technological changes. The Tukey's Studentized Range Test and the practical statistically significance difference test did not indicate that there are statistically significant difference between the type of tour operation and intelligence about technological development. It is thus concluded that all types of tour operations (domestic, incoming, outgoing and other) view intelligence about technological developments as more important than unimportant (0 for all the groups range from 1.5000 to 2.4550).

Statistical tests were conducted to determine exactly where the statistically significant differences are regarding the *years* tour operations have been in existence and legal/political forces and natural factors. The Tukey's Studentized Range Test revealed the following:

- The statistically significant difference between the number of years in existence and intelligence about legal and political forces lie between the following groups: firstly, tour operations that have been in existence for 6 to 10 years view intelligence about legal and political forces as more important ($0=2.0000$) in comparison to those who have been in existence for 11 to 15 years; and secondly, tour operations that have been in existence for up to 5 years view intelligence about legal and political forces as more important ($0=1.7333$) in comparison to those who have been in existence for 11 to 15 years. These findings are confirmed by the practical statistically significance test.
- The statistically significant difference between the number of years in existence and intelligence about natural factors lie between the following groups: firstly, tour operations that have been in existence for up to 5 years and between 6 and 10 years view intelligence about natural factors as more important ($0=2.000$) in comparison to those who have been in existence for 11 to 15 years ($0=3.125$). These findings are confirmed by the practical statistically significance test.

The above results indicate that smaller tour operations view macro marketing intelligence as more important and a reason for this could be that young upcoming tour operators still need to establish their information and intelligence sources and systems whilst bigger and older tour operations are already established. A comprehensive explanation of every force falls outside the scope this paper and the focus of the following delineation is only on the significance of every macro marketing environment force applicable to tour operating.

Tour operators need intelligence concerning the *demographic forces* because the size, structure and trends of a population exert the greatest influence on demand (Wilson & Gilligan, 2005). This type of intelligence will place a tour operator in a position to recognize any demographic change and trends that may influence their segmentation and niche marketing (Middleton & Clark, 2001). Demographics also form constraints within which consumers' motivations and buying behavior take place. Tour operators ought to be selective in this regard and should be knowledgeable about the populations in their generating markets, being it South Africa for domestic tourism offerings or any other country for incoming tour operators who specialize in those markets. Being aware of demographic trends in various global markets could reveal potential business opportunities and threats that need to be taken into consideration for

strategic planning. The results obtained revealed that 50.0% of the tour operators in South Africa view it as extremely important and important that a MkIS should be able to provide them with demographic intelligence. This is a major concern seeing that demographics is an important influence on and indicator of a tour operator's market and further research is needed in this regard.

The *economy* is a complex system and tour operators should strive to master the diagnosis of existing economic situations, domestically and internationally, in order to anticipate the direction of policy changes and to obtain a considerable edge over competitors (Oldroyd, 2001). Economic performance is measured by gross domestic product (GDP) and purchasing power parity (PPP). Knowledge about these measures will facilitate the comparison of one market/country's viability with another (Mullins, Walker, Boyed & Larréché, 2005). Consumers' purchasing power depends on current income, prices, savings, debt and also credit availability (Kotler, 2000). Various economic indicators can be used to monitor the economy, for example the economic growth rate, the inflation rate, the unemployment rate, the exchange rate and the interest rate. This necessitates close monitoring of major economic-related trends for decision-making, should such changes possibly exert influences on a tour operation. The results obtained revealed that 63.5% of the tour operators in South Africa view it as extremely important and important that a MkIS should be able to provide them with economy-related intelligence.

Legal and political forces are needed to "protect innovators of new technology, the interests of society in general, one business from another and consumers" (Lamb, Hair & McDaniel, 2006). Tour operators should relentlessly be updated about any legislation and/or regulations regulating their enterprises, and this also includes pressure groups. Tour operators should concern themselves not only with existing legislation but should also be aware of the ways it is expected to develop and how this would influence the tour operation and its marketing practices. An example is the Tourism Scorecard which was introduced to monitor black economic empowerment (BEE) in South Africa. The results obtained revealed that 69.2% of the tour operators in South Africa view it as extremely important and important that a MkIS should be able to provide them with economy-related intelligence.

The *natural environment* has "largely been ignored as a management and marketing issue" (Peattie & Charter, 2003) and out of this apprehension developed 'green marketing'. The natural environment embrace limited natural resources necessary to operate a tour operation. This includes natural/physical resources needed such as: forests, clean beaches, pristine streams, wildlife and clean air (Kotler et al., 2006). Cant et al. (2006) also include any harmful effects an enterprise may have on communities and this is specifically relevant to tourism. Carey and Gountas (1997) examined the influence of tour operators on the long term sustainability of destinations as tour operators are one of the major influences on the nature of tourism demand and instrumental in determining trends. These authors recommend that "sustainable tourism is dependent on the effective cooperation of all stakeholders in the [tourism] industry". The results obtained revealed that 66.7% of the tour operators in South Africa view it as extremely important and important that a MkIS should be able to provide them with natural environment intelligence.

Social marketing refers to the application of marketing not only to influence the behavior of an individual but "also the broader social, cultural, structural and policy influences on health and social behavior" (MacFadyen, Stead & Hastings, 2003). The society within which consumers find themselves shapes their beliefs, values and norms and as society changes so do consumers "seek self-fulfillment and immediate gratification" (Kotler, 2000). This can be achieved by providing the 'right' tourism offerings and tour operators should take core cultural values, subcultures and shifts of secondary cultural values into consideration when planning strategically, because this will influence the development of tourism offerings and the marketing thereof. The results obtained revealed that 66.7% of the tour operators in South Africa view it as extremely important and important that a MkIS should be able to provide them with social-related intelligence.

Kotler (2000) postulates that one of the “most dramatic forces shaping people’s lives is technology.” For tour operators, changes and developments in *technology* mean “attractive new markets” and it have “a profound impact on all aspects of marketing practice” (Mullins et al., 2005), or as Kurtz and Boone (2006) said: it “continuously revolutionize marketing.” Tour operators should monitor the pace of technological change; opportunities for innovation, varying budgets allocated for research and development and also increased regulation regarding technology (such as international air transportation). This all influences tourism, tourism offerings and the development thereof. The results obtained revealed that 70.0% of the tour operators in South Africa view it as extremely important and important that a MkIS should be able to provide them with technology intelligence.

The above discussion of the marketing environment emphasizes the importance of an environmental intelligence and scanning system that feeds into a marketing information system. It is only after a tour operator has meticulously considered every marketing environmental factor, its magnitude and influences on the tour operation, that intelligence obtained can contribute towards the MkIS and make it a valuable management tool for tour operators. Gounaris et al. (2007) conducted research on the effectiveness of marketing information systems and stated that “...the use of IT-based MkIS is improvements in the reporting system. Information processing becomes faster and the company’s management is able to relate pertinent information from different sources within the organization” which would otherwise “...be almost impossible to bring together in a meaningfully and integrated fashion”.

INFERENCES AND RECOMMENDATIONS

The majority of the tour operators (68.4%) in South Africa indicated that they are satisfied with their current information systems and it is evident that information systems do not provide tour operators with the information and intelligence they need for management decision-making. Possible reasons for this could be: tour operators do not have the necessary knowledge and/or know-how of how to obtain information and intelligence from their current information systems; tour operators do not have the necessary and correct software programs to be able to obtain the information and intelligence; and lastly, tour operators are not satisfied with the information they presently obtain from their current information systems. These are all possible areas for follow-up research, mainly to find reasons for this situation and this could result in information system innovation.

Only 41.9% of the tour operators indicated that their information systems do provide them with adequate marketing intelligence-related information whilst most of the tour operators indicated that it is important that an information system should be able to provide this type of information – this signify a noticeable research and innovation opportunity that should be further explored.

Word processing programs (a spreadsheet on a personal computer) as type of software used received the highest number of indications and this type of software used could explain the reason why tour operators do not have access to marketing intelligence. This then reveals a substantial opportunity for information system development for tour operators and the specific reasons should be further explored.

It is recommended that tour operators establish their information and intelligence needs before considering software programs. Tour operators should familiarize themselves with the types of software programs available, as well as the abilities and capabilities of software programs before acquiring such programs. However, this calls for large capital investment and technical knowledge, and it is recommended that an innovated information system operating from a central location on a national basis should be investigated.

CONCLUSION

The main purpose of this paper was twofold: to establish if tour operators view a marketing information system's ability to provide marketing intelligence as important and do tour operators have access to this type of information. The importance of realizing the purpose lies encapsulated in identifying opportunities for information system innovation and system development to the benefit of not only tour operators but tourism as an industry in South Africa. This paper revealed that tour operators view it as important that a MkIS should be able to provide marketing intelligence, although their current information systems do not provide them with adequate marketing intelligence. The literature included in this paper emphasizes the importance of marketing intelligence and this can only be achieved once tour operators do have a MkIS providing them with marketing intelligence.

Based on the revelations of this paper, the conclusion can be made that South African tour operators' current information systems need to be revised because tour operators are not provided with the marketing intelligence needed. The managerial implication is that tour operators would be in a better position to manage their enterprises should they be able to make informed decisions.

The main limitations of this study are: this is the first time that such a study was undertaken in South Africa and this resulted in limited information being available; compiling the sample frame that yielded the realized sample size posed various challenges; and lastly, it is impossible to cover all aspects of marketing intelligence in one survey and this study forms the platform from which various other studies can develop and build on the foundation that was laid down.

Researching marketing intelligence for tour operators in South Africa yielded various other research possibilities and the hope is expressed that these opportunities will initiate further research, especially the possibility of establishing an information system that operates from a central location on a national basis in South Africa, and possibly sub-Saharan Africa.

REFERENCES

- Ahituv, N., Zif, J. & Machlin, I. (1998). Environmental scanning and information systems in relation to success in introducing new products. *Information and Management*, 33(4). Retrieved April 4, 2007, from <http://www.sciencedirect.com>.
- Bove, L. (2003). Service delivery: the role of personnel and customers. In J.R. McColl-Kennedy (Ed.), *Services marketing: a managerial approach* (pp. 296-329). Queensland: Wiley.
- Cant, M.C., Strydom, J.W., Jooste, C.J. & Du Plessis, P.J. (Eds.). (2006). *Marketing Management* (5th ed.). Cape Town: Juta.
- Carey, S. & Gountas, Y. (1997). Tour operators and destination sustainability. *Tourism Management*, 18(7). Retrieved April 4, 2007, from <http://www.sciencedirect.com>.
- Cats-Baril, W.L. & Thompson, R.L. (1997). *Information technology and management*. Chicago: Irwin.
- Curtis, G. & Cobham, D. (2006). Strategy and information systems. In M. Hinton (Ed.), *Introducing information management: the business approach* (pp. 153-177). Amsterdam: Elsevier.
- Daniel, E., Wilson, H. & McDonald, M. (2003). Towards a map of marketing information systems: an inductive study. *European Journal of Marketing*, 37(5/6). Retrieved March 1, 2006, from <http://www.emeraldinsight.com>.

- Diemers, D. (2003). Virtual knowledge communities and the issue of information quality. In A.J. Beerli, S. Falk & D. Diemers (Eds.), *Knowledge management and networked environments* (pp. 157-177). New York: Amacom.
- Drennan, J. (2003). E-services. In J.R. McColl-Kennedy (Ed.), *Services marketing: a managerial approach* (pp. 358-390). Queensland: Wiley.
- Eldon, L.Y. & McLeod, R. (1993). Marketing information systems in the Fortune 500 companies: past, present, and future. *Journal of Management Information Systems*, 10(1), Summer. Retrieved May 21, 2001, from <http://www.ehostvgw10.epnet.com>.
- Fesenmaier, D., O'Leary, J. & Leppers, A.W. (1999). Developing a knowledge-based tourism marketing information system. *Information Technology and Tourism*, 2(1), March 1. Retrieved May 4, 2004, from <http://www.itt.ec3>.
- Gounaris, S.P., Panigyrakis, G.G. & Chatzipanagiotou, K.C. (2007). Measuring the effectiveness of marketing information systems: an empirically validated instrument. *Marketing Intelligence and Planning*, 25(6). Retrieved August 12, 2008, from <http://www.emeraldinsight.com>.
- Gratzer, M., Werthner, H. & Winiwater, W. (2004). Electronic business in tourism. *International Journal of Electronic Business*, 2(5). Retrieved August 21, 2008, from <http://inderscience.metapress.com>.
- Hinton, M. (Ed.). (2006). *Introducing information management: the business approach*. Amsterdam: Elsevier.
- Kolb, B.M. (2006). *Tourism marketing for cities and towns: using branding and events to attract tourists*. Amsterdam: Elsevier.
- Kotler, P. (1997). *Marketing management: analysis, planning, implementation, and control* (9th ed.). New Jersey: Prentice Hall.
- Kotler, P. (2000). *Marketing management* (Millennium ed.). New Jersey: Prentice Hall.
- Kotler, P. & Armstrong, G. (2004). *Principles of marketing* (10th ed.). New Jersey: Pearson.
- Kotler, P., Bowen, J.T. & Makens, J.C. (1999). *Marketing for hospitality and tourism* (2nd ed.). Upper Saddle River: Prentice-Hall.
- Kotler, P., Bowen, J.T. & Makens, J.C. (2003). *Marketing for hospitality and tourism* (3rd ed.). Upper Saddle River: Prentice-Hall.
- Kotler, P., Bowen, J.T. & Makens, J.C. (2006). *Marketing for hospitality and tourism* (4th ed.). Upper Saddle River: Prentice-Hall.
- Kotler, P. & Keller, K.L. (2006). *Marketing management* (12th ed.). New Jersey: Pearson.
- Kurtz, D.L. & Boone, L.E. (2006). *Principles of marketing* (12th ed.). Mason: Thomson.
- Lamb, C.W., Hair, J.F. & McDaniel, C. (2006). *Essentials of marketing*. Mason: Thomson.

Laudon, K.C. & Laudon, J.P. (2000). *Management information systems: organization and technology in the networked enterprise* (6th ed.). London: Prentice Hall.

Laudon, K.C. & Laudon, J.P. (2006) *Management information systems: managing the digital firm* (9th ed.). New Jersey: Prentice Hall.

Le Bon, J. & Merunka, D. (2006). The impact of individual and managerial factors on salespeople's contribution to marketing intelligence activities. *International Journal of Research in Marketing*, 23(4), December. Retrieved April 4, 2007, from <http://www.science direct.com>.

Liu, S.S. & Comer, L.B. (2006). Salespeople as information gatherers: associated success factors. *Industrial Marketing Management*, May, 23. Retrieved April 4, 2007, from <http://www.sciencedirect.com>.

MacFadyen, L., Stead, M. & Hastings, G. (2003). Social marketing. In M.J. Baker (Ed.), *The marketing book* (pp. 694-725) (5th ed.). Oxford: Butterworth.

Marchand, D.A., Davenport, T.H. & Dickson, T. (2000a). *Mastering information management*. London: Prentice Hall.

Marchand, D.A., Kettinger, W. & Rollins, J.D (2000b) Company performance and IM: the view from the top. In D.A. Marchand & T.H. Davenport (Eds.), *Mastering information management* (pp. 10-16). London: Financial Times Prentice Hall.

Marketing Intelligence Systems. (1999). *David Skyrme Associates, Insight Number 9*. Retrieved November 11, 2003, from <http://www.skyrme.com>.

Middleton, V.T.C., & Clark, J. (2001). *Marketing in travel and tourism* (3rd ed.). Oxford: Butterworth-Heinemann.

Morrison, A.M. (2002). *Hospitality and travel marketing* (3rd ed.). New York: Delmar.

Mullins, J.W., Walker, O.C., Boyed, H.W. & Larréché, J. (2005). *Marketing management: a strategic decision-making approach* (5th ed.). Boston: McGraw-Hill.

Oldroyd, M. (2001). *Marketing environment: 2001-2002*. The Chartered Institute of Marketing. Oxford: Butterworth.

Peattie, K. & Charter, M. (2003). Green marketing. In M.J. Baker (Ed.), *The marketing book* (pp. 726-756) (5th ed.). Oxford: Butterworth.

Singer, A.E. (2000). Management information systems (MIS). In M. Zeleny (Ed.), *The IEBM handbook of information technology in business* (pp. 179-199). Cornwall: Thomson.

Skyrme, D.J (2000) "Knowledge networking: creating the collaborative enterprise" Oxford: Butterworth.

Stokes, D. (2002). *Marketing* (3 rd ed.). London: Thomson.

Turban, E., McLean, E. & Wetherbe, J. (2004). *Information technology for management: transforming organizations in the digital economy* (4th ed.). New Jersey: Wiley.

Tustin, H., Ligthelm, A.A., Martins, J.H., & Van Wyk, H de J. (2005). *Marketing research in practice*. Pretoria: Unisa Press.

Wensley, R. (2003). The basics of marketing strategy. In M.J. Baker (Ed.), *The marketing book* (pp. 53-86) (5th ed.). Oxford: Butterworth.

Wilson, R.M.S. & Gillian, C. (2005). *Strategic marketing management: planning, implementation and control* (3rd ed.). Amsterdam: Elsevier.

Wood, E. (2001). Marketing information systems in tourism and hospitality small- and medium-sized enterprises: a study of Internet use for marketing intelligence. *International Journal of Tourism Research*, 3(4), May 9. Retrieved February 5, 2009, from <http://www3.interscience.wiley.com>.

Wright, M. & Ashill, N. (1998). A contingency model of marketing information. *European Journal of Marketing*, 32(1/2). Retrieved March 1, 2006, from <http://www.emeraldinsight.com>.

Yeshin, T. (2003). The integration of marketing communications. In M.J. Baker (Ed.), *The marketing book* (pp. 395-418) (5th ed.). Oxford: Butterworth.

Zikmund, W.G. (2003). *Exploring marketing research*. Mason: Thompson South-Western.

EXAMINATION OF MULTICULTURAL/DIVERSITY CONCENTRATION FOR THE MASTER OF HUMAN RESOURCES AND ORGANIZATIONAL DEVELOPMENT DEGREE: EQUIPPING FUTURE PROFESSIONAL TO THINK CRITICALLY ABOUT MULTIFACETED ORGANIZATIONAL ISSUES OF DIVERSITY IN THE WORKPLACE

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ABSTRACT

An urgent need exists for organizations operating in the global marketplace to hire and retain professionals prepared to think critically about multifaceted diversity issues in the workplace. Where do organizations find managers and supervisors equipped to handle the multifaceted issues of diversity facing global firms? Unfortunately, it seems that they cannot rely on business schools. How can business schools assist future executives and managers to develop diversity competencies necessary to compete in the global marketplace? This paper will explore diversity from an organizational and educational context, looking at the concept of diversity and exploring the value of teaching a diversity curriculum.

KEY WORDS: Diversity competencies, organic diversity, global marketplace, global organizations

INTRODUCTION

According to Iowa State University's college of liberal arts and science, diversity is being able to appreciate the differences in cultures, humanity and having respect for experiences that are unlike the ones we know (2009). If we are to understand diversity and the differences of culture, we need to begin with an exploration of that understanding.

Defining The Term Culturally Diverse

When we refer to the term culturally diverse we are referring to the qualities that make a person unique. Author Ricardo Garcia (1998), states that frequently diversity is thought of as something that deviates from the norm. If we define ourselves and cultural as normal, that the danger is every other cultural is not normal. We need to come to terms with being unique or different, isn't being abnormal according to Garcia (1998). Trying not to define normal but to understand others is the first step in beginning to open up the dialog for diversity. Education is the next step in valuing diversity.

It would be arrogant to think that only one way or one culture is right, yet some educational perspectives have supported that view. Paul L. Locatelli (2002, p.1), states, "We have to understand how our lives are vitally linked to Earth and all who live on it." The implication is that we have a global responsibility to comprehending the differences that make us unique on this planet. Appreciating differences and recognizing that in education will help in assuring that all of can function in a global world is critical.

The Concept of Multicultural Education

The concept of multicultural education has been around since the sixties. In his book *Education in a Multicultural Society*, Fred Rodriguez (1983, p.3) states, “multicultural education recognizes cultural diversity as a fact of life in American society, and it affirms that this cultural diversity is a valuable resource that should be preserved and extended.” What is significant about Rodriguez’ statement is that cultural diversity is viewed as a precious resource. The benefit of multicultural education is developing and preserving that resource to be used to the greater good off all of us.

Issues in Multicultural Education

The need for multicultural education is more relevant that ever According to Haskins and Kirk-Sanchez (2006), the ethnic minority population has increased tremendously over the last ten years. Latino and Asian groups make up the highest concentrations of the changing demographics (Haskins & Kirk-Sanchez, 2006). According to Barbara Bowman (1994), educational performance differences appear early in children from diverse backgrounds.

Education should provide a competitive edge for student to be able to compete in the global marketplace. According to James Ward (1992), there is an economic impact in how we respond to the demographic changes that indicate increasing populous of Hispanic, African American, and immigrants into our educational system and society. If we fail to respond from an appropriate educational standpoint, there will be a financial implication and well as a societal implication. According to Rodriguez (1983), the multicultural movement has not been well defined or understood. Author Christine Clark (2003), believes that multicultural organizational development is essential piece to making multicultural education work.

According to Jost, Whitfield and Jost (2005), there is a crisis situation that has resulted from the problem of unequal educational opportunities. We are a distance away from true multicultural education and the concept of equal education for all. The main issues of inequality in education have to do with race, social status and the school curriculum itself (Jost, Whitfield and Jost, 2005). The goal to achieve multicultural diversity is acceptance, respect and understanding of what makes us unique, and to value those differences. According to Guang-Lea Lee (2002), one challenge is in creating an educational environment that promotes respect for diversity.

While the subject of education and diversity in a global environment sounds like a worthy cause, it is also perceived as our duty to do so. Author Rosa Hernandez Sheets (2003), states that multicultural education is a responsibility to our children. According to Garcia (1998), we have a responsibility to the global cause to recognize that education must cross cultural barriers.

Most educators agree that they would like to reach the goal of having a diverse multicultural curriculum that would bring the student together. Some are saying the problem of not achieving equal education and the lack of effective diversity education is because of the teachers themselves. According to According to Jost, Whitfield and Jost (2005), teachers often do not have the background, knowledge or historical reference of the various cultures to fix the inequities.

Education has a key role and a responsibility in creating a multicultural society. According to Garcia (1998), cultural self-identity development is formed in the educational environment. This is the reason that a program that embraces and teaches cultural diversity in an effective way is so important. Garcia (1998) believes that there is a problem of elitism that affects curriculum in the schools.

Elitism is not intentional, but a by-product of the way teachers were trained as well as their own biases. Being able to openly address the problem and work together to improve it is what is important going forward. Embracing diversity needs to start with education.

DIVERSITY EDUCATION IN BUSINESS SCHOOLS

How do executives and managers develop diversity competencies if their company is not providing opportunities beyond training aimed at eliminating bias or eliminating reliance on stereotypes? Unfortunately, they cannot rely on business schools either. Not surprisingly, business school curricula are filled with classes on finance, management, accounting, and leadership. Some of those schools also contain concentrations on so-called soft skills such as human resources and communications.

Of the 28 universities in California accredited by the Association for the Advancement of Collegiate Schools of Business that offer undergraduate degrees in business and/or management none include diversity as a concentration or area of specialty, only nine include a course in diversity, none offer more than course.

If California is any indication, diversity is not a skill that is being widely taught in business schools. California is the most diverse state in the United States. If any state would be home to business schools with a strong emphasis on teaching diversity skills, it would appear to be California.

This omission is not explained by the fact that diversity is a soft skill; communication is a soft skill and at least 20 of those same business schools offer a course in communication. Nor is this explained by the fact that diversity is people-oriented; almost all of those schools offer at least once course in human resources management and nearly half offer a concentration in human resources.

Is the lack of diversity concentrations and courses in business schools due to the fact that executives don't value diversity enough? That may be a partial explanation. When diversity is little more than sensitivity training or a defense to discrimination lawsuits, diversity is not being fully valued. But the actions and comments of some Fortune 500 companies *seem* to indicate that diversity *is* valued.

Does Business Value Diversity in Higher Education

Twenty of America's largest and best-known corporations filed a legal brief strongly supporting the University of Michigan in a lawsuit challenging its admissions policies. The brief argued that diversity in higher education plays a critical role in preparing students to be leaders in business and other pursuits that affect the public interest.

The brief stated that racial and ethnic diversity in institutions of higher education is vital to the corporations' efforts to hire and maintain an effective workforce. A diverse learning environment in colleges and universities promote the development of a highly skilled, diverse workforce prepared for the opportunities presented by a global economy, said the friends of the court brief.

"Steelcase's success as a global company is dependent on our ability to hire people who have experience in and are knowledgeable about working in a diverse environment with diverse ideas and with people from all walks of life. Without a strong commitment to diversity from the world's leading academic institutions, it will become more and more difficult for multi-national corporations to compete at the global level," said James Hackett, CEO of Steelcase.

But do people develop diversity competencies, as Mr. Hackett suggests simply by being in a diverse environment?

In addition to a strong commitment from academic institutions, the proponents of diversity point to published research that indicates a correlation between a company's commitment to diversity and a positive influence on its bottom line.

However, a more detailed look at the research indicates the results are more mixed. There are some companies who make a commitment to diversity who do not see any positive impact on their bottom line. Other companies do. What is the difference?

Research suggests that companies who take an approach to diversity that values all differences (differentiation) and those companies that take a "we are all the same" approach (assimilation) do not see a positive impact to their bottom line. Those companies who combine the two approaches (integration) do see an impact on the bottom line.

Among other things, what this research demonstrates is that leveraging diversity is a skill set and it is a skill set that must be acquired. If it is not acquired through one-day seminars, then how is it acquired? Companies spend an estimated \$8 *billion* dollars on diversity training.

But there is an alternative; if as the amicus brief in the University of Michigan case suggests, the corporate world depends on academic institutions to supply it with qualified people, then business schools are also in a position to provide corporations with the people it needs to leverage diversity into a positive impact on the bottom line.

An article on the CNN website recounted how businesses are looking to business schools to fill their need for expertise in the use of business intelligence. Similarly, businesses looking to improve the return on their diversity investment could do worse than to look to business schools to produce executives and managers who have the knowledge and skill to leverage diversity.

Do Business Schools Offer Diversity Curriculum?

The problem is few business schools have anything to offer. As recounted above none of California's accredited by the AACSB offer a diversity concentration. Of the hundreds of classes total taught by those 28 universities only nine of those classes teach diversity.

And what should those universities offer as it relates to diversity? The literature on diversity consistently identifies three areas where leveraging diversity provides value – diversity helps companies compete in the global marketplace for high performing talent; diversity helps a company market and sell to an increasingly diverse customer base, and diversity increases the collective idea generation and problem solving abilities of teams.

A business school concentration in diversity should strive to develop managers who can be successful in those areas.

An on-line course offered by Cornell University also offers some guidance. Its course description begins as follows:

"The management of diversity and inclusion has evolved from handling day-to-day compliance issues to leveraging diversity for competitive advantage. Organizations that no longer see diversity as a legal or moral requirement, but as a competitive advantage, have an opportunity to improve performance at the financial, employee, customer, and community levels.

Diversity and inclusion practices must be embedded in an organizational culture to make a

positive impact on performance. This course summarizes the evolution of diversity and inclusion management; outlines key management practices for improving performance, contextualizes diversity in terms of current challenges, and provides direct linkages between diversity and the bottom line at the organizational and functional levels.”

EXPLORATION OF MULTICULTURAL/DIVERSITY CONCENTRATION

In order to meet the needs of companies, a business school concentration would focus on recruitment, sales and marketing, and improved team performance. However, any course or concentration should start with a basic understanding of diversity. As one author said, “diversity does deliver bottom-line benefits for some companies – but only if there’s an organizational culture that explicitly acknowledges differences and encourages people to bring all relevant insights and perspectives to their work.”

A diversity concentration would contain the following types of courses:

- To help managers understand diversity and improve team performance -Managing in a Multi-Cultural Environment
- To help managers compete for talent in an increasingly diverse candidate pool -Recruiting and Retaining a Diverse Workforce
- To increase sales and market to a diverse customer base - Cultural Explorations in Global Business

Diversity concentrations could also be added to incorporate the latest trends and challenges faced by businesses. For example, more and more companies are taking serious steps to demonstrate social responsibility. These steps often involve partnerships with community-based organizations. Thus, a class on leveraging community partnerships would provide a benefit.

There is another important benefit of adding a diversity concentration to business schools. By populating the workplace with managers and executives who possess a strong diversity competency diversity becomes more organic to organizations. This is important for several reasons – it increases the chances that organizations can leverage diversity into a positive impact on the bottom line, it improves the work environment for all employees, and it reduces corporations’ \$8 billion spend on diversity training.

Most importantly, when diversity is organic it increases the chances that diversity becomes engrained in the culture of the organization rather than a flavor of the month initiative. When diversity becomes part of the way business is done business is done more effectively. Business schools can make a significant contribution by offering a diversity concentration as an integral part of its curriculum.

REFERENCES

Bezrukova, B., Ely, R., Jackson, S., Jehn, K., Joshi, A., Leonard, J., Levine, D., Kochan, T., & Thomas, D. (2002). The Effects of Diversity on Performance: Report of the Diversity Research Network, Human Resource Management Journal. Retrieved February 28, 2009 from http://mitsloan.mit.edu/iwer/pdf/diversity_report.pdf.

Bowman, B. Cultural Diversity and Academic Achievement. North Central Regional Laboratory, 1994. <http://www.ncrel.org/sdrs/areas/issues/educatrs/le0bow.htm>.

Boyette, M. (2009). Benefits of diversity in the workplace: What’s the bottom line? HR Café. Retrieved February 28, 2009 from http://hrcafe.typepad.com/my_weblog/2009/01/benefits-of-diversity-in-the-workplace-whats-the-bottom-line.html

- Bradford, W.D. (2005). Discrimination, Legal Costs and Reputational Costs [Electronic version]. Washington University. Retrieved April 1, 2009 from <http://www.fma.org/Chicago/Papers/Suit090904.pdf>
- Casey, J. & Corday, K. (2006). Conversations with the Experts: Business Case for Workforce Diversity. Sloan Work and Family Research Network, Boston College
Retrieved February 28, 2009 from http://wfnetwork.bc.edu/The_Network_News/20/The_Network_News_Interview20.pdf
- Clark, C. (2003). Multicultural Education, 10(3), 27-30. Retrieved February 21, 2009, from Multicultural Module database. (Document ID: 320225081).
- Dobbin, F., Kalev, A. & Kelly, E. (2007) Diversity Management in Corporate America [Electronic version]. Contexts
- Dipboye, R.L., & Jayne, M.E.A. (2004) Leveraging Diversity to Improve Business Performance: Research Findings and Recommendations for Organizations. Human Resource Management, Winter 2004, Vol. 43, No. 4, Pp. 409–424. Retrieved February 28, 2009 from <http://www.utm.edu/staff/mikem/documents/Diversity.pdf>
- Ely, R.J. & Thomas, D.A. (2002). Making Differences Matter: A New Paradigm for Managing Diversity [Electronic version]. HBR On Point.
- Garcia, R. Teaching for Diversity. Bloomington: Phi Delta Kappa Educational foundation, 1998.
- Hernandez-Sheets, R. (2003). Historical analysis of the reluctance to school children of color: Requiring an English, white, and middle-class uniform. Multicultural Education, 10(3), 62-63. Retrieved February 21, 2009, from Multicultural Module database. (Document ID: 320225471).
- Hubbard, D.E. (2007). The Business Case for Diversity. The Multicultural Advantage. Retrieved February 28, 2009 from <http://www.multiculturaladvantage.com/business-case-for-diversity-recruiting.asp>
- Hutchens, J. (2007). Employee Diversity Training Doesn't Work. Time, Retrieved April 1, 2009 from <http://www.time.com/time/magazine/article/0,9171,1615183,00.html>
- Jost, M, Whitfield, E. & Jost, M. (2005). When the rules are fair, but the game isn't. Multicultural Education, 13(1), 14-21. Retrieved February 21, 2009, from Multicultural Module database. (Document ID: 898561911).
- Lagace, M. (2004). Racial Diversity Pays Off. HBS Working Knowledge. Retrieved February 28, 2009 from <http://hbswk.hbs.edu/archive/4207.html>
- Lauber, M. (1998). Studies Show That Diversity in Workplace is Profitable. Villagelife. Retrieved February 28, 2009 from <http://www.villagelife.org/news/archives/diversity.html>
- Lee, G. (2002). Realities and challenges facing multicultural education. Multicultural Education, 9(4), 36-37. Retrieved February 21, 2009, from Multicultural Module database. (Document ID: 126920521).

Locatelli, P. (2002, May). Education for globalization. *America*, 186(17), 8-11. Retrieved February 21, 2009, from Research Library Core database. (Document ID: 120983853).

Matuk, L., & Ruggirello, T. (2007). Culture Connection Project: Promoting Multiculturalism in Elementary Schools. *Canadian Journal of Public Health*, 98(1), 26-9. Retrieved February 21, 2009, from Health Module database. (Document ID: 1207782161).

Miller, A, Smith, V.E., & Underwood, A. (1996) Managing Diversity It's Not Just A Matter Of `Sensitivity Training.' The Boss Has To Become A Believer--And Say So, *Newsweek*. Retrieved April 1, 2009 from <http://www.newsweek.com/id/103449/output/print>

No Author. (2007) Healthy California. California Department of Public Health. Retrieved from <http://ww2.cdph.ca.gov/data/indicators/goals/Documents/discussion.pdf>

No author (2000). Fortune 500 Corporations File Brief in Support of Diversity in Higher Education, Jenner & Block press release, Retrieved February 28, 2009 from <http://www.umich.edu/~bhlumrec/a/admissions/releases/fortune.html>

Roberson, Q.M. (2009). Diversity and Inclusion for Bottom-line Performance. eCornell. Retrieved February 28, 2009 from <http://www.ecornell.com/individual-course-list/?crs=ILRHR553>

Rodriguez, F. Education in a Multicultural Society. New York: University of America Press, 1983.

Walker, P. (2006). Business schools expand global reach. CNN. Retrieved February 28, 2009 from <http://www.cnn.com/2006/BUSINESS/12/25/execed.global3/index.html>

unknown. "Definition of Diversity." Iowa State University's college of liberal arts and science. LAS. <http://www.las.iastate.edu/diversity/definition.shtml>.

BIOGRAPHY

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EFFICIENTLY TRACKING INFORMATION FLOWS IN SUPPLY CHAINS: CONCEPTUALLY POSITIONING RFID IN THE CONTEXT OF MAPPING AND MANAGING THE VALUE CHAIN

Anuradha Venkateswaran, Wilberforce University

ABSTRACT

A value chain takes an integrated/ systems approach, spanning the macro processes involved in transitioning from markets to company to end customer, in a supply chain. There are various dimensions to a value chain, including strategy, product flow, work flow, and bi-directional (upstream and downstream) information flow. In a marketing sense, value - the ratio of benefits obtained to costs incurred - evokes a parallel to efficiency, which involves the maximization of outputs relative to inputs. Efficiency, in turn links to the concept of 'Lean' – eliminating waste or anything that does not add value to a process. Thus lean management tools such as Value Stream Mapping, can provide utility in the context of assessing process efficiency in value chains. Improving the efficiency of tracking information flows in a firm's supply chain, using RFID, can add significant value to its business processes. It is the intent of this paper to position and explore the utility of RFID – viewed by some as just a technology tool - within a broader/more integrated framework of mapping information flows in real time, and thus adding value in the supply chain.

INTRODUCTION

A corporation's value chain (Bolstorff, 2005) is the value added set of materials, information, processes, and procedures used in the design, development, implementation, distribution, and delivery of goods and services in the supply chain, from the initial raw materials to the end consumer. Whereas a Supply Chain is sometimes viewed as uni-directional, with information flows from supplier to end customer reflecting an inventory 'push' strategy, the value chain generally involves bi-directional flows of information, flowing both upstream and downstream from a given entity; thus integrating a 'pull-strategy'. Given the length and complexity of today's global supply chains, Value Chain Management (VCM) is increasingly becoming crucial to achieving a competitive advantage. A VCM system improves the efficiency of the feedback process within the supply chain, reducing time-to-market, product errors, and rework. Effective creation and transmittance of knowledge in tandem with the physical movement of goods and services, has become a top priority in today's global supply chain, as companies that can improve their supply chains have been shown to generate a savings equal to 7% of their annual revenues (Gale et al., 2005).

In any process, efficiencies can be improved by identifying and eliminating wasteful activities. A visual tool/technique used in this context (largely in manufacturing), is Value Stream Mapping (VSM). VSM is used to create/visualize a flow of material and related information associated with a product or process, as it makes its way sequentially through the value chain. As such it can map at a broad level in the supply chain, from receipt of raw material all the way to the delivery of finished goods or completion of services. A value stream map aka an end-to-end system map accounts for not only the manufacturing activities associated with the good/product, but also the management and information systems that support it. Thus one gains insight into the decision making flow in addition to the process flow, making it a valuable 'Lean' tool. Mapping out all activities in the process with cycle times, down times, in-process inventory, material movement, lead time, and associated information flows in the 'current' state serves to guide the system toward a desired 'future' map, in which waste is significantly cut down. As such, VSM can be extended to various supply chain operations including any activities that reflect a relationship between

suppliers and customers, material flows, information flows and business processes such as purchasing and customer order fulfillment.

It is imperative to understand how to manage the supply chain to increase the ‘value’ component relative to its overall cost. An analysis of how e-collaboration tools affect different partners along the supply chain suggests that they play an important role in facilitating access to information (which affects knowledge creation capabilities), thus assisting in the design of flexible supply chains, and thereby adding value (Cassivi, 2006). Effective knowledge integration requires that partners in the chain engage in interlinked processes that enable rich information sharing, and build information technology infrastructures that allow them to cost-effectively process information obtained from other partners. As Craig (2000) mentioned at the turn of the century, the key to improving the efficiency and velocity of the processes constituting the value chain, is to eliminate non-electronic processes -- such as paper reports, faxes, and telephone calls -- and implement online, Web-based, instantaneous access to value chain data for all authorized users in the process. This reduces time-to-decision barriers that are created by non-electronic media. It also externalizes a company's internal processes to value chain members, thus empowering them to make decisions based on timely information, thereby decreasing costs and inefficiency.

One such tool/technology that enables knowledge creation and effective transfer in supply chains is Radio Frequency Identification (RFID), hailed as ‘the’ technique to cut costs, streamline production and delivery processes while effectively tracking and monitoring assets (and coupled information flows) throughout the supply chain. With RFID technology, inventory can be tracked more accurately in real time resulting in reduced processing time and labor. More significantly, the complete visibility of accurate inventory data throughout the entire supply chain, from manufacturer’s shop floor to warehouses to retail stores, brings opportunities for improvement and transformation in various processes of the supply chain (Lee et al. 2004), thus adding value. RFID is in turn best viewed as part of a broader spectrum of sensor-based technologies. This includes the familiar technologies of barcode and magnetic stripe, as well as integration with equipment such as sensors for such things as temperature, position and moisture. Hybrid sensors that combine RFID tags with temperature sensors, all embedded in a barcode label, are already available. While RFID is essentially a technology tool, the decision to adopt/deploy it is a strategic business decision, requiring an enterprise-wide approach to analyzing costs, benefits and return on investment.

As mentioned, while the utility of VSM as an industrial technique for assessing waste in a manufacturing process is well established, use of this technique in the general context of supply chain management is not typically emphasized. Similarly, though RFID is much touted as a valuable tool to track assets in a supply chain, it is nevertheless regarded by many as a technology tool, as opposed to a process for adding value to the supply chain. Consequently, it is the intent of this paper to position RFID within a broader/more integrated framework of mapping and managing value in supply chains, by tracking information flows in real time. Thus, this paper first briefly summarizes existing framework for supply chain performance measurement. Next, the pain points in typical supply chains are presented, and the central role played by information flows in alleviating such pain points is discussed. Subsequently, the role and positioning of RFID as a real time value-added tool for information tracking in the supply chain, is discussed. Since value is the ratio of benefits obtained relative to costs incurred, some discussion is presented on costs and limitations of RFID in the context of supply chain management. By integrating literature across the fields of supply chain management, RFID, and information systems and knowledge management, it is hoped that this paper proves useful. Lastly, a few suggestions are presented for future research on computing the Return on Investment (ROI), in order to more quantitatively establish the value of RFID in supply chains.

STRATEGIC FRAMEWORK FOR PERFORMANCE MEASUREMENT AND VALUE REALIZATION IN SUPPLY CHAINS – ROLE OF INFORMATION FLOWS

Value Stream Mapping, Lean, and the Supply Chain

Although more conventionally used in the evaluation of manufacturing processes, VSM does present a method of mapping the flow of materials and information from end-to-end in the supply chain. The goal of VSM, regardless of the context or application, is to identify and then reduce/eliminate non-value added and non-essential activities. Since identification and elimination of waste is a key aspect of lean manufacturing, there is a close conceptual link between VSM and Lean. It is important to realize that the concept of ‘value’ in supply chains goes beyond the internal operations of individual participants/entities, and includes various inter-relationships, combinations or integrations that occur along the chain (Barber, 2008). In the supply chain, value can be enhanced by eliminating or decreasing waste associated with any component such as product flow, inventories, order processing, transportation and waiting (Hines and Rich, 1997; Tompkins, 2004). Thus improvements in productivity, efficiency, and quality can be attained. As mentioned previously, accurate and timely information transmittal in real time, in tandem with the physical movement of goods and services, has become a top priority in today’s global supply chain (Lumsden & Mirzabeiki, 2008); substantially adding to value by decreasing the need for safety stock and shortening customer lead time.

In order to facilitate the change process identified by such a ‘mapping’ of value in the supply chain, it is necessary to first define corporate strategy and business processes, as well as to identify key customer facing-processes such as order fulfillment and upstream information flow from customers, as well as to map key non-customer facing processes such as supplier integration (Hines, Rich and Esain, 1999; Imants, 2007). Although VSM requires the mapping and assessment of **all** components/processes in the supply chain, this paper will focus largely on information flows in the supply chain.

Supply Chain Performance Assessment Framework

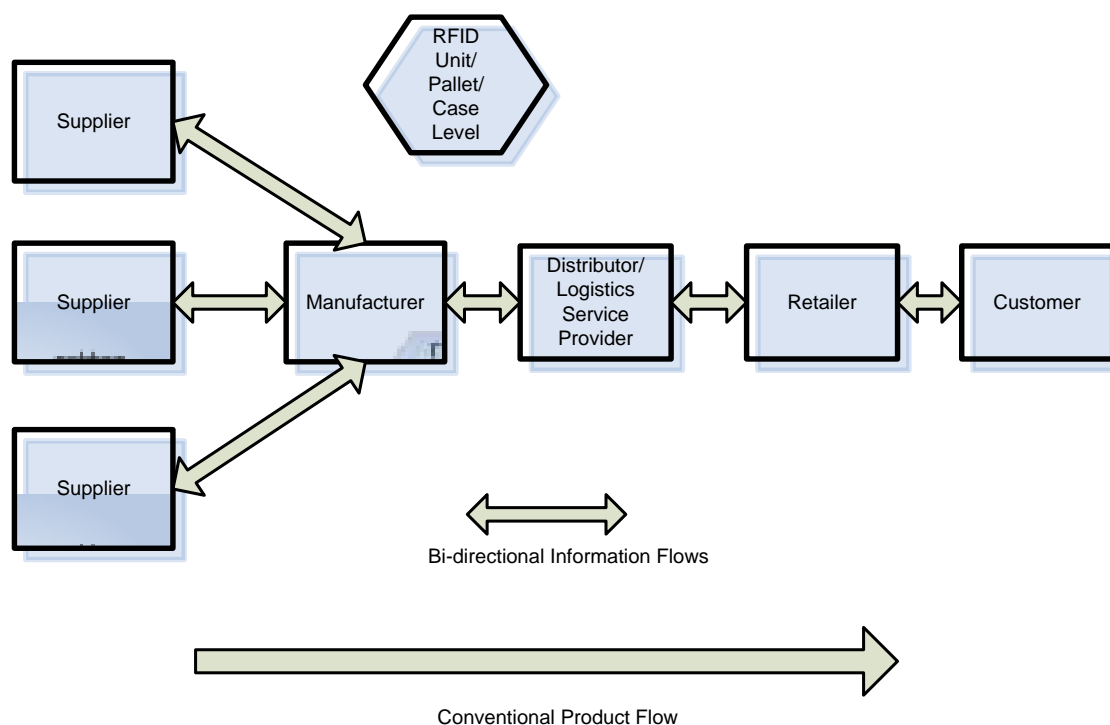
A supply chain is a conglomerate of individual business entities and operations, and as such its performance should be viewed within a strategic framework of mission/vision, goals and objectives, strategies, performance measurement, and feedback systems, for the system as a whole. The various entities in a typical ‘retailer’ global supply chain are shown in Figure 1, and can include supplier(s), manufacturer, distributor(s) or Logistics Service Providers (LSP), retailer(s), and end customer. Whereas product flow is largely downstream (except for returns), information flows in value chains are shown as two-way (interactive).

Two models of supply chain management (Lambert et al., 2006) feature prominently in literature – the Supply Chain Operations Reference (SCOR) and the Global Supply Chain Forum (GSCF). The SCOR model of the Supply Chain Council (SCC), is organized around five processes, namely - plan, source, make, deliver, and return (Bolstorff, 2005; Lambert et al., 2006). Each of these processes is implemented at four levels of detail involving, planning and execution, inputs, outputs, transactional flows, and appropriate metrics. According to the SCC, the value chain for SCOR spans from markets to the end customer, and involves the integrated macro processes of Marketing, Design, Supply, and Customer. Furthermore, there are four dimensions to the value chain: Strategy, Product Flow, Work Flow and Information Flow (Bolstorff, 2005). Proponents of SCOR point to its strengths in performance and process benchmarking, and its ability to provide a quicker identification of transactional wastes, enabling cost reduction and improved asset utilization (Lambert et al., 2006).

The GSCF framework defines supply chain management as *“the integration of key business processes from end user through original supplier, that provide products, services, and information that add value*

for customers and other stakeholders”. Implementation in the GSCF framework takes place through three key elements – the supply chain network structure, the business processes, and the management components. Eight supply chain management processes are included in GSCF – customer relationship management, customer service management, demand management, order fulfillment, manufacturing flow management, supplier relationship management, product development and commercialization and returns management. Whereas SCOR largely focuses on achieving transactional efficiencies (Lambert, 2006), the GSCF framework is more strategic with each process aligned with corporate strategy and functional strategy enabling a more flexible response to market conditions (ibid.). Thus GSCF allows for a better implementation of a ‘balanced scorecard’ approach that evaluates “corporate performance based on four different perspectives – financial, internal business processes, customers and learning and growth” (Bhagwat & Sharma, 2007). Essentially, the approach stems from maintaining a “balance between short and long-term objectives, between financial and non-financial measures, between leading and lagging indicators and between internal and external performance perspectives” (ibid.). Regardless of the model, it is clear that the speed and accuracy of information flows feature largely – be they viewed as a way to improve transactional efficiencies (SCOR), or to provide better strategic feedback (GSCF). From the perspective of this paper, the GSCF framework makes it conceptually easier to view information flows within a broader, strategic focus.

Figure 1 : Schematic Overview of Typical Supply Chain Entities , Product and Information Flows



Supply Chain Pain Points and Role of Information Flows in Supply Chains

A global supply chain can be viewed as a network of business units (including manufacturing facilities) that work in tandem to achieve mutually satisfactory goals. While each business unit must operate with a level of autonomy to achieve its particular objectives, it also must coordinate and synchronize its activities with business partners in the supply chain (Hull, 2002), as well as pro-actively engage in environmental scanning. Thus, from a systems architecture perspective, it benefits to have a distributed,

flexible, scalable and adaptive multi-agent supply chain management system (Li, Sikora & Shaw, 2009). Since such agents interact together through dynamic information exchanges, effective integration and management of these information flows is absolutely crucial (ibid., Matopoulos et al., 2009). Lumsden and Mirzabeiki (2008) detail four key reasons why timely and accurate information is vital for realizing optimal value in supply chains. The first links to customer satisfaction and customer relationship management – customers need real time information on order status, product availability, delivery tracking, and invoices. Second, information on physical product flows can be used to reduce inventory (JIT, MRP II). Third, information increases flexibility in regards to how, when, and where resources need to be utilized to gain strategic advantage. Fourth, enhanced information transfer and exchange via internet technologies, facilitates collaboration and enhances supply chain relationships (ibid., Bowersox et al., 2007). Thus, information flows within and across organizations in the supply chain drive decision making, cut inventory costs, speed work processes, increase flexibility, and enhance customer service.

Researchers have identified pain points across the supply chain (Gale et al., 2005; Avhad & Gude, 2004), and have linked them to an appropriate supply chain operational metric. Key operational metrics and related actions to overcome typical supply chain pain points are summarized in Table 1, adapted from Gale et al. (2005). A key point to note is that many of the problems that contribute to supply chain pain points stem from a lack of real-time, accurate tracking data and information (Li et al., 2009). Such accurate and real-time information sharing is vital to optimally match supply (upstream information) with demand (downstream information); and to coordinate business activities accordingly. Figure 2, adapted from Lambert et. al. (1998), and reflecting the GSCF framework, demonstrates that the supply chain business processes (and accompanying information flows) are closely intertwined with key business unit functions such as marketing/sales, purchasing, logistics, production, R &D and finance. Eight business processes - supplier manufacturer relationships, customer service, customer relationship management, demand management, order fulfillment, manufacturing flow management, product development, and returns management, result in operational/transactional information flows in the supply chain. Some of these information flows can be very complex, involving multiple entities across the length of the supply chain - for instance, order fulfillment involves transactional information from manufacturers (and their suppliers) to distributors/warehouses, to retailers to customers. Others tend to be more limited – for instance supplier relationship management involves primarily just the suppliers and the manufacturer.

RFID AND INFORMATION TRACKING IN SUPPLY CHAINS:

Scope and Benefits Associated With Use of RFID in Supply Chains

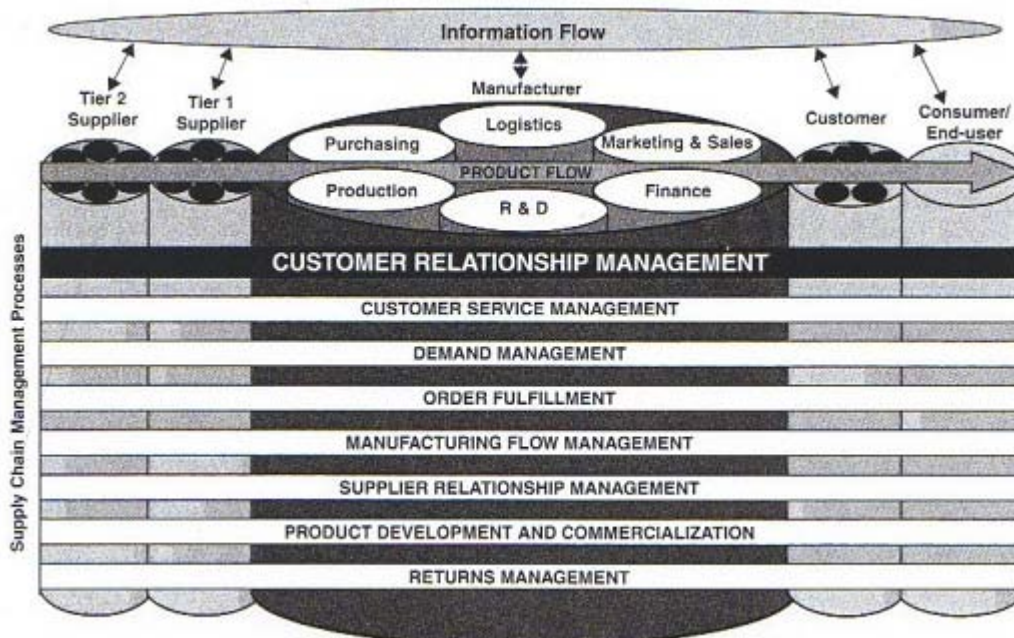
Radio Frequency Identification (RFID) has actually existed since World War II, but is increasingly being deployed in a variety of innovative, new applications in the 21st century. A key role for RFID is its ability to enable real-time information creation and its effective transfer in global supply chains. RFID systems contain five main components: tags (active or passive), readers (in differing frequency bands), encoders, middleware, and application software. Affixing RFID tags at the level of aggregation desired i.e. at the container, pallet, case or item level, either at the point of manufacture or at the point of distribution, (Figure 1) provides the building blocks for increased visibility and asset tracking throughout the supply chain, from manufacturer to end customer. Thus manufacturers and other supply chain entities can track real-time demand signals from customers and the market.

Table 1: Key Metrics Associated With Supply Chain Pain Points - Required Action and Desired Outcome

<u>Key Metric</u>	<u>Action and Desired Outcome</u>
Reduce Inventory (I)	<ul style="list-style-type: none"> • Increase inventory accuracy • Reduce inventory holding costs; inadvertent stock, redundant safety stock, overstock, miscoded SKUs (stock keeping units) • Reduce inventory shrinkage (theft, gray market counterfeit, misplacement) • Reduce out-of-stocks and subsequent loss of sales • Reduce reorder quantities and target inventory levels • Reduce bull whip effects by real-time information sharing • Reduce expired time-sensitive or product lifecycle obsolescent goods
Reduce Cycle Time (C)	<ul style="list-style-type: none"> • Accelerate product velocity (increase speed of order to delivery cycle time and supply chain integration) • Eliminate distribution bottlenecks • Improve inefficient business processes (automate, streamline) • Improve product life cycle analysis • Improve cash conversion cycles
Improve Resource (R) Utilization	<ul style="list-style-type: none"> • Reduce labor costs; Automate manual inventory management tasks • More rapid, automated, accurate cycle counts • Reduce search and reconciliation activities for misplaced SKUs • Reduce labor and space requirement due to inadvertent excess stocks (time-on-floor and quantity) • Improve inventory efficiency (inventory throughput per labor hour)
Improve Quality (Q)	<ul style="list-style-type: none"> • Reduce inbound mis-shipments, in-coming manual coding errors • Reduce outbound mis-shipments, out-going manual coding errors • Inter-company error reductions • Decrease claims record / charge backs for inaccurate delivery with better visibility, better fault source identification • Anti-counterfeiting protection • Reduce reverse supply chain costs; claims / charge backs for inaccurate deliveries and product recalls
Improve Service (S)	<ul style="list-style-type: none"> • Improve defect product, in-store / building tracking and recall management • Improved In-Store Replenishment / Forecasting / Improved shelf availability • Accelerated payment transactions • Improved work in progress tracking • Improve responsiveness to product recalls. • Enable mass product customization by integrating customer usage and product information in adaptive CRM, SCM and PLM applications

Source: Adopted from Gale, T., Rajamani, R. and Sriskandarajah, C. "The Impact of RFID on Supply Chain Performance". *The School of Management, University of Texas at Dallas*, pp. 1-33, 2005.

Figure 2: Integration of Information Flows across the Supply Chain Business Processes and Firm Business Functions.



Source: Adapted from Douglas M. Lambert, Martha C. Cooper, and Janus D. Pagh, "Supply Chain Management: Implementation Issues and Research Opportunities", *The International Journal of Logistics Management*, 9(2), 1988, p.2.

The implementation of RFID can lead to improved information sharing and tighter connection with business partners, which, in turn can lead to more efficient business processes (Zhang, 2006); alleviating pain points in the supply chain (Table 1) through reductions in inventory, improved resource utilization, improved quality and improved service. Moreover, RFID in conjunction with the Electronic Product Code (EPC) can provide both much more information as well as more timely information on supply chain performance, than barcode technology. Thus, with RFID, a higher level of detailed analysis can be implemented, to guide the management and synchronization of the supply chain. Early adopters of RFID have experienced significant benefits- anywhere from a 3% to 5% reduction in supply chain costs, and 2% to 7% increases in revenue as a result of greater inventory visibility (Zhang, 2006). Overall, the adoption of RFID technology has been hailed as having the capability to improve the speed, efficiency and security of information sharing across the supply chain (ibid., Lee et al., 2004).

Since RFID technology is not industry specific, it has the capability to bring benefits to a wide range of industries including retail, defense, pharmaceuticals, health care, consumer electronics, security, the food supply chain, defense, airline – indeed the potential applications are limitless as it is relevant to any organization engaged in the production, movement and sale of physical goods (ibid.). Manufacturers can benefit from increased inventory visibility, more efficient use of labor, better line operations and improved fulfillment. Retailers can benefit from reduced inventory, as the improved supply chain visibility allows for better demand forecasting, lower safety stocks and lower order cycle times. Automated data capture will also cut costs by reducing labor in the store and warehouse, and fewer stock outs. Novel applications are possible by combining RFID with sensors capable of capturing variations in pressure, temperature, motion, speed etc (Wyld, 2006, Gale et al. 2005, Lee et al. 2004, *The RFID Journal*, 2008).

The reduction in costs, associated with implementing RFID in a large supply chain can be substantial, as much as 54-66% of the Cost of Goods Sold in the average container, as is shown in Table 2 (Bhuptani & Moradpour, 2005).

Table 2: Component Benefits from RFID Deployment in Supply Chain

COMPONENT	PROJECTED BENEFIT
Reduction in Safety Stock	0.25% to 0.30% of Cost of Goods
Reduction in Inventory Pipeline	0.13% to 0.16%
Reduction in Service Charges	0.08% to 0.10%
Administrative Savings	0.04% to 0.05%
Reduction in Pilferage	0.04% to 0.05%
COMBINED BENEFITS	0.54% to 0.66% of COGS in Average Container

Source: Bhuptani, M. & Moradpour, S. (2005), "Cost-Benefit Analysis", Chapter 7, pp.115-126, in *RFID Field Guide: Deploying Radio Frequency Identification Systems*, Pearson/Prentice Hall, NY.

Component Costs Associated With Enterprise-Wide Deployment of RFID:

Costs to implement RFID comprise three categories – hardware (tags, readers, antenna, and software), creation or upgrading of middleware and other applications, and services such as installation, tuning, component integration, training, maintenance/support, and business process reengineering (Building a Case, 2006).

The tag, a unique identifier associated with the object, is comprised of an integrated circuit (IC), attached to a small antenna. Data is stored in the tag chip via an electronic product code (EPC). EPC allows for product identification at the appropriate level (unit/case/pallet), allowing for unique tracking capabilities. Most RFID EPC tags have a memory capacity of 96 or 128 bits (Gale et al., 2006). Protective packaging surrounds the IC-antenna, and can take on various forms, depending on the specific application, such as labels, key fobs, watches, cards, disks, coins, and even glass transponders (Wyld, 2006). Apart from the size and packaging, tag costs also vary depending on whether the tag is active or passive. Passive tags have no power source, and can transmit information only when within a few yards of an RFID reader. Active tags contain an internal battery that constantly powers the tag, enabling continuous transmission, and can be read at a distance of 10-30 yards or more. However, the battery limits the useful life of an active tag to about five years. Active tags are re-usable with a life of 5-12 years, and cost around \$15 each (Building a Case, 2006). In contrast, a passive tag has an unlimited life span, but much more limited capabilities. RFID tags can further be classified by their memory capabilities as Read-only, Read/write and Combination (ibid.). High frequency (13-56 MHz) and Ultra High Frequency (300 MHz to >1 GHz) tags have greater 'read' ranges (Gale et al., 2006) than lower frequency ones (125 KHz or 134 KHz). From a cost perspective, therefore, the costs associated with the tag vary significantly depending on the specifics. Currently a 96-bit EPC inlay (chip and antenna mounted on a substrate) costs from 7 to 15 US cents. If the tag is embedded in a thermal transfer label on which companies can print a bar code, the price rises to 15 cents and up. Low and high frequency tags will cost even more (The RFID Journal, 2008).

RFID readers have three essential components – an antenna, a transceiver, and a decoder. Readers can be large or small, stationary or portable, with single or multiple antennae. The reader, either continuously (fixed-position) or on-demand (portable hand held) sends out an electromagnetic wave to query any RFID tags within range. When it receives a tag signal, that information is passed on to the decoding software for further processing and identification. Nearly all RFID systems operate on one of four frequency bands - low frequency (125–134kHz), high frequency (13.553– 13.567MHz), ultra high frequency (UHF) (400–1000MHz) and microwave (2.45GHz). For supply chain purposes, UHF is the most widely used due to its robustness and reading range (The RFID Journal, 2008.). Like tags, readers too can vary substantially in price depending on form and complexity. Most UHF readers cost from \$500 to \$2000, depending on the

features (ibid.). Companies may also have to buy antennas separately, along with cables; and each antenna costs about \$250 and up. As with tags, very large volume purchase of readers is expected to bring down their price. Low and high frequency readers also vary in price, based on features. A basic low frequency reader can sell for as low as under \$100, while a standalone reader can retail for \$750. High frequency reader modules typically cost from \$200 - \$300, and stand alone readers cost about \$500 (ibid.).

Middleware is the software between the reader network and the application software. It provides the ability to retrieve data from readers, filter to reduce and aggregate significant data volume from multiple transmits and data reads, and separate and identify directional movement from different reader signals. It also monitors tag/reader network performance to generate a real-time view of tags being read, and may capture history of tag-read events for application tuning and optimization (Gale et. al., 2006). Application software processes RFID data, controls workflows and business transactions, and passes RFID data on to other systems such as Electronic Data Interchange (EDI) or Enterprise Resource Systems (ERP) software (ibid.). System integration costs in this category include costs for data analysis, employee training, maintenance, licenses and other third party costs. These range from hundreds of thousands of dollars to upwards of millions of dollars depending on the company size, and it's position in the supply chain. AMR Research, for instance found that a conservative cost estimate for RFID implementation for a typical consumer packaged goods (CPG) manufacturer would be around \$13M to \$23M for shipping 50 million cases per year. Of this total, tags and readers accounted for \$5 to \$10 million, system integration for \$3-\$5 million, changes to existing supply chain applications \$3 - \$5 million, and storage and analytics of the tremendous volume of data another \$2 - \$3 million (Asif & Mandviwalla, 2005).

DISCUSSION AND CONCLUSIONS

A lack of effectiveness in supply chains is caused by a variety of factors such as stock-outs, inventory shrinkage, counterfeit goods, misplaced or mis-identified goods, overstock and obsolescence of goods, expiration of goods, insufficient visibility and consequently 'search costs', lack of quick response to product demand shifts or product recalls, insufficient speed of delivery and/or expedited transportation costs, incorrect order fulfillment, damage in transit etc. As stressed already, real-time information linkages are key to overcoming supply chain pain points. To quote Ke and Wei (2007:p.297), "knowledge sharing allows trading partners to orchestrate the operation of supply chain and capture positions of advantage. Yet, lack of knowledge sharing has been consistently found to be the most critical failure factor in supply chain management".

RFID can provide information on the location of the product in the supply chain, as well as the conditions, such as the level of temperature, vibration, pressure, humidity etc. that it was subjected to. Enterprise RFID deployment can greatly improve inventory visibility while simultaneously improving the accurate and timely flow of information on both the supply and demand side (Gale et al., 2005). Point-of-sale and inventory levels for each Stock Keeping Unit (SKU) are very important for decreasing the bull whip effect (Lumsden & Mirzabeiki, 2008). The bullwhip effect refers to the fact that distortions in demand data can get really magnified as they cascade upstream to the suppliers. One way to minimize this is to centralize information on retailer's point of sale data on each SKU and immediately make it available to each member in the supply chain. Aside from minimizing the bull whip effect, this will minimize stock keeping costs and back order costs; and thus has the potential to create value for all upstream partners (ibid.). By providing accurate inventory control and reducing labor costs; RFID enables operators in warehouses to improve their time efficiency in order preparation and processing (Bowersox et. al., 2007). Statistical information on the history of sales for different products at different locations is yet another value-adding piece of information that benefits retailers and manufacturers, enabling more accurate forecasting on order quantity and batch sizes (Lumsden & Mirzabeiki, 2007). Thus the value associated with RFID can be attributed/mapped at the operational level as well as at the strategic level.

On the other hand, the large costs involved in deploying RFID, and managing and making sense of the sheer volume of data associated with tracking information flows in real time, present a huge challenge. To realize the maximum value, firms need to leverage their information architecture strategically, ensuring that RFID is properly and tightly integrated into their information infrastructure and business processes. Additionally, supply chain analysts are of the opinion that a variety of ‘tipping points’ need to be crossed at both the company level as well as at the industry level for RFID to reach critical mass to be able to add real value (Gilmore & Fralick, 2005). These include:

- volume tipping points (in terms of the number of items to justify more economical EPC tagging upstream in the supply chain)
- cost tipping points (fixed and variable EPC costs to reach a point where sufficient ROI can be reached)
- performance tipping point that relates to the ‘read rate’ achievable by EPC/ RFID readers. Read rates are not consistently at 99% plus, and become harder to achieve at the individual item level when surrounded by other items inside a large case. Other complicating factors such as metals and water can create mis-reads or non-reads.
- system coordination tipping point – enough support throughout the supply chain to enable sharing of costs
- software tipping point – scalable software to take advantage of RFID data and deliver value from a business process standpoint.

While there is general recognition of the importance of information flows and knowledge management in the supply chain, “a key limitation of the current state of the art in this fieldis thatthere is no generalized, conceptual discussion, or model, on how such activities occur” (Suarez-Nunez et. al., 2009, p. 43). Thus it is hoped that this paper, by furthering the discussion on the conceptual positioning of RFID within the strategic framework of assessing supply chain performance, incrementally furthers the current state of knowledge in this area. This paper also underscores that in a supply chain context, inter-reliance of supply chain entities creates ripple effects, complicating the determination of costs, benefits and value. In fact, it is difficult even to come up with a realistic cost/benefit analysis for a generic supply chain as each situation is unique, and the many assumptions in building such a ‘generic model’ would quickly render it hypothetical (Venkateswaran, 2008). Therefore it is very important to clearly define the specific business case for each player, and estimate the ROI before proceeding to actually implement RFID. Given that most corporations seem unwilling to provide details on their ROI computations, it is suggested that academics research and model a variety of scenarios (across industries and supply chain entities), employing simulations to evaluate, for instance, Break-Even volumes, Net Present Value and Payback periods, in order to quantify costs, benefits and resulting value.

REFERENCES

- Asif, Z. & Mandviwalla, M (2005) “Integrating the Supply Chain with RFID: A Technical and Business Analysis”, *Fox School of Business and Management, Temple University*.
- Attaran, M.(2007), “RFID: an Enabler of Supply Chain Operations”, *Supply Chain Management*, 12(4), p.249-257
- Avhad, S. & Gude, K. (2004) “ RFID in Supply Chains”, *Patni Computer Systems White Paper*, February 2004
- Barber, E. (2008) “ How to Measure the “Value” in Value Chains,” *International Journal of Physical Distribution & Logistics Management*, vol. 38(9), p. 685-698

- Bhagwat, R. & Sharma ,M.K. (2007) “Performance Measurement of Supply Chain Management: A Balanced Scorecard Approach. *Computers and Industrial Engineering*,, vol.53, p. 43-62
- Bhuptani, M. & Moradpour, S. (2005) “Cost – Benefit Analysis” , Chapter 7 in *RFID Field Guide: Deploying Radio Frequency Identification Systems*, Pearson/Prentice Hall, NY, p. 115-126
- Bolstorff, B. (2005, June) “How to Make your Supply Chain more Valuable”, *Logistics Today*, p. 19-22
- Bowersox, D., Closs, D. & Cooper, M.(2007), *Supply Chain Logistics Management*, 2nd Ed., McGraw Hill, NY.
- Building a Case for Active RFID ROI : Cost –Benefit Analysis (2006), Active RFID Systems, Inc. , p.1-7
- Cassivi, L.(2006) “Collaboration planning in a supply chain”, *Supply Chain Management*, vol. 11(3), p. 249-58
- Gale, T., Rajamani, D., & Sriskandarajah, C. (2005) “The Impact of RFID on Supply Chain Performance”, *The School of Management, University of Texas at Dallas*, p. 1-33
- Gilmore, D. & Fralick, M.(2005) “10 Things Necessary for RFID/EPC to Thrive”, *Supply Chain Digest, Internet*, p.1-5
- Hines, P. & Rich, N. (1997) “The seven value stream mapping tools,” *International Journal of Operations and Production Management*, vol.17(1), p.46-64
- Hines, P., N. Rich, and Esain, A (1999) “Value stream mapping a distribution industry application,” *Benchmarking: An International Journal*, vol.6 (1), p.60-77
- Hull, B(2002) “A Structure for Supply-Chain Information Flows and its Application to the Alaskan Crude Oil Supply Chain,” *Logistics Information Management*, vol.15(1), p. 8-23
- Imants, M. (2007) “Value Stream Mapping and the Supply Chain,” *Manufacturing, Supply chain and Maintenance Management Newsletter*, BVBA.
- Lambert, D, Garcia-Dastugue, S.J., Knemeyer, M. & Croxton,K.L. (2006) “Implementing Supply Chain Management, in *Supply Chain Management – Processes, Partnerships, Performance*. Ed: Douglas M. Lambert, Supply Chain Management Institute, Fl., p.217-235
- Lee, Y.M., Cheng, F., & Leung, Y.T.(2004), “Exploring the Impact of RFID on Supply Chain Dynamics”, *Proceedings of the 2004 Winter Simulation Conference*, R .G. Ingalls, M. D. Rossetti, J. S. Smith, and B. A. Peters, eds., p. 1145-1152
- Li, J., Sikora, R.T. & Shaw,M.J. (2009) “Supply Chain Management: A Multi-Agent System Framework”, *Supply Chain Management and Knowledge Management – Integrating Critical Perspectives in Theory and Practice*. Eds: Ashish Dwivedi and Tim Butcher. Palgrave Macmillan: London. p. 151-169
- Lumsden, K. & Mirzabeiki , V. (2008) “Determining the Value of Information for Different Partners in the Supply Chain”, *International Journal of Physical Distribution & Logistics Management*, vol. 38 (9), p. 659-673

Matopoulos, A., Vlachopouou, M. & Manthou,V. (2009) “Electronic Integration of Supply Chain Operations: Context, Evolution and Practices,” *Supply Chain Management and Knowledge Management – Integrating Critical Perspectives in Theory and Practice*. Eds: Ashish Dwivedi and Tim Butcher. Palgrave Macmillan: London., p. 217-231

The RFID Journal. “Frequently Asked Questions”. Online at <http://rfidjournal.com/faq/20>, accessed on 10/5/2008.

Suarez-Nunez, C. A., Monahan, G.E., & Vojak, B. A. (2009), “ A Conceptual Model of Knowledge Management for Strategic Technology Planning in the Value Chain”, *Supply Chain Management and Knowledge Management – Integrating Critical Perspectives in Theory and Practice*. Eds: Ashish Dwivedi and Tim Butcher. Palgrave Macmillan: London., p. 40-57

Tompkins, B. (2004, June) “Lean Thinking for the Supply Chain,” *Supply Chain Edge*. Retrieved February 9, 2009, from www.tompkinsinc.com/publications/competetitive-edge/articles/06-04-Lean_Supply_Chain.

Venkateswaran, A. (2008) “When Does RFID Add Value to the Supply Chain? : An Overview of Complications and Considerations in Evaluating Benefits Versus Costs, and Return on Investment”, *Proceedings of the Business and Economics Institute’s International Conference*, December 14-17, Las Vegas, NV.

Zhang, C. (2006) “Secure Information Sharing in Internet-Based Supply Chain Management,” *The Journal of Computer Information Systems* , Summer 2006.

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GRADUATION RATES AT COLLEGES AND UNIVERSITIES: WHAT FACTORS REALLY MATTER?

Jeff Anstine, North Central College

ABSTRACT

There is a lot of information about graduation rates in higher education. The majority of material on this subject is from administrators, counselors and news personnel. Most of the research has been based on small samples or is just anecdotal. There has been virtually no research using regression analysis with large data sets that examines what variables are most important in determining graduation rates. This paper combines large data sources related to graduation rates at schools from the American Association of University Professors, the Carnegie Foundation and elsewhere with information from the U.S. News and World Report.

This research examines the impact of many variables, such as if a school has a teaching and learning center, faculty salaries, and if the school uses learning communities, holding other influences constant on graduation rates. Results show that factors such as the location of the school, the percentage of faculty that are full time and faculty salaries all contribute to increased graduation rates, which is as expected. Interestingly, other variables that should improve graduation rates are not statistically significant. The existence of student learning communities and if a school has a teaching and learning center for faculty does not increase graduation rates.

INTRODUCTION

There has been much written about graduation rates at US colleges and universities both in the popular press and by individuals affiliated with institutions in higher education. However, the majority of what has been published on this subject is by administrators, counselors and other individuals with little or no training in the use of sophisticated econometric techniques. Most of the research has either been based on small, non-random samples or is just anecdotal in nature. There has been virtually no research using regression analysis with a large data set that examines what variables are most important in determining graduation rates at colleges and universities in the United States.

LITERATURE REVIEW

A few papers looking at factors influencing graduation rates at colleges and universities that use regression analysis are in the preliminary phase. In a National Bureau of Economic Research paper, Angrist et. al. (2006) looked at a small sample of Canadian students, broken into three groups. They find that using both tutoring services and financial rewards were more likely to return for their second year than students getting only financial or support services. The impact was greater on female than on male students.

DesJardins and McCall (2006) use discontinuity analysis to account for potential unobserved characteristics of recipients of the Gates Millennium Scholarship Program. They find that the retention of minority students depends in part on their race. As the authors note in their paper, the research is incomplete.

The ultimate goal of the research was to examine the impact of variables, such as if a school has a teaching and learning center, faculty salaries, location of the school, if the school uses learning communities, holding other influences constant on graduation rates.

DATA

The US News and World Report has information on 1,347 schools that grant bachelors degrees. This only includes traditional colleges, not technical schools or other specialty colleges. The includes schools' graduation rates and factors that may impact this such as the percentage of students in the top 10 percent of their high school class, standardized test scores, peer assessment and other variables. There are many variables not in this data that impact graduation rates.

I collected and compiled data from a half a dozen other sources and combined it with the variables from the News and World Report. Other sources are the Carnegie Foundation, the US Department of Education, the American Association of University Professors, the National Survey of Student Engagement (NSSE) and websites of various colleges such as data on the existence of teaching and learning centers from Hofstra University. I compiled these data sources with the other data on graduation rates. In some situations the other data sources did not have all of the same 1,347 colleges and universities.

METHODOLOGY

This research examines the impact different variables, such as if a school has a teaching and learning center, faculty salaries, the percentage of students that remain on campus during the weekend or if the school uses learning communities, holding other influences constant to determine what influences graduation rates at institutions of higher learning in the US. Thus, the dependent variable, the graduation rate of school i , is a function of independent variables shown below.

$$\text{Graduation rate}_i = \beta_0 + \beta_1 X + \varepsilon_i$$

X = vector of variables

If the school is public or private

Peer assessment by other schools

Rank in category (Liberal Arts, Research, etcetera)

Freshman retention rate

If a college participates in NSSE

The percent of classes with under 20 students

The percent of classes with over 50 students

The student faculty ratio

The percentage of faculty that is full time

The freshman in the top 25 percent of their HS class

School's acceptance rate

The type of school:

National University

Liberal Arts

Comprehensive

The location of the school:

Urban

Suburban

Rural

If the school has Learning Communities

If the school is:

female 90% or more women

male 90% or more men

Mostly coed

Overall diversity (if the minority population is greater than 17%)

The average ACT score

The average SAT score

The SAT and ACT equivalent, in SAT format

RESULTS

Table 1 provides an overview of the data. Note that some of the variables have fewer observations than the data from the US News and World Report. None the less there close to 1,000 observations for the regressions.

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Graduation Rate	1336	0	1	.51	.179
NSSE (participate, Y=1)	1347	0	1	.33	.469
Public (Y=1)	1347	0	11	.37	.562
Peer Assessment	1347	1.3	4.9	2.793	.5653
Freshman Retention	1313	0	1	.75	.109
Percent classes under 20	1271	0	1	.55	.168
Percent classes over 50	1272	0	1	.04	.056
Student Faculty Ratio	1086	3	47	14.79	3.934
Percent Faculty Full Time	1294	0	1	.81	.132
Freshman in top25%	1155	0	1	.40	.195
Acceptance Rate	1321	0	1	.70	.178
Urban (y=1)	1347	0	1	.42	.494
Suburban (Y=1)	1199	0	1	.26	.439
Rural (Y=1)	1345	0	1	.25	.430
Has learning communities	1347	0	1	.18	.388
Over 90% female	1347	0	1	.03	.174
Over 90% male	1347	0	1	.00	.067
Coed	1347	0	1	.97	.159
Diversity (minority pop>17%)	1343	0	1	.47	.499
ACT scores	528	15	29	21.94	2.430
SAT scores	757	705	1520	1085.61	141.700
All stand test scores	1285	605	1520	1071.49	144.337
Has a Learning Center	1347	0	1	.19	.393
Faculty Salary (in thousands)	941	35	130	69.41	15.060

Table 2 shows the results from a simple Ordinary Least Squares (OLS) regression. Due to multicollinearity all of the variables could not be included in the regression. Regressions were also conducted excluding faculty salary in order to increase the degrees of freedom. The size of the other coefficients and the statistical significance did not change much so the results including salary are shown. Other regressions are available from the author upon request.

Almost all of the control variables have the expected sign and are statistically significant. The smaller the student class sizes, the lower the student faculty ration, the more faculty that are full time and the higher the peer rankings all increase a schools graduation rate.

About 60 percent of the schools report the SAT for incoming freshman and the other 40 percent report the ACT scores. I normalized the scores so that the two could be included together. It is no surprise that the higher the student body standardized test scores, the higher the graduation rate.

Other variables that impact graduation rates also make sense upon further inspection. Private schools tend to have higher graduation rates than their public counter parts, all else constant. Urban colleges and universities have slightly lower graduation rates compared to suburban and rural schools.

Table 2: Ordinary Least Squares (OLS) regression

Dependent Variable: Graduation Rate

N= 941

Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t statistic	Statistical Signif.
	B	Std. Error	Beta		
(Constant)	-.289	.078		-3.681	.000
NSSE (participate, Yes=1)	.003	.008	.009	.451	.652
Public (Yes=1)	-.095	.013	-.247	-7.532	.000
Peer Assessment	.032	.012	.102	2.612	.009
Percent classes under 20	-.022	.037	-.019	-.587	.558
Percent classes over 50	.020	.111	.006	.185	.853
Student Faculty Ratio	-.004	.002	-.077	-2.188	.029
Percent Faculty Full Time	.106	.040	.068	2.637	.009
Freshman in top25%	-.003	.031	-.003	-.089	.929
Acceptance Rate	-.011	.027	-.012	-.407	.684
Urban (Yes=1)	-.019	.010	-.053	-1.981	.048
Suburban (Yes=1)	-.001	.011	-.004	-.135	.893
Has learning communities	.002	.011	.005	.196	.844
Diversity (minority pop>17%)	-.047	.009	-.130	-4.984	.000
All stand test scores	.001	.000	.439	11.539	.000
Has a Learning Center	-.006	.011	-.014	-.540	.590
Faculty Salary (in thousands)	.003	.000	.289	7.607	.000

Of interest is that the higher the faculty salaries the higher the graduation rates. Better paid professors, at all schools, likely have higher satisfaction with their jobs and help students through college.

It is surprising that neither the existence of learning communities or teaching centers improves graduation rates. Learning communities where incoming students are grouped according to interests such as music or sports would seem to provide camaraderie and a network of friends and colleagues. This should provide more support, which should lessen the probability of students leaving school. These results do not support this hypothesis.

Of most interest is that the existence of a teaching and learning centers on campus do not improve graduation rates. 265 colleges and universities in the data set had a “Center for Teaching Excellence”, a “Center for Teaching and Learning” or other resource for faculty to improve their teaching. The existence of one of these centers should improve teaching, which in turn should improve learning, which then should increase graduation rates. Perhaps the concept is too new to have had an impact to date.

Analyzing the differences in graduation rates is obviously a very complicated concept. Some variables impacting graduation are determined simultaneously, an endogenous variable problem. In the future I will use a Two-Stage Least Squares and a Switching model to control for this. In addition, the size of the student population is also likely important, but there are heteroskedasticity issues associated with this that are not recognized in the current literature on the topic. Future econometrics will examine these issues.

CONCLUSION

This research attempts to examine various factors that impact graduation rates at U.S. colleges and universities. Data on faculty salaries, existence of a teaching center, school location, and if the college participates in the National Survey of Student Engagement and others are added to the data from the *U.S. News and World Report* rankings with data on graduation rates.

Results show that factors like student faculty ratio, the percentage of faculty that are full time and faculty salaries all contribute to increased graduation rates. The existence of student learning communities and if a school has a teaching and learning center for faculty does not improve graduation rates. Future research should use appropriate econometrics to better answer what variables are most important to increasing graduation rates.

REFERENCES

- Angrist, Joshua, Daniel Lang, and Philip Oreopoulos. December 2006. “Lead Them to Water and Pay Them to Drink: An Experiment with Services and Incentives for College Achievement” NBER Working Paper No. 12790
- Anstine, J. and Skidmore, M. 2005. “A Small Sample Study of Traditional and On-line Courses with Sample Selection Adjustment” *Journal of Economic Education*.
- Holmstrom, Bengt and Paul Milgrom. 1987. “Aggregation and Linearity in the Provision of Intertemporal Incentives,” *Econometrica*, 55(2), pp. 303-28.
- Jaeger, David and Marianne Page. 1996. “Degrees Matter: New Evidence on Sheepskin Effects in the Returns to Education,” *Review of Economics and Statistics*, 78(November), pp. 733-739.
- Lavy, Victor and Analia Schlosser. 2005. “Targeted Remedial Education for Underperforming Teenagers: Costs and Benefits” *Journal of Labor Economics*, 23(4), 839-74

Lotkowski, V. A., S. B. Robbins and R. J. Noeth. 2004. "The Role of Academic and Non-academic Factors in Improving College Retention," ACT Policy Report (ERIC Document Reproduction Service no. ED485476)

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AUDIT MARKET IN THE REPUBLIC OF MACEDONIA SEEN THROUGH TRANSPARENCY REPORTS

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ABSTRACT

The need for audit firms to present transparency report was introduced for the first time in the Macedonia with the new Audit Law in September 2005. In the spirit of integration of the Macedonia in the EU, minimum information requirements than need to be included in the transparency report fully correspond to Article 38 of the new Eighth Directive. Taking into account the fact that first transparency reports were presented by audit firms in 2007, this paper will provide, through detailed and comparative analysis of such firms, clear picture of the audit market in the Macedonia. The paper comprises three segments. The first one gives summary of the trends in the audit profession prior to adopting the Audit Law, with their repercussions on the audit market. The second one places the focus on analyzing and comparing the information presented by the audit firms in the transparency reports. The third segment, on the basis of previously carried out comparative analysis, shows the trends on the audit market in 2007 in the Macedonia. At the same time, we would also like to point out to the potential benefits the information in transparency reports provide for the audit firms and to the users of audit services.

KEY WORDS: Transparency Report.

INTRODUCTION

Republic of Macedonia, as an integral part of SFRY, was building plan economy for more than four decades. Like in the other former socialist countries, the audit profession was not developed. Following the breakdown of SFRY in 1991, transition period in the Republic of Macedonia was marked with privatization of socially-owned enterprises. Carrying out just privatization was conditioned, among other things, by fair and honest presentation of the financial statements. Unfortunately, despite the emphasized need for credibility in the presented statements, in the period 1991-1997 audit profession was in the margins of the transition process. First steps towards creating the necessary climate for establishing the audit profession were undertaken in the post-privatization period by adopting the Audit Law in December 1997. Signing the Stabilization and Association Agreement (SAA) with the European Union and its Member States on 9 April 2001 confirmed the decisiveness of the Republic of Macedonia to integrate in the European family. Not even the audit profession was resistant to the requirements for harmonization with the *Acquis Communautaire*. On the contrary, in a relatively short period of time, in September 2005, new Audit Law was adopted, fully harmonized with the Revised Eighth Company Law Directive. New Audit Law introduced essential changes in the audit profession, which were assessed as a step forward in the EU integration processes. The obligation to present transparency report, by precisely defining the information necessary to be disclosed therein pursuant to the Law, reached the most sensitive and the most mysterious part of the operations of the audit firms in the Republic of Macedonia. With a one year delay, the first transparency reports were presented in the course of 2008. Paper segments below give more detailed presentation on the trends on the audit services market in the Republic of Macedonia, observed from the point of view of the detailed analysis of information presented in the transparency reports.

CLIMATE IN THE AUDIT PROFESSION IN THE REPUBLIC OF MACEDONIA PRIOR TO THE ADOPTION OF THE NEW AUDIT LAW

Under the Audit Law dated 1997, conditions for creating the audit profession, with attributes immanent for the developed market economies, were established for the first time in the Republic of Macedonia. The Law defined, for the first time, the requirements for registration of audit firms as primary holders of audit activities. At the same time, the Law precisely stated the preliminary criteria to be met by individuals that wanted to become part of the audit profession. What was immanent for the environment in which the Law was adopted was the absence of strong professional association of accountants and auditors, that could be the generator of changes. Association of Accountants, Financial Workers and Auditors, having tradition longer than half a century, remained passive at the time the foundations of the profession were laid down. Taking such trends in the accounting profession into account, delicate mission related to the creation of the professional regulation in the audit profession with the Law was entrusted to the Ministry of Finance. Having in mind the fact that the Law expressed the commitment to accept and implement the international regulation as a substitute for the national one, in 1998 Ministry of Finance translated IFAC's IAS. One year later, Ministry of Finance translated the IFAC's Code of Ethics for Professional Accountants, which was accepted in the national profession in its original form and contents.

In 2001, Minister of Finance adopted the training program for the potential candidates to pass the exam for acquiring the title of statutory auditor. Ministry of Finance also adopted the Rulebook on the Manner of Passing the Exam for Acquiring the Title of Certified Auditor by precisely stating the exam criteria under the program. Logical continuation of the undertaken activities was for the Minister of Finance to be assigned the toughest task to appoint the Exam Commission. The first exam for acquiring the professional title was held in December 2001, organized by the Ministry of Finance. By having two exam cycles annually (in May and December), nine exam cycles were carried out as of December 2005 inclusive, and the initial audit core, comprising 147 statutory auditors, was established. However, despite the generally created climate for introduction of the audit profession in the accounting infrastructure, the Law did not cover all aspects that were crucial for this profession. Part concerning the professional development of the auditors after acquiring the title of statutory auditor remained fully unregulated. Basically, the Law left series of opened issues, the resolution of which became an imperative in the next several years. Resolving these issues initiated radical changes in the existing Audit Law, which, after full 7 years, was substituted with a new one.

In the meantime, on 9 April 2001, Republic of Macedonia became the first country in the region to sign the Stabilization and Association Agreement (SAA) with the European Union and its Member States. Parliament ratified the SAA on 13 April 2001, thus confirming the strategic interest of the Republic of Macedonia and the political commitment for integration in the European structures. Article 68 of SAA clearly includes the obligations for harmonizing the national legislation with the *Acquis Communautaire*, creating own experience and guidelines in this process. On 9 November 2005, the country was delivered positive *Avis* for the status of a candidate country, with detailed standards to be met.

The *Avis* clearly pointed out the need for the candidate country to meet the EU criteria, among which was the acceptance of 31 Chapters of the *Acquis Communautaire*. Adoption and implementation of the relevant components in Chapter 5 (Company Law) of the *Acquis Communautaire* pertaining to accounting and audit is the key part of all the activities envisaged in the *Country Action Plan adopted in June 2005 by the Steering Committee appointed by the Government*. In line with the commenced EU integration processes, enforcement of the new Audit Law should provide for a significant improvement of audit quality, as well as commencing the process of approximation of the audit profession in the Republic of Macedonia to the European family.

Having in mind the fact that in the past period the term “self-regulation” was unknown to the members of this profession, primary task of the new Audit Law was commencement of the process of deregulation of the audit profession. Deregulation should contribute to transfer of the competences in the field of creating the professional regulation and certifying the statutory auditors by the Ministry of Finance in the Institute for Certified Auditors established under this Law. More specifically, the Law envisages establishment of a professional association of statutory auditors with a wide range of obligations and responsibilities, having all statutory auditors and audit firms as its members. Assembly for the incorporation of the Institute for Certified Auditors of the Republic of Macedonia (hereinafter: ICARM) was held on 23 May 2006.

Establishment of ICARM caused avalanche of changes in the audit profession, in particular in the field of profession oversight, assessment of the quality of work of the statutory auditors and the audit firms, changes in the exam program for acquiring the title of statutory auditor, introduction of continuous professional development of statutory auditors, defining the obligation for the audit firms to present transparency report on annual basis, etc. Part of these activities has already commenced, while part of them will start in the period to come.

INFORMATION FROM THE TRANSPARENCY REPORT AS BASIS FOR ANALYZING THE AUDIT MARKET IN THE REPUBLIC OF MACEDONIA

Establishment of ICARM led to creation of the key pre-conditions for development of a modern audit profession with all attributes immanent for the EU Member States. Absence of strong professional association of statutory auditors in the past period not only slowed down the development of the profession itself, but also completely blocked the integration of the national auditors in IFAC and FEE. Establishment of ICARM has opened new horizons for the statutory auditors in the Republic of Macedonia.

During the past eight years by the time the first Audit Law was adopted, audit firms operated in conditions of unfair competition on the audit market on which, unfortunately, quality was not the key criterion for attracting clients, but it was rather the price of the service offered. Most often offered price for carrying out audit by the local audit firms did not correspond to the time and the complexity of the engagement and the competence of the auditors. Unscrupulous race for profit and clients evidently led to significant deviations from the enforcement of the professional regulation, in particular in the methodological approach of certain audit firm and the ethical behaviour of the statutory auditors. Despite the legal limitation for the audit firm to carry out audit and render audit services at the same client, it has never been proven that this legal requirement de fact functions in the national audit practice. In conditions of absence of installed mechanism to observe the rules of the game and adequate quality control, statutory auditors and audit firms observing the professional regulation were discontented by the unprofessional behaviour of their colleagues.

Such trends initiated the need to introduce, as a novelty to the existing Audit Law, the obligation for the audit firm or the statutory auditor – sole proprietor to publish in at least one mass media or on their websites, within three months of the end of each financial year, the annual transparency report. Transparency report should provide for a permanent insight in monitoring the rules of the game in the competition on the market by the members of this profession. The report should include a wide range of information providing clear picture of the type and the volume of activities carried out by the audit firm during the year and the turnover thus realized. More precisely, pursuant to Article 26 of the Audit Law, annual transparency report should include the following information:

- 1) Description of the legal structure and ownership;

- 2) Description of the professional network and the legal and structural arrangements in the network they belong to;
- 3) Description of the governance structure of the audit firm or the statutory auditor – sole proprietor;
- 4) Description of the internal quality control system of the audit firm or the statutory auditor – sole proprietor and a statement by the administrative or the management body on the effectiveness of its functioning;
- 5) List of entities being audited during the preceding year;
- 6) Statement on the policy followed by the audit firm or the statutory auditor – sole proprietor concerning the continuing education of the statutory auditors and
- 7) Financial information on the total turnover realized on the basis of audit and on the basis of other fees, broken down by four categories of audit services, additional services for quality assurance, tax advisory service and other non-audit services. Audit Law, Official gazette of the RM, no. 79. p. 99, 21 September (2005)

Transparency reports should be signed by the authorized person at the audit firm, i.e. the statutory auditor – sole proprietor, as the case may be.

If Article 26 Transparency Report in the Law is compared with Article 40 Transparency report in the Revised Eighth Company Law Directive, one can conclude that there is high level of harmonization regarding the issue on compulsory information to be presented in the transparency report. However, regarding the information requirements to be part of the transparency report, Revised Eighth Company Law Directive is more rigorous, in particular the following points: New Audit Law entered into force in the course of 2005, imposing the obligation for the audit firms to submit the annual transparency report in 2007 covering their operations in 2006. Unfortunately, during 2007, most of the audit firms did not submit annual transparency reports. Having in mind the fact that in 2007 ICARM was engaged in building its architecture and it worked on constitutive acts, while the Council for Advancement and Oversight of the Audit put efforts to assist ICARM in commencing the functioning, not adhering to Article 26 of the Law remained suppressed, and the offenders were unsanctioned.

During 2008, situation evidently improved and, 17 out of 24 audit firms published their annual transparency reports, while the remaining 7 audit firms did not adhere to this legal obligation. Initial reading of the transparency reports imposed the impression of lack of experience of the audit firms in preparing and presenting such type of reports. Certain audit firms, especially the local ones, briefly focused in the reports on several key information (such as, the legal structure and ownership, description of the governance structure and part of the financial information), without covering the other segments of the report (such as, the internal control, continuous professional development, presentation of list of clients and realized turnover by categories of services defined in the Law). Unlike them, other audit firms, especially the Big Four, presented more detailed information on the internal system on internal quality control of the firm, attached list of entities, however, they did not make precise distinction of the realized turnover pursuant to the requirements in the Law. Such approach is logical if one takes into account that the Big Four operate according to the globally accepted audit methodology. It means a developed, detailed and rigorous internal control system. What is immanent for the Big Four is carrying out control through every-day controlling of the operations on the basis of hierarchy-pyramidal system, from the lowest to the highest management level. In addition, there are periodic internal controls according to specially designed methodology of the audit firm. Offices of the Big Four in the Republic of Macedonia are subjected to detailed review once a year, carried out by another firm member of the European audit firm, according to specially designed control methodology and sophisticated and specially designed control software.

Such inconsistent approach regarding the form and the contents of the transparency reports burdens the comparison of data and the carrying out of more detailed research. However, financial data presented in

the reports on the basis of globally listed categories give rough picture of the trends on the audit market in the Republic of Macedonia.

Table 1 is a review of all audit firms, ICARM members, which submitted transparency reports in 2008, specifying in more details the turnover, by the four key categories, realized in the course of 2007.

Table 1: Review of Turnover Realized on the Basis of Different Services in Audit Firms in the Republic of Macedonia

	Audit firm	Audit-related turnover in EURO's	Quality assurance services in EURO's	Tax advisory services in EURO's	Other non-audit services in EURO's	Total in EURO's
1	<i>Ernst&Young Statutory Auditors, Skopje</i>	305,446.98	24,878.70	0	245,433.20	575,758.88
2	<i>PriceWaterhouseCoopers DOOEL Skopje</i>	1,239,900.44	0	435,100.68	0	1,675,001.12
3	<i>KPMG MACEDONIA DOO Skopje</i>	510,155.14	0	57,666.44	541,157.28	1,108,978.86
4	<i>Deloitte DOOEL Skopje</i>	699,936.18	0	34,814.10	71,697.12	806,447.40
5	<i>Grant Thornton DOO Skopje</i>	244,663.08	0	0	6,503,702.05	6,748,365.13
6	<i>Macedonian Audit Center</i>	224,879.67	0	0	11,835.77	236,715.45
7	<i>Dimitrov Audit</i>	242,654.36	0	0	33,043.50	275,697.85
8	<i>B&Lj. Boro and Ljupco, DOO Skopje</i>	151,512.20	0	0	7,512.20	159,024.39
9	<i>Trio-Consulting DOO Gevgelija</i>	140,605.12	0	6,342.47	32,148.24	179,095.83
10	<i>Rafajlovski Audit DOO Skopje</i>	72,325.20	0	0	81.30	72,406.50
11	<i>Censum DOOEL Skopje</i>	38,968.13	0	0	53,728.63	92,696.76
12	<i>Pelagoniska Audit Firm DOOEL Prilep</i>	65,266.85	0	0	5,881.17	71,148.02
13	<i>Kojzakliev-Pavleska AD Skopje</i>	8,487.54	0	0	0	8,487.54
14	<i>Kni-Prokom Prilep</i>	29,333.33	0	0	24,243.90	53,577.24
15	<i>Infos D – Skopje</i>	43,840.68	0	8,248.78	0	52,089.46
16	<i>Primeko Audit DOOEL Skopje</i>	56,495.93	0	2,390.24	5,850.42	64,736.60
17	<i>Revizions DOO Skopje</i>	1,888.57	0	0	3,756.24	5,644.81
	Total	4,076,359.40	24,878.70	544,562.72	1,101,406.00	5,747,206.82

Table 1 is a review of all audit firms, ICARM members, which submitted transparency reports in 2008, specifying in more details the turnover, by the four key categories, realized in the course of 2007.

More detailed analysis of the data in the Table 1 points out to the fact that, out of the total realized turnover from the wide range of services offered to the clients during 2007, the Big Four, together with Grant Thornton, accounted for 77.97%, while the other 12 local audit firms accounted for 22.03%.

With respect to the turnover realized on the basis of the offered services, transparency reports show that turnover realized on the basis of carrying out audit services was dominant at almost all audit firms. Individual share of audit firms in the total offered audit services and the turnover thus realized are shown in Table 2 below.

Table 2: Turnover Realized from Audit Services by Audit Firm

	Audit firm	Audit-related turnover in EURO's	Percentage
1	<i>Ernst&Young Statutory Auditors, Skopje</i>	305,446.98	7.49
2	<i>PriceWaterhouseCoopers DOOEL Skopje</i>	1,239,900.44	30.42
3	<i>KPMG MACEDONIA DOO Skopje</i>	510,155.14	12.51
4	<i>Deloitte DOOEL Skopje</i>	699,936.18	17.17
5	<i>Grant Thornton DOO Skopje</i>	244,663.08	6.00
6	<i>Macedonian Audit Center</i>	224,879.67	5.52
7	<i>Dimitrov Audit</i>	242,654.36	5.95
8	<i>B&Lj, Boro and Ljupco, DOO Skopje</i>	151,512.20	3.72
9	<i>Trio-Consulting DOO Gevgelija</i>	140,605.12	3.45
10	<i>Rafajlovski Audit DOO Skopje</i>	72,325.20	1.77
11	<i>Censum DOOEL Skopje</i>	38,968.13	0.96
12	<i>Pelagoniska Audit Firm DOOEL Prilep</i>	65,266.85	1.60
13	<i>Kojzakliev-Pavleska AD Skopje</i>	8,487.54	0.21
14	<i>Kni-Prokom Prilep</i>	29,333.33	0.72
15	<i>Infos D – Skopje</i>	43,840.68	1.08
16	<i>Primeko Audit DOOEL Skopje</i>	56,495.93	1.39
17	<i>Revizions DOO Skopje</i>	1,888.57	0.05
	Total	4,076,359.40	100.00

Data from transparency reports speak of dominant share of the Big Four, together with Grant Thornton, of 73.60% in the total turnover in the Republic of Macedonia realized on the basis of audit. Share of PriceWaterhouseCoopers in the structure of realized turnover is evident, accounting for 30.42%, compared to the other firms in the group of the Big Four. Such trend is partially a result of the requirement in the Banking Law as of June 2007 for rotation of audit firms each five years. More specifically, Banking Law does not allow for the same audit firm to carry out audit at the same client, i.e. bank, continuously longer than five years. Due to this, arrangements of the Big Four in the financial sector were changed, resulting in losing large clients at part of these firms, and as a result, their turnover dropped on this basis.

Audit Law requires turnover the audit firm realized from quality assurance services to be separately presented in the transparency report. Taking into account the fact that audit market is still not developed in the Republic of Macedonia, as is the case in the EU Member States, small number of clients request quality assurance services, and when they request such services, the audit firms treat them as another type of services. Data in the transparency reports speak of such trends, and it was only Ernst&Young Statutory Auditors, Skopje that showed turnover on the basis of quality assurance services, while the other audit firms, including the rest of the Big Four, presented no turnover.

Another category of turnover from the transparency reports includes the turnover realized on the basis of tax advisory services. Data on the participation of the audit firms in the total turnover realized on this basis are presented in Table 3.

Similar to audit services, the Big Four had the dominant share in the turnover structure, realized on the basis of tax advisory services, accounting for 96.88%, while the 3 local audit firms participated with 3.12%. In addition, the numbers speak of the leader position of PriceWaterhouseCoopers, participating with 79.90% in the total turnover realized on the market in the Republic of Macedonia on the basis of tax advisory services.

Last category of turnover covers the other non-audit services and, according to the explanations in the transparency reports of the audit firms in the Republic of Macedonia, this category incorporates the turnover from accounting services and assessments. Review of structural share of audit firms in the

Republic of Macedonia in the total turnover realized on the basis of other non-audit services is given in Table 4.

Table 3: Turnover Realized from Tax Advisory Services by Audit Firm

	Audit firm	Tax advisory services in EURO's	Percentage
1	<i>Ernst&Young Statutory Auditors, Skopje</i>	0	0.00
2	<i>PriceWaterhouseCoopers DOOEL Skopje</i>	435,100.68	79.90
3	<i>KPMG MACEDONIA DOO Skopje</i>	57,666.44	10.59
4	<i>Deloitte DOOEL Skopje</i>	34,814.10	6.39
5	<i>Grant Thornton DOO Skopje</i>	0	0.00
6	<i>Macedonian Audit Center</i>	0	0.00
7	<i>Dimitrov Audit</i>	0	0.00
8	<i>B&Lj, Boro and Ljupco, DOO Skopje</i>	0	0.00
9	<i>Trio-Consulting DOO Gevgelija</i>	6,342.47	1.16
10	<i>Rafajlovski Audit DOO Skopje</i>	0	0.00
11	<i>Censum DOOEL Skopje</i>	0	0.00
12	<i>Pelagoniska Audit Firm DOOEL Prilep</i>	0	0.00
13	<i>Kojzakliev-Pavleska AD Skopje</i>	0	0.00
14	<i>Kni-Prokom Prilep</i>	0	0.00
15	<i>Infos D – Skopje</i>	8,248.78	1.51
16	<i>Primeko Audit DOOEL Skopje</i>	2,390.24	0.44
17	<i>Revizions DOO Skopje</i>	0	0.00
	Total	544,562.72	100.00

Table 4: Turnover Realized from Non-Audit Services by Audit Firm

	Audit firm	Non-audit services MKD	Percentage
1	<i>Ernst&Young Statutory Auditors, Skopje</i>	245,433.20	22.28
2	<i>PriceWaterhouseCoopers DOOEL Skopje</i>	0	0.00
3	<i>KPMG MACEDONIA DOO Skopje</i>	541,157.28	49.13
4	<i>Deloitte DOOEL Skopje</i>	71,697.12	6.51
5	<i>Grant Thornton DOO Skopje</i>	65,037.02	5.90
6	<i>Macedonian Audit Center</i>	11,835.77	1.07
7	<i>Dimitrov Audit</i>	33,043.50	3.00
8	<i>B&Lj, Boro and Ljupco, DOO Skopje</i>	7,512.20	0.68
9	<i>Trio-Consulting DOO Gevgelija</i>	32,148.24	2.92
10	<i>Rafajlovski Audit DOO Skopje</i>	81.30	0.01
11	<i>Censum DOOEL Skopje</i>	53,728.63	4.88
12	<i>Pelagoniska Audit Firm DOOEL Prilep</i>	5,881.17	0.53
13	<i>Kojzakliev-Pavleska AD Skopje</i>	0	0.00
14	<i>Kni-Prokom Prilep</i>	24,243.90	2.20
15	<i>Infos D – Skopje</i>	0	0.00
16	<i>Primeko Audit DOOEL Skopje</i>	5,850.42	0.53
17	<i>Revizions DOO Skopje</i>	3,756.24	0.34
	Total	1,101,406.00	100.00

Information on the participation of certain audit firms in the total realized turnover from non-audit services, obtained from the data in the transparency reports, is slightly different from the previously analyzed services. Despite the indisputably high share of the Big Four, together with Grant Thornton, of 83.83% in the total realized turnover from non-audit services and the significantly low share of the local audit firms of 16.17%, dispersion of turnover between the Big Four points out to the leader position of KPMG Macedonia, with dominant 49.13% in the total realized turnover. What is interesting is the information that PriceWaterhouseCoopers showed no turnover from non-audit services, while Ernst&Young Chartered Auditors Skopje showed relatively high share of 22.28%.

Researching the data in the transparency reports is a challenge; however it also imposes certain limitations. Due to the absence of an established practice to regularly publish the transparency reports in at least one mass media or on audit firms' websites, we were compelled to ask for some of the reports

directly from ICARM. Processing the inconsistently presented data also imposed serious limitations. At part of the audit firms, selecting the realized turnover on the basis of realized service in the transparency report did not correspond to the requirements in the Audit Law. This certainly required, when processing the data, additional grouping so as to realistically include the entire turnover the audit firms in the Republic of Macedonia realized on the basis of the four types of services. Finally, the absence of comparative indicators from the reports from the previous years limited the research and made it poorer in terms of monitoring the dynamics of the development of certain audit firms and their participation in the audit market in the Republic of Macedonia.

BENEFITS THE TRANSPARENCY REPORTS OFFER TO THE USERS OF AUDIT FIRMS' SERVICES

However, regardless of the numerous limitations we faced when obtaining the transparency reports from the audit firms and analyzing the presented data, observations we made gave us the real picture of the trends on the audit market in the Republic of Macedonia. After almost a decade from the adoption of the first Audit Law and after 3 years of the adoption of the new Audit Law, which promoted the building of the audit profession with attributes immanent for the developed economies, the Big Four have played the dominant role in creating the climate for development of the profession. They were, are and, we expect, they will be generators of changes in the audit profession in the Republic of Macedonia. In parallel to them, several local audit firms (Macedonian Audit Center, Dimitrov Audit, B&Lj, Boro and Ljupco, etc.), by showing high professionalism in their operations, gained their position on the audit market. Such trends for participation of the audit firms in the audit market could be foreseen even prior to obtaining the initial information from the presented transparency reports. However, as said at the beginning, in conditions of absence of strong professional association of chartered auditors, establishment of the audit profession in the accounting infrastructure, establishment of audit firms and their struggle to win the market and the clients was accompanied with a certain amount of mystery. Issue of which audit firm works at which client and the fee for the offered service was speculated. Such atmosphere protected the audit firms and made them untouchable. Adjusting the new Audit Law to the revised Eighth Company Law Directive opened the issue of transparency in the operations of the audit firms and touched the most sensitive information. Resistance to such requirement was shown by refraining from presenting the 2006 transparency reports by most of the audit firms in the Republic of Macedonia.

Different perception of the requirement to present sensitive information from the operations of the audit firms in the transparency report is partially overcome, following their first presentation for 2007. Legal requirement for the audit firms to offer, through the report, transparent information on themselves provides for (1) their better presentation in front of the potential users of their services; (2) better insight for those purchasing the service in the quality of the products offered through the statements for the internal control system of the audit firm, meeting the obligation for continuous professional development of the employees, respecting the requirement for independence in realizing the arrangement, etc. All in all, presenting data from the transparency report should provide for a positive input of the audit quality and it can help in promoting sounder competition on the audit market.

Presenting the transparency report might, for part of the smaller audit firms, be legal obligation that is time consuming, that incurs costs which in a given situation of clients can be hardly valorized through winning new clients and winning better position on the audit market. After almost a year of presenting the first transparency reports, it is extremely difficult to measure the benefits arising from the legal requirement to publicly present the data for themselves and their policies and processes. However, it is quite certain that by developing the audit market in the Republic of Macedonia in the coming years, audit firms will start feeling the benefits from their transparent presentation in front of the clients.

CONCLUSION

Strategic commitment of all Governments of the Republic of Macedonia since its independence till today is approximation and integration in the EU. Audit profession was, still is and, it is quite certain, will be part of the strategies for faster integration in the EU. New Audit Law was adopted in the spirit of such commitments. Audit profession was waiting for this Law for eight years. It was not just a mere coincidence that, during its preparation, then proposed Eighth Company Law Directive was consulted. Striving for approximating the national audit profession to the global professional elite, new Audit Law is harmonized with the said Directive in all key segments. To that end, requirement for presenting the annual transparency report by the audit firms in Macedonia was introduced in 2007 for the operations carried out in 2006. However, despite such defined legal requirement, public in the Republic of Macedonia saw the first transparency reports in 2008. Information presented in the reports aroused huge interest at us and stimulated us to carry out initial research so as to give a picture of the trends on the audit market in the Republic of Macedonia in 2007. On the basis of comparison of data from the transparency reports of the audit firms we came to a conclusion that the Big Four, together with Grant Thornton, still held the dominant share on the audit market in the Republic of Macedonia. Local audit firms had just a small portion of the audit market to win. However, this should not discourage the local audit firms. On the contrary, they should use the presentation of transparency report as a possibility to promote the wide range of services to the potential clients. By presenting the 2007 transparency reports, the first barrier is surmounted, and time will tell whether transparent disclosure of most sensitive information from the operations of the audit firms will bring more benefits to them or just more obligations and costs to meet the legal requirements.

REFERENCES

Auditing Law, Official Gazette RM, 21 September 2005.

Country Action Plan, Steering Committee, Skopje, 2006.

Revised New Eighth Company Law Directive 78/660/ECC and 83/349/EEC, Council of the European Union, Brussels, June 2006.

Stabilization and Association Agreement between Republic of Macedonia and EU and its Member States, Official gazette RM, No. 28. 13th April 2001.

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BIOGRAPHY

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THE MODERATING ROLE OF RELATIONSHIP QUALITY IN DETERMINING THE TOTAL VALUE FOR THE END-CUSTOMER

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ABSTRACT

The concept of value in a business transaction has been studied by academic scholars in several diverse fields such as management, marketing, economics and accounting. Among the several approaches to understanding value, the one most frequently encountered in business literature is the tradeoff of benefits and costs, the difference or ratio of which is operationalized as value. In a complex business relationship involving goods and services as well as multiple business partners, assessing the total value of the system is not as straightforward as a simpler one-time business transaction. The purpose of this paper is to not only offer a model of total value of a system including antecedent factors and outcomes but also to study the role of relationship quality in moderating the value of the individuals in the business relationship. This paper uses the transaction cost approach to study the value in a business relationship to both the service-provider and client firm, considering the costs and benefits to each business partner. Next, the paper discusses the impact of the quality of the business relationship on the value perceived by each business partner. Finally, several outcomes of a total value orientation such as financial performance, competitiveness and, especially, end-customer value is considered. Future directions for research including measurement issues, model validation and model extensions to a network of relationships are forwarded.

BIOGRAPHY

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A QUALITATIVE APPROACH TO GAME THEORY AND INTERNATIONAL TRADE

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ABSTRACT

This is a conceptual paper on qualitative Game Theory. Game Theory has successfully infiltrated a large number of academic disciplines mainly with a formidable quantitative arsenal. With the strong development of quantitative research in economics and the quantitative preference in Game Theory it is little surprise that virtually all Game Theoretical research on International Trade has been done from a quantitative angle. Until 1996 research on Strategic aspects of Business suffered from a similar deficiency. However, Nalebuff and Brandenburger successfully developed a qualitative application of Game Theory for Business and filled an academic void. There is considerable overlap between Business and International Trade. Companies increasingly have international value chains that result in the trading of half-products across borders or end products Businesses produce for the international market. However in spite of the important areas of overlap the actual Business setting is distinctively different from setting of International Trade targeted in this paper due to two aspects: the Anarchical setting in International Trade and due to the presence of ethics in International Trade to an extent absent in Business. The upshot of those two additions is that Nalebuff and Brandenburger's qualitative approach of Game Theory cannot be applied seamlessly to the academic discipline of International Trade. However this does not negate the possibility of developing a quantitative version of Game Theory that is applicable to International Trade. This paper takes the first steps in achieving such a version.

INTRODUCTION

The archetypal Game Theoretical element of Nalebuff and Brandenburger's Co-opetition theory is undoubtedly the "new Mindset". This Mindset consists of two dimensions: competition and co-operation. The contributive value of the Mindset is that it indicates under which circumstances actors need to co-operate and under which ones they need to compete. Essentially Co-opetition prescribes that when it comes to creating value - i.e. "increasing the pie" – co-operation is in order; when the total value, including the newly created part, needs to be divided competition is the name of the game. To illustrate this simple yet powerful prescription, consider the following. At first glance British Airways and American Airlines are competitors in a fierce industry. However, in an attempt to increase their joint share of the market they have joined forces¹. Through joining their assets, for example by sharing landing codes and possibilities to collect and redeem air miles the partners hope to compete more effectively with those outside the partnership: BA and AA co-operate with the aim to create (more) value. If their attempts are successful and the partnership has led to extra revenue or profit, it needs to be decided how this surplus will be divided across the partners: in this process of distributing (the extra) value BA and AA adopt a competitive mindset.

THE MINDSET AND INTERNATIONAL TRADE

Indebted to the analytical contribution that the concept of Nalebuff and Brandenburger's Mindset offers to Game Theoretical application for Business, the first step in determining to what extent the theory can apply to the field of International Trade should be in assessing whether this field can be subjected to the same type of Mindset as identified in Business. As indicated, the main notion of the Nalebuff and Brandenburger's Mindset is the duality caused by two – opposing – ways to approach Business settings: through competition or through co-operation. Furthermore, as previously explained in Nalebuff and Brandenburger's view the choice when to opt for the one and when for the other of these two components

of the Mindset should be dictated by the nature of the situation, be that creating value or distributing value. As such both the setting and, consequently, the choice can be considered straightforward because a Business situation can either be interpreted as one that is creating value or one that refers to distributing it. To be sure, the fact that setting and choice portray an analytically straightforward situation does not guarantee that actors always play the right game of Business. The craft of doing so lies, to a large extent, in the ability of the actor to identify whether a situation is one of creation or distribution, i.e. whether to adopt the competitive or the co-operative component of the Mindset in case. But the observation that actors in their execution of the choice may make mistakes, i.e. play the wrong game, does not negate the relative simplicity of this model based on two clearly opposed options (creation or distribution and as a consequence competition or co-operation) that, moreover, are not subjected to further dimensions. It is our opinion that the stylization of reality through the notion of the Mindset as part of the wider theory is adequate for Business settings and much of the theory's strength resides in this starting point of how to consider Business. However, an important question for our current interest is whether practical settings away from the world of Business can be captured with the same model. Specifically stated, is the world of International Trade subjected to the same simplicity as the one of Business with regard to the Mindset or is it characterized by a more complicated setting? In a Game Theoretical format the question becomes: is playing the Game of International Trade similarly and equally based on the notions of creating value and distributing it as have been identified for the Game of Business?

To scholars in and followers of International Trade the notions of value creation and value distribution will ring enough familiarity that they instinctively respond with an affirmative answer to that question or at the very least identify strong parallels between the two fields in light of creating value and distributing value. In fact, they may argue that scholars in Business, arriving at the academic scene several centuries after their counterparts in International Trade, have "borrowed" the concepts of value creation and distribution from Economics or its expansion discipline International Trade. Similarly, the concepts of competition and co-operation can be traced back to the "Founding Father" of International Trade, Adam Smith as, at the very least, an implicit underlying notion in which states compete to increase their citizens' wealth but do so through a mechanism of co-operation as prescribed in Smith's theory of Absolute Advantage (Smith, 1776; Smith and Heilbroner, 1987; O'Rourke, 2007; Deane, 1990; Smith, 2003). With both issues of value creation and value distribution as well as issues of competition and co-operation representing established notions within the discipline of International Trade it seems evidently obvious that the Mindset developed in Co-opetition for Business purposes is also applicable to International Trade. The four building blocs of the Mindset, value creation and distribution of value as well as competition and co-operation can be considered the four pillars of International Trade theory². However this congruence is deceptive and without scrutiny the Mindset is not as automatically applicable as a starting point to create a qualitative Game Theoretical model for International Trade comparable to Co-opetition's contribution to Business. This is due to differences in the setting in which International Trade takes places compared to the setting of Business. These differences render a straightforward application of the Mindset to International Trade inadequate in spite of the ostensible similarity of the two fields with regard to the presence of the building blocks of the Mindset. In case of International Trade, the notions of creation and distribution are less delineated and materialize in a less universally defined manner, for example, because some actors do not automatically attach value creation to a co-operative mindset. This is the basis for our belief that Co-opetition's Mindset requires adjustments for it to be applicable to International Trade and to perform a similar starting point for a qualitative application of Game Theory to International Trade as it has for Business.

Actors in International Trade

At first glance, Business – and particularly the international element of it – and International Trade operate in the same arena. Both have been subjected to forces of globalization, impact on life, work and behavior patterns within those aspects such as consumption, leisure, health and travel and both bring

together a number of actors such as consumers, producers, governments, and interest groups to mention some of the most obvious ones. Due to the interwoven relation between Business and International Trade often the same actors operate in both Business and International Trade. Many of the Business transactions have a direct relation with International Trade, not in the least due to the fact that many of today's end products and services are an amalgamation of several International Trade linkages. Similarly, much of International Trade either consists of products and services generated through Business or aims to facilitate Business transactions.

Notwithstanding this intertwined relationship between Business and International Trade and substantial overlap of actors, there is one deciding differences between the two contexts. Much attention has been paid to the footloose nature of contemporary Business indicating that the "Borderless World" has led to many Business sectors operating in one global market instead of within separate units, states (Ohmae 1985, 1999). Academic discussions surrounding that theme focus on diminished capacities of states versus firms (Gilpin 1987; Strange 1988; Spero and Hart, 2002), consequences for national labor policies by government due to a re-articulation of what is added value to a country (Reich 1992) and economic implications of such a world without frontiers for poorer countries (Rodrik 1997). Insightful as such contributions may be, for our current debate – Business versus International Trade – the notion of the Borderless World could be misleading. On the applicability of the discussion on whether the world is truly borderless or not there are two important observations: unlike the case of Business, states are – and continue to be – the single most important actors in International Trade and, consequently, what is referred to as the Anarchical System of the world has a larger impact on International Trade than on Business.

Competition in International Trade

In the mid- to end-1980 the perception that nations are engaged in a similar head-to-head competitive game comparable to the one played by companies on a global scale gathered momentum and by the 1990s it was an established position based on generally accepted analyses (Prestowitz, Jr., 1988; Magaziner and Reich, 1982; Thurrow, 1992; Tyson, 1993). Notwithstanding Krugman's valuable analysis that applying the principals of corporate competitiveness to the arena of states not only leads to false analogies and misrepresentations but could be labeled as a "dangerous obsession" on the side of policy makers (Krugman, 1994), it is nevertheless valuable to assess nations on a competitive dimension provided this is linked to an assessment on a co-operative dimension. This paper takes that position for two reasons, one being a derivative of two of Krugman's three reasons behind the article referred to in this context and the other reason stemming from the contributing value of Game Theory. Regarding the former, the usefulness of the notion of competitiveness of nations, in spite of its inaccuracy from an academic point of view, means – even a decade and a half after Krugman's analysis – that it has continued to be an attractive concept for policy makers. The potential danger for protectionist behavior and trade wars or lower impact trade conflicts remains as long as policy makers continue to consider nations engulfed in an environment characterized by interstate competition. In other words, whilst Krugman's normative position is that such perceptions should be absent, the fact that they do exist jeopardizes the international economic system and particularly the multilateral aspects of trade as portrayed in the WTO policies. For that reason alone, the concept of competitiveness of nations cannot be ignored. A second reason why it is valuable to consider the competitive dimension of nations is because, and this is where Game Theory contributes, in tandem with the co-operative dimensions it provides a more wholesome display of states' conduct in the international arena.

A "State-Centric" Approach

Nalebuff and Brandenburger introduce the Value Net, which maps the actors in the Game of Business (Nalebuff and Brandenburger, 2002). The wider group of actors, "Players", includes, besides firms, actors

with various roles such as governments, international organizations, Regional Trading Blocs (RTBs), individual (mostly buyers). Whilst most actors can play any of the four roles (buyer, supplier, competitor and complementor) there is a focus on firms. The variety of actors bears a similarity with an International Trade setting where firms are the predominant carriers of such trade³. However, where in case of Business the main actors are firms, in the settings of International Trade it is states. This is because they can limit the boundaries of the operating space of firms and they decide for or against membership of both international organizations and RTBs and can – in principal – withdraw earlier obtained membership. So while firms are the “doers”, states are the “facilitators” and “deciders” of international trade. It can be argued that the co-operation dimension is more predominantly present in International Trade than Business where its strongest form would be an alliance. This is partly due to the increase of co-operation in the international trade regimes since the end of WWII, i.e. the GATT and WTO, but arguably more so due to a rising importance of Regional Trade Agreements (RTAs) and RTBs (Baldwin, 2006; Pomfret, 2007, Limão, 2006; Lawrence, 1991).

STATES AND INTERNATIONAL TRADE

International Trade is subjected to a paradox. Notwithstanding the fact that by far most of the actual global trading is conducted by private firms, it is states, individually or in union, that are the most important and decisive actors in International Trade. This is due to the fact that states, again individually or in concert, decide to what extent they allow trade to take place. A topic of academic debate is whether states are under pressure to accept decisions regarding trade against their will and this is largely influenced by the strength of the individual country as well as its propensity to counter international trading principals but as long as a state is willing to suffer the consequences it cannot be forced to adopt measures it does not want to adopt (Keohane and Nye, 1989). Ultimately, this is a consequence of the so-called Anarchical System of International Politics (Bull, 1977; Waltz 1979). In principal this notion refers to absolute sovereignty of states and has been anchored in International Law as well as in the United Nations (UN) principals⁴. A consequence of the sovereignty of states is that there is no global or international government that supersedes individual states which implies that states are the highest unit of authority. The mandate that International Organizations (IOs) such as the UN possess is a collective mandate that has been granted by individual states and that, at least in principal, could be revoked unilaterally. To be sure, an individual country that revokes its mandate to the UN could face substantial pressure and become isolated. However, as indicated, if the country is willing to undergo this it is within its means to take such steps. To illustrate the relative mandate of the UN consider the fact that Switzerland, one of the most appreciated countries in the international society has not been a member of the UN for most of this IO's existence and only joined the UN in 2002. Similarly, amongst members UN's mandate certainly is not always fully accepted from a politico-legal perspective or from an administrative one⁵. Such examples all indicate the *de facto* absence of a higher authority than individual states in spite of the existence of the UN. It is important to stress this because it plays a decisive role regarding the issue of the Mindset. In order to explain this we return to the Mindset of Nalebuff and Brandenburger's Co-opetition. There the actors in a game, or the Players, take various shapes but in the majority of occasions are private sector companies⁶. Whilst the world has become more globalised in many respects with businesses testament to this development, the aforementioned footloose character of contemporary business should not be stretched to making businesses, i.e. private sector companies, “stateless” in a borderless world⁷. Every firm is subjected to at least one governmental authority that sets the rules and regulations that cap the firm's activities. To be sure, depending on their assets, position, role in society and political embeddedness individual firms can have a lot of *influence* and even to the extent that they can dominate aspects of the government's decision-making process but influence, regardless of its size, does not equate the ultimate power to set the rules. In other words, ultimately firms are always subjected to the higher authority of states.

However, as concluded earlier, the international arena that states do not have such an authority above them. This distinction between firms and states has important implications for the Mindset when comparing Business with International Trade. Firms, as the main actors in Business, are limited by the powers of the state which sets the meta-rules. Meta-rules are the rules that regulate the Rules of Game (Nalebuff and Brandenburger, 2002; Cairo, 2006). In the Game Theoretical tradition various actors can set rules. But the types of rules that regulate conditions under which transactions take place can only be set by the government (Nalebuff and Brandenburger, 2002; Keohane and Nye, 1989; Susan Strange 1988). In International Trade, however, the main actors, states, are not subjected to a higher authority and have freedom in setting their rules. The upshot of this is that actors of Business – be that private sector firms or otherwise – operate within given boundaries that they can influence at best but that states of International Trade only have boundaries if they so choose. Consequently, in Business actors find a game with outer boundaries set⁸. They game they play is restricted by the boundaries set by the higher authority (governments, for example through regulatory authorities, criminal legislations, etc.) and the differences in the actors' ability to play the game materializes in how they are able to shape the game to their desired outcome, measured in terms of success⁹. Such ability is largely based on being creative (i.e. seeking and finding options), making the best choice amongst the options, a sound execution of the chosen direction and the right strategic leadership credentials of the firm's strategic apex (Porter, 1985; Porter, 1996; Chan and Mauborgne, 2005). However, it is important to reiterate that the actors will always be subjected to boundaries placed by a higher authority and that this restricts their ability, e.g. it limits their options, to play or change the game¹⁰. The absence of controlling the meta-rules in case of firms in a Business setting contrasts with the position of states in an International Trade setting: states do have the power to set meta-rules. As a consequence, states, as actors in International Trade have a wider arsenal than firms as actors in Business have. Co-opetition's Mindset which is designed for actors in Business is, therefore, too restricted for states in International Trade. As indicated, for firms in the games of Business the options available to shape the game to their maximum benefit are derived from a choice of two procedures: creating value or distributing value. Earlier the question on whether the Co-opetition's Mindset is applicable to International Trade was posed. It became apparent that value creation and value distribution are staple concepts of International Trade. Moreover, it was indicated that the introduction of those concepts in Business is due to a transfer of the two concepts from International Trade. The exact same case can be made for the concepts of competition and co-operation. But the automatic attachment of value creation to co-operation and value distribution to competition as Co-opetition proposes is not present in International Trade due to two extra aspects present in the field of International Trade but absent in Business. Those aspects will feature next.

Two Extra Dimensions of International Trade

The first aspect separating International Trade from Business of relevance to the Mindset is ethics. With regard to the distribution side of the Mindset, Business is ethically neutral. There is a realistic assumption that individual companies strive for maximizing their goals which, as indicated earlier, are often set as maximizing profits. The underlying notions of strategy theory are precisely this: describing and / or prescribing ways how companies can maximize their profits. Due to the forces of globalization, which have been prevalent in the majority of industries and sectors, such companies seeking profit maximization are surrounded by other companies that could frustrate their efforts and success. In this competitive process companies can either succeed or fail. What is absent in the case of Business is a structural presence of an ethical aspect in this competitive battle that relates to the outcomes of competition.¹¹ Those that have lost out in competition, be that on one occasion or repeatedly, usually cannot claim unfairness. This is because the dominant mood in Business is that the outcome of a competitive battle is the best result¹². This perspective is derived from Pareto efficiency considerations and such considerations exclude ethical considerations favorable to (perpetual) losers of the game. One of the main contributions of Game Theory in general and Co-opetition specifically is linking value creation to co-operation and

value distribution to competition as opposed to an over-emphasis on competition as can be found in Porter's Competitive Forces approach (Cairo, 2006).

Much like in the case of Business there is a competitive process within International Trade where countries can either succeed or fail. This competitive process relates to almost all public revenue-generating activities that countries, or more precisely, its firms and individuals can be involved in. Whilst the onus of the actual activity is mostly on private firms, governments have the ultimate responsibility to generate welfare for their citizens¹³. Therefore, the outcome of the competitive process in International Trade is of utmost importance to governments and the extent to which they are able to use their ability select, set and implement the policies that maximizes national revenue to their citizens, which determines economic success and separates successful countries from failing ones (Tyson, 1993). All of this so far is in congruence with firms in a Business setting. However, where, as indicated, in the case of Business the process does not have an ethical component, in International Trade such a component is present and features quite strongly. Starting with the theory of Marx and Engels to Frank or Wallerstein's theory of the World System as well as via Prebisch's dependency theory leading to more regional segmentation a host of theories relate to ethical aspects of perpetual losers in games of International Trade (Love, 1980, Wallerstein, 1995, Frank, 1980). Building on Marx's observation that throughout the world's history there have always been two dominant groups: one with assets, means and power and another group that lack those aspects. In the view of proponents of such theories this division of the world into "have's and have-nots" has the added feature that it will be an extremely difficult and lengthy process in the most rosy scenario and will most likely prove to be impossible for the have-nots to bridge the resource gap. They maintain, therefore, and this is where the ethical aspect enters, that it is not fair to solely allow the competitive interaction decide the outcomes in International Trade. To redress repeated losses suffered by weaker Players of the games in International Trade they propose more "level playing fields", i.e. measures that place the weaker countries in a more favorable position vis-à-vis the stronger trading nations. It is important to stress that the ethical aspect only refers to those measures that are invoked in cases where there is perpetual weakness of structural proportions: it does not refer to situations where potentially strong players happen to lose one or a number of games¹⁴. In sum, the Mindset of Business is free of ethics and the result of how the game is played forms the outcome irrespective of whether the same player or players appear to do well and better than their counterparts on a recurrent basis. In International Trade ethics do come into the game through a desire by some to redress the balance during the game or otherwise compensate perpetual losers afterwards.

As indicated, compared to Business there are two additional aspects in the case of International Trade. Following the introduction of the first, ethics, it is time to highlight the second, which, in fact has already been introduced: the Anarchical system. Whilst the total number of options open to firms is endless in practicality, the inability to change the meta-rules (see section above on meta-rules and governments) means that their ability to enforce their position is limited by the actions of the governing authority they are subjected to. In other words, in Business settings, the actors operate within the boundaries set by governments that control their jurisdictions. Furthermore, firms as the main actors in the Business setting are always subjected to at least one governing authority for any of their Business practices. For states as the main actors of International Trade the situation is quite different. Unlike firms they are not subjected to an overarching authority unless they have opted for such a position and then only for the selected areas and for as long as they are desire to be in that position. Where firms cannot opt-out of at least some form of subjection to authority, states choose to opt-in subjecting their authority to "higher" bodies¹⁵.

Expanding the Mindset

The identification of two extra aspects when comparing the setting of Business with that of International Trade has, as will be proved shortly, consequences for the applicability of the Mindset. The absence of both ethics and the Anarchical system for Business leads to a relatively straightforward matching of value

creation with co-operation and value distribution with competition. Due to the presence of those two aspects in case of International Trade settings linkages between value creation and co-operation as between value distribution and competition are far less clear-cut. In order to prove this Co-opetition's Mindset – which, as indicated earlier, consists of a competition dimension and a co-operative one – needs to be placed within a theoretical International Trade context. In order to secure that this is done in a manner that includes a wide perspective on International Trade, the three main ideologies of International Political Economy are of great utility. After a brief descriptive introduction of these ideologies, these three will be assessed against the two components of the Mindset.

IPE'S THREE MAIN IDEOLOGIES

A full discussion of the three main ideologies of IPE warrants a separate paper on its own and numerous scholars have compared the main ideologies or contrasted them with a number of other perceptions on IPE in general or specifically on international trade (Rosecrance, 1987; Gilpin, 1987; Keohane and Nye, 1989; Krasner, 1992; Hoogvelt, 2001; Gilpin 2001; Frieden and Lake, 2003; Oatley, 2008; Ravenhill, 2008)¹⁶. For the purpose of the current research the description of the ideologies is relevant to the extent that it facilitates differentiation between actors engaged in international trade. This can be satisfied by providing the most essential characteristics of the three traditional ideologies and, subsequently, align characteristics of the ideologies with countries' actions in the international trade arena.

Mercantilism

Mercantilism is the most common term but its notions are often also referred to as Economic Nationalism or even Realism¹⁷. Furthermore, Mercantilism – as is the case with the Liberalism and Marxism – is in fact an amalgamation of a number of similar ideologies that share common characteristics. For the purpose of this article it suffices to indicate the main and common characteristics of the ideologies. For the Mercantilist in international political economy arguably the most important characteristic is that politics takes precedent over economics (Polanyi, 1957). This means that economic goals are to facilitate political goals and not the other way around. For the Mercantilist the prime objective of states is to increase their power relative to other states and political goals converge around fortifying the position of the state vis-à-vis other states. Possible economic goals should all be conceived in terms of their contribution to the state's wealth as a vehicle to promote the state's strength (Gilpin, 1987). Political leaders should strive for self-sufficiency rather than economic interdependency because the latter indicates dependency (Gilpin, 2001)¹⁸. Another important observation of Mercantilism is that there is no faith in the market mechanism of supply and demand as an effective means for state building. The market mechanism regulates economic activity but not per definition in a way that facilitates political goals. Hence, Mercantilists plea for state intervention in the market and regulation of economic activities to achieve the political goals such as increase the state's relative strength.

Liberalism

Where Mercantilism places the primacy in international political economy on the political sphere, Liberalists take the complete opposite positioning: they place the primacy with economics. To them the most important contribution of international activity is in its potential to increase wealth of individuals or households at the most. Unlike the Mercantilist, the Liberalists do not consider international activity a means to fortify the state's power, be that political or economic. International activity should, however, be engaged in to enhance efficiency on a global level which, in turn, leads to higher welfare to individuals. This view closely reflects the theories of classical economists as Smith and Ricardo and values Pareto's efficiency and long term stability considerations as the building blocks for such welfare. Societies are best shaped by placing primacy on economic activity through an unhindered working of the market mechanism (Krugman, 2006). If left to their devices, supply and demand will allocate resources in the

most efficient manner and automatically create the highest levels of welfare to citizens of all countries in the world (Lindsey, 2003). As such, state intervention should be kept to an absolute minimum and only be to the extent of establishing an infrastructure to recognize and respect ownership of property and resources as well as a judicial infrastructure that allows for the enforcement of such rights. Other economic activity should be freed from governmental compulsion since it is the rationality and economic freedom of individuals that lead to optimum outcomes (Deane, 1988).

Marxism

Marxism is arguable the most constructed ideology of the three and difficult to capture in a single paragraph. Like the previous two ideologies, the term Marxism includes a number of sub-ideologies that share some common denominators. The number of sub-ideologies is perhaps largest in the Marxism camp and particularly regional sub-divisions have made this a diverse bunch, compare, for example, the works of Habermas, Marcuse, Frank, Debray, dos Santos or George Derwent Thomson. Notwithstanding such variety, the roots of such streams are all derived from the classic theory developed by Marx and Engels. Regarding the primacy debate, Marxists observe that this merely relates to a normative discussion between politics and economics but that *empirically* economics determines politics. According to Marxists regardless of whether primacy *should* lie with politics (Mercantilist viewpoint) or Economics (Liberalist viewpoint) a review through history universally shows that every society consists of two dominant classes: one that has the abundant power, resources and assets and another one that lacks such elements. In other words, the “have’s” versus the “have-nots”, whereby the latter are dependent on the former¹⁹. There has been a constant struggle between these two groups with, according to Marx and Engels as the classic Marxists, an automatic and unavoidable outcome. This outcome would be an overthrow of the capitalist system by the proletariat (the have-nots) who would take grab ownership, resources and assets from the industrialists (the have’s) and promote the society to one with public ownership only. This outcome would materialize as a consequence of a widespread revolution²⁰ caused by the irrational nature of the capitalist system.

Capitalism, according to Marxists carries the seeds of its own destruction since it stimulates the accumulation of capital into the hands of an ever-decreasing few thereby impoverishing more and more, yet requiring an increasing demands for the produced products. In the continuous struggle the proletariat would increasingly become dependent on its sole asset, labor, which, over time, would decrease in value as the gap between the have’s and have-nots would continue to widen. Ultimately at a certain stage this would lead to a level of misery due to impoverishment on the side of the proletariat (“die Verelendung”) in which proletarians would feel they had nothing to lose and would be willing to risk overthrowing the owners of production and labor. Whilst not all contemporary Marxist thinking may envisage the exact course Marx and Engels saw for history, Marxists do agree with the widening of the gap between the rich and poor. This can be on a national basis – between different groups in society – as well as on an international basis – between rich and poor countries. It is Marxists’ normative belief that international governance, as national politics, is a tool in the hands of the rich to further exploit the poor. As a consequence Marxists are skeptical with regard to institutions such as international organizations and seek to either overturn those that they identify as facilitating the rich in international society or, at the very least, change the policies to enhance the position of the poor, particularly poor nations or citizens thereof.

CONSEQUENCES FOR THE MINDSET

Having provided a brief description of the most important notions of the ideologies for the purpose of the current research it will now be possible to match the individual ideologies with Co-opetition’s Mindset.

Mercantilism and the Mindset

As indicated above the Mindset consists of two components, competition and co-operation. In order to assess how the Mindset relates to the ideologies all three need to be considered separately on the applicability of both competition and co-operation. Chronologically Mercantilism preceded the Liberalism and Marxism and, to some extent, the other two can be considered reactionary to Mercantilism. In Mercantilism the competitive dimension is evidently present. Acting according to this ideology states consider all other states as competitors and as potentially infringing upon their power. The upshot of this is a strictly competitive stance vis-à-vis other states. Moreover, within the Mercantilist perception interstate relations are considered a zero sum game, which adds to the competitive pressure: advancement of one country automatically means that one or more other countries lose out. That is a consequence of the fact that power is exclusively regarded in a relative manner. Unlike the Liberalists, who believe that a positional increase of one country can be accompanied by an increase of other countries – in fact, this is the Liberalist “sales pitch” – Mercantilists reject the notion that improvement can be achieved through *non-zero* games. To the extreme Mercantilist, the strictly competitive standpoint does not allow for a simultaneous existence of co-operation. In other words, for the extreme Mercantilist there only is competition. More benign Mercantilist may accept co-operation but this will be when competitive alternatives are absent and take shape in the form of “negative co-operation”. Contrary to the traditional term – or, to emphasize the opposing nature, *positive* co-operation – *negative* co-operation, thereby stretching somewhat Galtung's concept of negative peace (Galtung, 1969), does not refer to co-operating for altruistic reasons. It is also not based on a firm belief that co-operation serves the “Greater Good” but it is co-operation that occurs under some level of duress. Such duress is likely to be imposed by a hegemon in a direct manner or indirectly through “forced” compliance within an international regime (Kindleberger, 1992; Keohane, 1984, Ruggie, 1982). However, in those situations where co-operation materializes Mercantilist will approach it with skepticism and as a second best option where a competitive approach is not a viable possibility at the time. The Mercantilist – and to reiterate co-operation is only an option to the more benign Mercantilist – will consider co-operation a temporary measure and assess the co-operative outcome against competitive alternatives on a continuous basis. Since the focus of this article is on the larger differences between the ideologies, the position of the more extreme Mercantilists will be considered: as such, the competitive dimension of the Mindset is predominantly present whilst the presence of the co-operative dimension is negligible.

Liberalism and the Mindset

The next ideology to assess on the Mindset's applicability is Liberalism. Again, the Mindset consists of the two components, competition and co-operation. It can be argued that of the three ideologies in international political economy Liberalism is the one most closely related to the Business environment for which Co-operation was developed. Liberalism's central normative element of attempting to achieve the highest level of Pareto efficiency and the assumption that an inclusion of political aspects in this process is harmful is in congruence with perceptions in Business. Due to Business' comparable stance with Liberalism on the relation between the two most basic elements of international political economy it is generally more fitting to equate matters of Business with Liberalism than with either of the other two ideologies. Moreover, the roots of Liberalism stem from classical economics, a discipline, which, arguably is also the most influential stream within Business as an academic discipline. This overlap explains the ease with which parallels can be drawn with the applicability of the Mindset to International Trade to that of Business. The Mindset's two components represent the need to first create value through co-operation and the subsequent process of dividing such value which occurs in a competitive environment. Much like the aforementioned examples in the case of Business showed, in case of International Trade the Liberalists like the classic economists build their ideology on the cooperative aspects of International Trade. Both, Smith's theory of Absolute Advantage and Ricardo's theory of Comparative Advantage presuppose countries to co-operate in some form. Only if countries co-operate

through exchanging goods can the advantages of trade be realized. Similarly, in later Liberalist theories this co-operative dimension is a *conditio sine qua non*²¹. In all Liberalists approaches the competitive dimension is even more automatic: it can be argued that it is taken for granted. As indicated, the competitive dimension in Mercantilism is all-encompassing. Influenced by the principals of the Enlightenment period, academic scholars in a variety of disciplines considered the attainment of individual liberty and the promotion of equality as the primary goals of any society. In the field of economics Smith pioneered this Liberalist approach to the discipline and highlighted the threat the Mercantilist approach posed to individual liberty (Smith 1776, O'Rourke, 2007). Therefore, in order to achieve the goal of individual liberty – and the attached maximization of individual welfare – countries' competitive positioning needed to be capped in order to allow room for necessary co-operation to increase value. But a total abolishment of the competitive dimension would not cater for the best environment to enhance efficiency. In other words, the competitive dimension of the, then ruling, Mercantilist practice that preceded the Enlightenment period, remained the starting point since it served increasing efficiency. Adding a co-operative dimension to the existing competitive one would lead to a mix that generates superior outcomes in international trade than a strict mercantilist approach would. As such, Liberalism identifies both aspects of the Mindset: competition and co-operation²².

Marxism and the Mindset

Third and final ideology to consider in light of the Mindset is Marxism. Dating back to the works of Marx and Engels, history according to Marxists can be described in terms of the have's versus the have-nots. This applies within a society but, in the realm of international political economy, equally to rich versus poor countries (dos Santos, 2003). Marxists' main preoccupation is the gap between the two classes. The structure of the capitalist system favors the have's at the expense of the have-nots, which leads to a further widening of the gap. It is the Marxists mission to decrease this gap either by a complete overhaul of the capitalist system or by changing the rules of the "capitalist game" to such an extent that a level playing field emerges (Evans and Finnemore, 2001). In terms of the Mindset, a parallel can be drawn with the discussion on where primacy lies: politics or economics (see below). Just like with that discussion Marxists focus on the empirical rather than the normative. More important that an answer to the question whether there should be competition or co-operation, Marxists concentrate on an assessment of the type of competition and co-operation that does take place. It is their belief that structurally both occur to the detriment of poor countries. The parameters of global competition and the setting in which competition transpires are such that they favor the countries best placed in international political economy. Similarly, Marxists will also consider co-operation, whether within a multilateral or bilateral setting, as largely more beneficial to the rich countries as to the poorer ones. As indicated these observations refer to the Marxists' empirical analysis of the two dimensions of the Mindset. They do play a role how the Marxists consider the desirability of either one of those two dimensions. Competition, *par excellence* a vehicle of the capitalist system, does not carry Marxist approval. The verdict on the co-operative dimension is somewhat more mixed. Regarding the type of co-operation that is prevalent Marxists are equally dismissive as they are with regard to competition: it merely favors the rich and widens the gap. However, different types of co-operation – for example through an overhaul of international organizations in a manner that provides poor countries with more decision-making power and, crucially, better economic outcomes – can count on the support of Marxists (Kapur and Webb, 2007). In other words, Marxists would not oppose co-operation from an ideological viewpoint as they would concerning competition but demand co-operation under radically different conditions than those that currently prevail.

CONCLUSION ON IDEOLOGIES AND THE MINDSET

Whilst Co-opetition's Mindset has been developed for a Business setting, there are, as explained above, valid reasons to assess to what extent the Mindset is applicable to International Trade. The current investigation can provide a contribution to the wider research plan of developing a qualitative approach to

Game Theory for international trade. Evaluating Co-opetition's central component, the Mindset, against the three ideologies of international political economy leads to an assessment of an important theoretical foundation for International Trade on route to establishing such a qualitative framework. Based on the assessments above it can be concluded that the competitive dimension of the Mindset is naturally represented in Mercantilism but the co-operative dimension is not. The Liberalist ideology incorporates both the competitive and the co-operative dimension, something which stipulates a closer proximity of this ideology with central principals of Business than the other two ideologies. For the third and final ideology, Marxism, it appears that the co-operative dimension is the one represented, albeit with a strong proviso that demands a change from the current style and conditions of co-operation.

For the Mercantilist primacy lies with politics since power is the overall vehicle that enables to pursue the highest Mercantilist goal: increasing the state's strength relative to other states. The Liberalists, on the other hand, place the primacy with the economy and interpret good governance in terms of allow the market mechanism to operate as freely as possible with a limit role for political authorities. The normative question whether the primacy should lie with either politics or economics is not the most essential matter of international political economy to Marxists. The existence of classes and particularly the uneven situation in the historic struggle between the two classes is what occupies Marxists minds more than anything else. Whilst Liberalists acknowledge the existence of unevenness within societies and amongst countries in a similar manner as the Marxists do, the important difference is that the Liberalists do not consider the unevenness as unfair. For Marxists, on the other hand, the lack of equity is the thorn in society's eye and the Marxist will seek ways to redress the balance by narrowing the existing gap between the rich and the poor classes. In the context of international political economy this means improving the position of the poor countries vis-à-vis the richer ones. As such, Marxism shares with Mercantilism that gains are expressed in a relative manner. The zero sum game is, however, played between the have's and the have-nots for Marxists. A material increase of wealth or power to the rich countries means a widening of the gap with the poorer ones. Where the Liberalist considers co-operation as an important vehicle to improve the position (most notably through an increase of wealth) of all involved, the Marxist is keen to know what the distributive outcomes are of this mutual improvement of wealth. As indicated, the Mercantilist it is not in favor of co-operation. In cases where co-operation takes place, nevertheless, the Mercantilist would be keen to know whether co-operation increases one state's power over one other or over others (which, and this stresses the one-dimensional presence of the Mindset's competitive component, is close to interpreting co-operation in a strictly competitive mode). To Marxists the importance of distributive outcomes is translated into changes between rich and the poor states. In other words, where Liberalists are unconcerned with which country or countries gain more than others through co-operation – as long as all gain to some extent – Marxists do ask the question *cui bono*? This indicates that they do place importance on distributive consequences. Whilst distributive consequences are also a concern to Mercantilists there is, however, an important difference between Mercantilists and Marxists with regard to this normative aspect of the consequences of co-operation. Marxists include ethics into their assessment of distributive consequences. Liberalists, especially the classic ones starting with Smith, also claim to take an ethical stance but, if accepted, do this from a different angle. Their ethics do not relate to the distributive consequences but to the insistence on personal freedom and equality (as pre-conditions for free trade and maximization of wealth). Be that as it may, ethics within Liberalism is of a more selective manner than ethics within the Marxist ideology which is of an all-encompassing nature and the *raison d'être* for Marxism.²³

PUTTING THE MINDSET AND IDEOLOGIES TO A TEST

This paper is conceptual in nature and a first step on route to what eventual should become an adequate qualitative version of Game Theory that can be applied to International Trade. Nevertheless, in order to assess the conclusions reached so far a brief section is provided in which those conclusions will be tested.

Case 1: Agriculture

There is little doubt that the positioning of the major countries with regard to international trade in agriculture products is mercantilist. The three biggest players in this issue area of international trade are the European Union (EU) and the USA. In both cases mercantilism tendencies dominate their policies over liberalist or Marxist ones. The absence of a co-operative spirit in the agricultural issue area is evidenced in a number of ways. First and foremost, during the 47 years of its existence the General Agreement on Tariffs and Trade (GATT) never effectively dealt with trade in agriculture (Grant, 2005). When the GATT was established the 23 initial signatories considered agriculture too thorny to include as an area subjected to aggressive tariff reduction and attempts to discuss agricultural issues at GATT rounds prior to the Uruguay Round were less a symbol of co-operation than any of the other areas (Swinbank, 2005; Petersmann, 2005). An agreement on agriculture was first reached in April 1989 (Croome, 1995). In other words, well into GATT's final episode, the Uruguay Round, and even this agreement was far less robust than most of the other agreements reached at this round. Subsequent attempts to fortify the regime such as Framework Agreement of 1 August 2004 made some progress but left many issues unsettled (Tangermann, 2005).

Even though trade in agriculture accounts today for less than 10 per cent of world merchandise trade, almost half of the 115 dispute settlement reports issues up to 1995 under Article XXIII of GATT 1947 and under the 1979 Tokyo Round Agreement related to agricultural goods (Petersmann, 2005: 131).

Another indicator of a lack of presence of the co-operative dimension in agriculture is the antagonistic stance between developed and developing countries in this issue area. Both the US and the EU have used anti-dumping on a number of occasions as a mercantilist tool. However, the high usage of this tool dwarfs compared to the specific agricultural protectionist measures (Young, 2004; Das, 2006). There is some co-operation between the EU and a select group of developing countries that have been granted preferential access.²⁴ However, the relation between the EU – and the same thing goes for the US – is far more characterized in terms of conflict due to mercantilist stances.

To further stipulate the competitive dimension in the issue area of agriculture, it needs to be stressed that antagonistic behavior also applies amongst the major developed countries (Petersmann and Pollack, 2003). Whilst initially a dispute between the EU and Central and South American non-ACP countries, the banana wars are the most notorious example of such inter-developed country disputes. This is because the interests of major US fruit companies coincided with the disadvantaged fruit producers that sold their products to the US companies. Therefore, US trade representatives challenged the EU and, eventually, obtained the support of the WTO Appellate Court (Read, 2005). Equally divisive were disputes between these two trading super-powers over genetically modified (GM) foods as well as over growth hormones (Kelly, 2007, Perdakis, 2005). Besides the EU and the US, other developed countries have also prioritized their mercantilist position. Japan and Australia found themselves at the Appellate Court on Sanitary and Phytosanitary (SPS) disputes. Confrontation between developed countries also occurs on a permanent basis due to the fact that the Cairns Group, the most diverse bargaining coalition in the field of agriculture, includes developed country members Australia, Canada and New Zealand (Costantini, Crescenzi, De Filippis and Salvatici, 2007). The Cairns Group main focus is the dismantling of EU protectionism and due to EU reluctance to decrease its support for agriculture, clashes with these developed countries are inevitable.

A final indication of the lack of co-operation in the issue area of agriculture due to mercantilist stances is, of course, the illustrative failure to conclude the current round of the WTO. Since the Ministerial Meeting at Cancún agriculture has been the major stumbling block for completion of the Doha Round. In order to have four controversial matters – the so-called Singapore Issues, named after the Ministerial Meeting

when they were proposed by the EU – on the WTO agenda, concession to reduce agricultural tariffs were made by EU negotiators. Due to a lack of progress on such reductions, at Cancún 7 years after the Singapore Meeting of 1996, developing countries took a strong stance. Attempts to break a deadlocked Doha Round at Summer 2008 also failed over agricultural and mercantilism when India and the US could not agree on Safeguard Measures regarding substantial imports of food, in spite of relative agreements on 19 of 21 issues.

Case 2: Trade Facilitation

As indicated the Singapore Issues are controversial due to the fact that most developing countries did not welcome discussions on those matters but accepted placing them on the agenda in exchange for more market access to EU agriculture markets. The four Singapore Issues are: a) transparency on government procurement; b) trade and competition policy; c) trade and investment policy; and d) trade facilitation. Initially none of these four could count on support from developing countries but realizing the benefits of transparency in trade rules has shifted this issue away from developing countries' Marxist (if not Mercantilist) position-taking to a Liberalist approach to trade facilitation. Installing clearer and more transparent regulations regarding trade enhances the likelihood for developing countries to attract trade in half-products without jeopardizing its infant industries (Sally, 2003). Unlike the other Singapore Issues, which are still subjected to a Mercantilist perception (government procurement) or Marxist perceptions (trade and investment as well as trade and competition), the shift towards viewing trade facilitation in a Liberalist manner has led to a more co-operative stance – either through unilateral action by developing countries or in bilateral agreements with developed countries (Sally, 2003). In addition to this manifestation of the co-operative dimension there remains a competitive one. In their efforts to facilitate trade, countries are competing with other countries that attempt to lure trading opportunities to their territory.

Case 3: TRIPs

Trade-Related Intellectual Property Rights (TRIPs) include a large number of separate regimes (King, 2004; May, 2003). In this short assessment of the applicability of the Mindset it is not the intention to be comprehensive regarding all aspects of TRIPs. Rather the focus is on providing a general illustration of TRIPs and the Mindset.

The TRIPs Agreement has an awkward dimension from a WTO point of view. In addition to the Principals transferred from the GATT, the WTO explicitly aims to decrease the gap between the rich and the poor member states.²⁵ However, apply the TRIPs Agreement runs counter to that goal. The most notorious violators of Intellectual Property Rights (IPRs) are based in developing countries, whilst the major owners of IPRs are companies or individuals in the developed world. The upshot of this is that strict enforcement of the Agreement in fact leads to a transfer of financial means from the developing countries to the developed ones. Uniquely, a successful application of TRIPs essentially harms one of the WTO's goals (Sally, 2003).

There has been widespread opposition from developing countries to various elements of the Agreement. This relates to the entertainment-related IPRs, software IPRs, product-related IPRs but most vociferous regarding medicines, particularly of those for diseases prevalent in developing countries such as HIV/AIDS and malaria.²⁶ The developing countries (and those sympathetic to them in the developed world) generally take a Marxist position on the IPRs issues. In order to catch up with the richer countries on areas as software production and other commercial IPRs as well as for medication and even folklore the argument is that the developing countries should be allowed to obtain the goods and services for a substantially reduced price in order to create a more level playing field. For most developing countries competing in IPRs areas is not an option. There is a willingness to co-operate with the rich countries on

IPRs issues but only under radically different conditions than the current TRIPs regime has established because the current one favors the richer countries far more than the poorer ones.

CONCLUSION ON THE TESTS

Based on these initial tests it appears that the Mercantilist dominated area of agriculture struggles to display anything but competition. It is also clear that trade facilitation, which enjoys a Liberalist approach from most countries, joins both dimensions of the Mindset in current outlook: there are signs of co-operation as well as competition. Finally, the TRIPs Agreement is predominantly conceived in a developed versus developing countries' perspective. The Marxist approach is prevalent in this case and whilst there are possibilities for co-operation between these two camps, it appears that such co-operation will only materialize if the regime is changed drastically. All of the cases appear to support the operationalization of the Mindset and whilst more testing is essential to determine whether the conclusions hold but this makes for an encouraging start on the route to device a qualitative version of Game Theory that can be applied to International Trade.

ENDNOTES

1. In fact, they have joined forces with another eight airline companies in an alliance called "one world".
2. This is particularly true for classical and neo-classical perceptions on International Trade; as will be shown below other perceptions may not place equal credence to those four pillars.
3. Other important actors in International Trade include: International, intergovernmental and supranational organizations (GATT, WTO, UNCTAD, IMF, World Bank) and Regional Trading Blocs (EU, NAFTA, MERCOSUR, CARICOM, GCC, ASEAN, etc).
4. A sole but important exception in lieu of the UN is Humanitarian Rights. On a number of occasions since Korea in 1950 and more pervasive during the Gulf War, the UN has used violations of such rights as a justification to set aside state sovereignty, which has led to debates on the legitimacy to do so. See, for example Weiss, Thomas G., Forsythe, David P. And Coate, Roger A. (2004). *The United Nations and Changing World Politics*. New York: Westview Press or MacFarlane, S. Neil and Khong, Yuen F (2006). *Human Security and the UN: A Critical History*. Bloomington, IN: Indiana University Press.
5. Structural arrears of approximately \$1bn on an annual basis the UN's main member, the US, has had since the mid-1990s is a clear indication of the latter.
6. In fact, other than private sector companies, Players in Nalebuff and Brandenburger's definition can be governmentally controlled companies, associations, unions or alliances, countries, charity organizations, individuals etc. None of these and possible other actors alter the situation with the possible exception of governments. Although in their role as actor they play the game more often in a capacity that equates that of any other actor, there are situations where the government could play the role of the ultimate rule-setting authority similar to that of states in the Anarchical System but those situations are rare.
7. The long-running Barcelona Traction case in the International Court of Justice established the (single) nationality of "multinational" firms. See International Court of Justice judgments on 24 July 1964 and 5 February 1970.
8. Players, most notably firms, can, of course, try and change such boundaries through effective use of influence: in fact this is one of the prescriptive contributions of Co-opetition.
9. Success can be defined in a manner of outcomes. Profit is the most common but, in line with the Pluralist School of strategy, a wide range of other outcomes including the creation of employment or prestige can be sought by firms (Whittington, 2000).
10. Of course, the earlier mentioned footloose character of particularly big businesses stresses the point that such firms can leave and "shop" for better conditions elsewhere. However, this still means that they will be subjected to a higher authority even if, from their perspective, it is a more favourable one.
11. This differs from the ethical dimension which often is present in Business settings: ethical considerations regarding companies' operations. The large volume of literature on Social Corporate Responsibility (SCR) refers to such aspects but is unrelated to the ethical dimension addressed here.
12. In Co-opetition this is echoed in the Added Value part of the PARTS framework where the authors categorically state that actors should not expect to get more out of the game than their added value presents. In fact, rather than getting more out of the game, for example through compensation based on ethical considerations, actors run the risk of obtaining less than their added value if they play the wrong game.

13. This concept has been modified in different ways and most prominently by Reich (1990; 1991) who in two Harvard Business Review articles assess whether it is the national companies or particular foreign companies that actually add value to a country's economy and Krugman (1994) who dismisses the competitiveness of nations as a "dangerous obsession".
14. In such cases measures to create level playing fields may also feature but those are not based on ethical grounds but on an interpretation of selfishness that favors certain outcomes over the "Greater Good" (which, in essence portrays the opposing stances of the Mercantilist and the Liberalists, respectively; see below).
15. The consequences of the second aspect can be viewed by assessing the patchy outlook of various types of international regulation in the different issue areas. To be sure, regulation of firms in the Business setting by various authorities has a patchy outlook too but with the common denominator that ultimately at least one governmental body of at least one country could subject the firm to its rules and regulations. Such a common denominator is absent with states and the essence of the "patchiness" is in that case more due to what extent an individual country accepts being subjected to a higher authority, most commonly in the form of intergovernmental or supranational organizations.
16. For a more comprehensive discussion including sub-sectors of the main ideologies, comparison of the different names and labels as well as a historical context of the ideologies see references on citation, particularly Gilpin, 1987 which, arguably, is the most influential work on this topic.
17. However, using the term "Realism" to refer to the notions of mercantilist notions can create confusion. Realism is also understood to be one of the main streams in theories on international, i.e. political, relations whilst mercantilism refers to international political economy. Although there is a relation between Realism and Mercantilism it would stretch this relation too far to equate the terms.
18. That dependency can be mutual for the actors involved is not a cause for mitigation to the Mercantilist. The Mercantilist does not pay credence to stability and harmony that can be derived from such mutual dependence as the Liberalist does (see below) and would consider it too risky to balance on the thin pole of mutual dependency which could sway to a stronger position of one over the other at any point in time.
19. Particularly the Latin American regional version of Marxism placed this dependency at the heart of their analysis which is why this school is referred to as the Dependency School (Escuela de la Dependencia).
20. In the words of the final phrase of Marx and Engels' publications *The Communist Manifesto*: "Proletarier aller Länder, vereinigt euch!" (Proletarians of all countries, unite!)
21. Best known examples of such theorists include John Stuart Mill, Alfred Marshall, Paul Samuelson, Gottfried von Haberler, Milton Friedman, Friedrich Hayek and Robert Gilpin.
22. It is noteworthy to highlight that Liberalism, despite all its criticism to Mercantilism, does not suggest a complete abolishment of the competitive dimension for the reason indicated. As long as governments create the best infrastructure – whilst observing restraint in intervening in the market mechanism – for their companies to produce cheaper or better products or produce faster than companies in other countries can, the relentless pursuit for increased efficiency continues thereby adhering to this normative goal in the view of Liberalists.
23. It can be argued that Mercantilism is even less associated with ethics than Liberalism. This is strengthened by the parallels between Mercantilist principals and Machiavelli's *Il Principe*, by some considered to be the first codification of Mercantilism – although it has been argued that Machiavelli's work was a satire rather than a normative guidebook for political rulers (see: Mattingly, Garret (1958). *Machiavelli's Prince: Political Science or Political Satire?*, *The American Scholar* 27: 482-491).
24. his refers to two types of agreements. The longer established ones are the agreement with former colonies from Africa, the Caribbean and the Pacific or ACP countries. Originally this was an agreement established at Lomé – which is why such countries have also been referred to as "Lomé Countries. The ACP agreement was replaced by the Cotonou Agreement in 2000 but after this agreement was successfully contested at the WTO's Appellate Body by third parties (i.e. WTO developing countries members not included in the agreement) in 2007 the EU has been replacing this agreement on a bilateral basis with so-called Economic Partnerships. The other type of agreement the EU has with developing countries in this context is the so-called EBA (Everything But Arms). This is a unilateral preferential agreement for the poorest developing countries and refers to trade in goods other than arms and weapons.
25. The GATT Principals referred to are Non-Discrimination (which consists of the Most Favourite Nation Rule and the National Treatment Principal) and Reciprocity (Hoekman and Kosteci (2001).
26. Some progress has been made for developing countries but on medication only. Thanks to pressure posed by Brazil, India and South Africa developing countries are allowed to produce – or have third parties produce – generic medication in times of national medical emergency.

REFERENCES

Baldwin, Richard E. (2006). Multilateralising Regionalism: Spaghetti Bowls as Building Blocs on the Path to Global Free Trade. *The World Economy* 29 (11): 1451-1641.

Bull, Hedley (1977). *The Anarchical Society: A Study of Order in World Politics*. Berkeley: Columbia University Press.

Cairo, Raymond (2006). *Co-opetition and Strategic Business Alliances in Telecommunications: The Cases of BT, Deutsche Telekom and Telefónica de España*. London: PhD thesis London School of Economics, unpublished.

Chan, Kim W. And Mauborgne, Renée (2005). *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant*. Boston, MA: Harvard Business School Press.

Costantini, Valeria; Crescenzi, Riccardo; De Filippis, Fabrizio and Salvatici, Luca (2007). Bargaining Coalitions in the WTO Agricultural Negotiations. *The World Economy* 30 (5): 863-891.

Croome, John (1995). *Reshaping the World Trading System*. Geneva: World Trade Organization.

Das, Dilip K. (2006). The Doha Round of Multilateral Trade Negotiations and Trade in Agriculture. *Journal of World Trade* 40 (2): 259-290.

Deane, Phyllis (1990). *The State and the Economic System: An Introduction to the History of Political Economy*. Oxford: Oxford University Press.

Dos Santos, Theotonio (2003). The Structure of Dependence in Goddard, C. Roe, Cronin, Patrick and Dash, Kishore C. eds. (2003). *International Political Economy: State-Market Relations in a Changing Global Order*. Boulder, CO: Lynne Rienner Publishers.

Evans, Peter and Finnemore, Martha (2001). *Organizational Reform and the Expansion of the South's Voice at the Fund*. G-24 Discussion Paper Series December 2001, No. 15.

Frank, Andre Gunder (1980). *Crisis – In the World Economy*. Oxford: Heinemann Educational Publishers.

Frieden, Jeffrey A. and Lake, David A. (2003). International Politics and International Economics in Goddard, C. Roe, Cronin, Patrick and Dash, Kishore C. eds. (2003). *International Political Economy: State-Market Relations in a Changing Global Order*. Boulder, CO: Lynne Rienner Publishers.

Galtung, Johan (1969). Violence, Peace and Peace Research. *Journal of Peace Research* 6 (3): 167-191.

Gilpin, Robert (1987). *The Political Economy of International Relations*. Oxford: Princeton University Press.

Gilpin, Robert (2001). *Global Political Economy: Understanding the International Economic Order*. Princeton: Princeton University Press.

Grant, Wyn (2005). Agricultural Trade in Kelly, Dominic and Grant, Wyn (eds). *The Politics of International Trade in the Twenty-First Century: Actors, Issues and Regional Dynamics*. Basingstoke: Palgrave Macmillan.

Hoekman, Bernard M. and Kostecki, Michel M. (2001). *The Political Economy of the World Trading System: The WTO and Beyond*. Oxford: Oxford University Press.

- Hoogvelt, Ankie (2001). *Globalization and the Postcolonial World: The New Political Economy of Development*. Basingstoke: Palgrave Macmillan.
- Kapur, Devesh and Webb, Richard (2007). *Beyond the IMF*. G-24 Discussion Paper Series February 2007, No. 43.
- Kelly, Trish (2007). *The Impact of the WTO: Environment, Public Health and Sovereignty*. Cheltenham: Edward Elgar.
- Keohane, Robert O. (1984). *After Hegemony: Cooperation and Discord in the World Political Economy*. Princeton: Princeton University Press.
- Keohane, Robert O. and Nye, Joseph S. (1989). *Power and Interdependence*. Old Tappan, NJ: Prentice Hall.
- Kindleberger, Charles P. (1986). *The World in Depression 1929-1939*. Berkeley: University of California Press.
- King, Philip, G. (2004) Intellectual Property Rights and the WTO in King, Philip G. and King, Sharmila K. *International Economics and International Economic Policy: A Reader*. New York: McGraw-Hill.
- Krasner, Stephen (1992). *Structural Conflict: The Third World against Global Liberalism*. Berkeley, CA: University of California Press.
- Krugman, Paul (1994). Competitiveness: A Dangerous Obsession. *Foreign Affairs*, vol. 73 # 2, March/April.
- Krugman, Paul and Wells, Robin (2006). *Macroeconomics*. Princeton: Princeton University Press.
- Lawrence, Robert Z. (1991). Emerging Regional Arrangements: Building Blocks or Stumbling Blocks? In O'Brien, (ed.) *Finance and the International Economy 5: The AMEX Banks Review Prize Essays*. New York: Oxford University Press.
- Limão, Nuno M. (2006). Preferential Trade Agreements as Stumbling Blocks for Multilateral Trade Liberalization: Evidence for the United States. *The American Economic Review* vol. 96 (3): 896-914.
- Lindsey, Brink (2003). The Invisible Hand vs. the Dead Hand in Goddard, C. Roe, Cronin, Patrick and Dash, Kishore C. eds. (2003). *International Political Economy: State-Market Relations in a Changing Global Order*. Boulder, CO: Lynne Rienner Publishers.
- Love, Joseph L. (1980). Raúl Prebisch and the Origins of the Doctrine of Unequal Exchange. *Latin American Research Review* 15 (3): 45-72.
- Magazine, Ira C. And Reich, Robert B. (1982). *Minding America's Business: The Decline and Rise of the American Economy*. New York: Harcourt Brace Jovanovich.
- May, Christopher (2003). Intellectual Property Rights in Kelly, Dominic and Grant, Wyn (eds). *The Politics of International Trade in the Twenty-First Century: Actors, Issues and Regional Dynamics*. Basingstoke: Palgrave Macmillan.
- Nalebuff, Barry J. and Brandenburg, Adam M. (1996). *Co-opetition*. London: HarperCollinsBusiness.

Oatley, Thomas (2008). *International Political Economy: Interests and Institutions in the Global Economy*. New York: Pearson Longman.

Ohmae, Kenichi (1985). *Triad Power: The Coming Shape of Global Competition*. New York: The Free Press.

Ohmae, Kenichi (1999). *The Borderless World: Power and Strategy in the Interlinked Economy*. New York: HarperBusiness.

O'Rourke, Patrick J. (2007). *On the Wealth of Nations*. London: Atlantic Books.

Perdikis, Nicholas (2005). EU-US Trade in Genetically Modified Goods: A Trade Dispute in the Making in Perdakis, Nicholas and Read, Robert (eds.) *The WTO and the Regulation of International Trade: Recent Trade Disputes between the European Union and the United States*. Cheltenham: Edward Elgar.

Petersmann, Ernst-Ulrich (2005). Strategic Use of WTO Dispute Settlement Proceedings for Advancing WTO Negotiations on Agriculture in Petersmann, Ernst-Ulrich and Harrison, James *Reforming the World Trading System: Legitimacy, Efficiency, and Democratic Governance*. New York: Oxford University Press.

Petersmann, Ernst-Ulrich and Harrison, James (2005). *Reforming the World Trading System: Legitimacy, Efficiency, and Democratic Governance*. New York: Oxford University Press.

Petersmann, Ernst-Ulrich and Pollack, Mark A. (2003). *Transatlantic Economic Disputes: The EU, the US, and the WTO*. New York: Oxford University Press.

Polanyi, Karl P. (1957). *The Great Transformation: The Political and Economic Origins of Our Time*. Boston MA: Beacon Press.

Pomfret, Richard (2007). Is Regionalism an Increasing Feature of the World Economy? *The World Economy* 30 (6): 923-947

Porter, Michael E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: The Free Press.

Porter, Michael E. (1996). What is Strategy? *Harvard Business Review*, 74(6): 61-78, Nov/Dec.

Prestowitz, Jr, Clyde V. (1988). *Trading Places: How we Allowed Japan to Take the Lead*. New York: Basic Books.

Ravenhill, John ed. (2008). *Global Political Economy*. New York: Oxford University Press.

Read, Robert (2005). The 'Banana Split': the EU-US Banana Trade Dispute and the Effects of EU Market Liberalisation in Perdakis, Nicholas and Read, Robert (eds.) *The WTO and the Regulation of International Trade: Recent Trade Disputes between the European Union and the United States*. Cheltenham: Edward Elgar.

Reich, Robert (1990). Who is Us. *Harvard Business Review* 68(1): 53-64, Jan/Feb.

Reich, Robert (1991). Who is Them. *Harvard Business Review* 69(2): 77-88, Mar/Apr

Reich, Robert (1992). *The Work of Nations: Preparing Ourselves for 21st Century Capitalism*. Colchester: Vintage.

Rodrik, Dani (1997). *Has Globalization Gone too Far?* Washington, DC: Institute for International Economics.

Rosecrance, Richard (1987). *The Rise of the Trading State: Commerce and Conquest in the Modern World*. New York: Basic Books

Ruggie, John G. (1982). International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic System. *International Organization* 36 (2): 379-415.

Sally, Razeen (2003). Whither the WTO? A Progress Report on the Doha Round. *Trade Policy Analysis, Cato Institute* 3 March 2003, # 23.

Sally, Razeen (2008). *Trade Policy, New Century: The WTO, FTAs and Asia Rising*. London: The Institute of Economic Affairs.

Smith, Adam (1776). *An Inquiry into the Nature and the Causes of the Wealth of Nations*. London: W. Strahan & T. Cadell.

Smith, Adam (2003). Excerpts from “The Wealth of Nations” in Goddard, C. Roe, Cronin, Patrick and Dash, Kishore C. *International Political Economy: State-Market Relations in a Changing Global Order*. Boulder, CO: Lynne Rienner Publishers.

Smith, Adam and Heilbroner, Robert L. (1987). *The Essential Adam Smith*. London: W. W. Norton and Company.

Spero, Joan E. and Hart, Jeffrey A. (2002). *The Politics of International Economic Relations*. Belmont, CA: Wadsworth Publishing Company.

Stiglitz, Joseph and Charlton, Andrew (2005). *Fair Trade for All: How Trade can Promote Development*. New York: Oxford University Press.

Strange, Susan. (1988). *States and Markets*. Oxford: Blackwell Publishers.

Swinbank, Alan (2005). The Challenge of the Agriculture Trade negotiations in the WTO Doha Round in Perdakis, Nicholas and Read, Robert (eds.) *The WTO and the Regulation of International Trade: Recent Trade Disputes between the European Union and the United States*. Cheltenham: Edward Elgar.

Tangemann, Stefan (2005). How to Forge a Compromise in the Agriculture Negotiations in Petersmann, Ernst-Ulrich and Harrison, James *Reforming the World Trading System: Legitimacy, Efficiency, and Democratic Governance*. New York: Oxford University Press.

Thurrow, Lester C. (1992). *Head to Head: The Coming Economic Battle among Japan, Europe and America*. New York: Morrow.

Tyson, Laura D’Andrea (1993). *Who’s Bashing Whom? Trade Conflict in High-Technology Industries*. Washington, DC: Institute for International Economics.

Wallerstein, Immanuel (1995). *After Liberalism*. New York: The New Press.

Waltz, Kenneth N. (1979). *Theory of International Politics*. New York: Longman Higher Education.

Whittington, Richard (2000). *What is Strategy and Does it Matter?* London: Thomson Learning.

Young, Alasdair R. (2004). The Incidental Fortress: The Single European Market and World Trade. *Journal of Common Market Studies* vol. 42 (2): 393-414.

COSTCO-ADDICTION: SEASONAL AND SPECIALTY ITEMS INCREASE SALES

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ABSTRACT

The purpose of this paper is to find out the impact of Costco's merchandising strategies to increase sales and loyalty of its members. It is exploratory research to provide insights in the perceptions of Costco customers in reference to new, seasonal, and premium products in their shopping habits, and test the possible hypothesis that Costco has indeed created a competitive advantage as a result of this strategy in comparison with other strategic competitors like Wal-Mart, Sears and Target. In other words, as a result of this strategy, Costco members develop a sense of urgency to shop and, hence, create an addiction. An email survey of ten questions was developed for this purpose and sent to a sample of 150 individuals with a 55.33 % response rate (83 completed the survey) and results are analyzed and discussed in this paper.

KEYWORDS: Costco, competitive advantage, marketing, consumer behavior, shopping habits

INTRODUCTION

Jim Sinegal loves breaking retail rules and, as Costco's CEO, he introduces his "treasure hunt" strategy to entice his members to spend more money and visit the warehouse more often by offering premium and seasonal items, including fine crystal, famous names handbags, the latest in consumer electronics, plasma TV's, cashmere sweaters, gourmet cheeses, imported wines, leather jackets and lobster, to name a few. Regular products include food, health and beauty items, tires, consumer electronics, wine (Costco became the biggest wine merchant in the US), soft goods, groceries, and even caskets (Funeral Monitor, p.2, as cited in Chevalier, 2008).

His strategy has produced very good results and Sinegal, with a very casual way of running business, created an empire of 544 stores in 40 states and operations in eight world countries (McGregor, 2008). With yearly sales of \$72 billion, Costco is ranked 29th in the Fortune 500 list (up from 32nd place last year), and competing indirectly with the number one company in America, Walmart (with sales of over \$379 billion). Within the specialized retailers, Costco is second only to Home Depot, with 84.7 billion in sales, and has become the fourth largest retailer in the country and the seventh in the world (Boyle, 2006). Costco's merchandising strategy has proven very effective by generating sales of \$918 dollars per square foot on average per year, compared with \$438 of Walmart, and Sam's Wholesale Club (a division of Wal-Mart) with an estimate of \$552, and only second to Best Buy with \$941; however, the latter sells mostly electronic items which tend to be rather pricey, and Costco averages include groceries, food, cleaning items and other low-price items (Boyle, 2006). Despite having 82 fewer outlets than rival Sam's Club, Costco has 20 billion more in sales.

The more than 50 million Costco members avidly shop an average of 22 times per year and more than a third have a household income of \$75,000 a year (Boyle, 2006). Not surprisingly, these customers have the financial means to buy more luxury items like wine and plasma TV's, in addition to the regular food and cleaning items. This is what makes Costco so unique and it is not unusual to observe fancy, expensive, sport cars parked outside their warehouses across the nation.

In addition to the low-cost strategy (maximum of 14% margin on any item), economies of scale due to the high volume of limited number of products (only 4,000 items per store, compared with 40K of some of its competitors), and a very efficient distribution system (now with its own trucking system), Costco uses the

“treasure hunt” strategy cited earlier which consists of creating an uncontrollable desire to go back to the store and see what is the most recent model of an electronic item, or the latest imported wines from Chile, or the seasonal items for the next summer or winter. It also uses a “preemptive” approach to seasonal items, by being the first to offer products a few months ahead of the season, creating a “preemptive desire” and capturing sales away from and before the competition.

Regarding advertising, Costco has also broken all paradigms of traditional retailing by using the most inexpensive and effective way: word of mouth. They do not contract any newspaper, radio or TV ads (except when they have store openings) but are able to attract many customers that tell other friends about it (the buzz factor), thus creating a viral marketing effect that expands rapidly in any given community. Sinegal says: “Advertising becomes like a drug, once you start doing it, it is very hard to stop. We feel that the most successful type of Advertising is word-of-mouth. When people are saying good things about you, it is much more important that when you say them about yourself” (Davis, 2008).

Another rather innovative approach is the membership fees (an average of \$50/member), to compensate for lower margins in all merchandise, that reached \$ 1.1 billion dollars in 2006. All these merchandising tactics combined can create an addiction to shop at Costco, or a “Costco -Addiction” that entices customers to shop more often. “Costco card-carrying legions come in droves, waiting anxiously in fancy foreign cars on Saturday mornings for the store to open. Carts in hand, they display a fervor not usually seen outside of houses of worship. Why? Because we all love a bargain and Lord help us if we miss one.” (Boyle, 2006).

The Issaquah, Washington-based warehouse chain also implements a very effective approach in providing services outside the store to its members, such as kitchen counter-tops, garage doors, window blinds and curtains, carpet, automobiles and trucks (the auto-buy program in affiliation with local car dealers) as well as business services that include printing, insurance, accounting services, and others. Furthermore, its website is becoming a very important source of income for Costco, where members can buy a wider variety of products and services, including auto-insurance, travel, financial investing, payroll, and phone services.

One of the most fascinating aspects of this strategy has to do with the concept of scarcity that is based on the idea that the customer will display a higher propensity to buy if they realize that a particular item may not be offered again next week. Of the 4,000 items that the store regularly carries, one fourth (about 1,000) of them belong to this category and include seasonal (like swimsuits, leather jackets, umbrellas, clothing, accessories, camping items, sporting goods), electronic items (like plasma TV’s, IPODs, cameras, laptops) and premium items (like diamonds, fine crystal, jewelry, watches, fine wines, imported cheeses, Italian olive oil, lobster tails), that entice members to make impulse buys. Regarding wines sales, Costco has become the largest retailer in the US.

Costco has also been the pioneer in implementing customer life-time value (CLTV) by adopting a return policy with no questions asked, which also helps generate more impulse buying, realizing that the customer can return the product later if he/she does not like it or is not fully satisfied. They are one of the few stores that offer a three-month return policy in computers and electronics.

The purpose of this paper is to explore how much of this “treasure hunt” strategy is really enticing customers to shop more often or buy products as a result of impulsive tendencies rather than cognitive perception. The systematic view of persuasion emphasizes the cognitive process of persuasion and messages, whereas the heuristic approach gives less importance to the cognitive process and more to impulse persuasion (Chaiken, 1980).

Costco’s strategy has to do more with the context and impulse buying persuasion, which emphasizes the situation in which the products or services are offered. Presumably, consumers have well-defined wants

and preferences, but when influenced by others, they can be persuaded to change. When their insights are not deeply rooted and preferences are unstable, the consumer can be easily influenced by the context and reference groups (Simonson, 1993). “Consumer’s preferences tend to be fuzzy and imprecise, and as a result the choices they make are susceptible to a variety of seemingly irrelevant influences” (Simonson, 1993). One of these irrelevant factors in Costco’s strategy, that can easily become a strong influencer, is the amount of products offered and the observable throngs of shoppers anxiously inspecting and purchasing those items.

RESEARCH DESIGN AND METHODOLOGY

Malhotra (2007, 42) defines qualitative research as: “Unstructured, exploratory in nature, based on small samples, and may utilize popular qualitative techniques such as focus groups (group interviews), word associations, in-depth interviews and other exploratory research techniques such as pilot surveys and case studies.” A pilot survey was designed to test the hypothesis that the Costco members were especially attracted to the store as a result of new, seasonal and premium products and indulgencies as mentioned earlier, using a direct approach and an exploratory research methodology with a sample of 150 individuals (convenience sample). The basic research questions are: Are Costco members attracted by regular items such as groceries, or because the store offers distinctive seasonal and premium items, and if so, to what degrees? Do these items foster more frequent visits and higher ticket item? Can this be (or become) Costco’s competitive advantage versus its strategic competitor Walmart?

The survey consisted of ten questions (Appendix A) using a combination of word completion, multiple-choice, scale and dichotomous types of questions. The surveys were sent via email with a response rate of 55.33% of completed surveys. Questions included the shopping frequency habits, perceptions and attitudes about these products and their impact to promote more frequent visits to the store, ranking of different lines of products, and demographic data. To gain a better perspective of their addiction level, one question addressed the degree of discomfort experienced by Costco members who did not find a seasonal or premium item when they tried to buy it again.

A pilot survey is a common method used in exploratory research to discover ideas and insights of a particular population (Malhotra, 2007). It offers flexibility and versatility to learn about a specific issue, and often becomes the front end of a more complete descriptive research design, or to develop hypothesis. A pilot survey tends to be less structured and the sample used is much smaller.

SAMPLE CHARACTERISTICS

The respondents were 57% male and 45% female; 30.4% were in the 25-40 year old bracket, 25.3% in the 40 to 50, and 29.1% in the 50 to 60, and 15.2% more than 60 years old. Caucasians made up 24.4% of the survey, 69.2% were Hispanics, 1.3% were Pacific Islanders, 1.3% were Asian-American, 1.3% African-American, and there were 2.6% other.

DATA ANALYSIS AND DISCUSSION

From the first closed-end, dichotomous question asking whether or not the consumers shop at Costco (yes or no), 92.6% of the sample responded yes, and only two skipped the question, which shows that a large percentage of the sample were Costco members.

The second question, an open-ended, word-association type asking the first word that comes to mind when thinking of Costco, the respondents provided a great variety of responses, but some of the recurrent themes include comments like “*I buy more than what I originally wanted to*”, or “*bulk products*”, “*big quantities*”, the “*over \$100 dollars shopping experience*”, and the like. See more details in Appendix B.

On the third question (multiple choice), 16.9% said they shop once a week, 35.1% once every two weeks, 35.1% once a month, which means 87.1% combined shop at least once a month.

The fourth question was a closed-end rating type question ranking the reasons for shopping at Costco. Choosing from a variety of products and aspects, the most relevant reason included price, quality, and return policy. Interestingly, 37.3% responded that new and exciting products were an important factor, and 36.8% also responded that seasonal items were important in their reasons to shop at Costco.

In addressing the degree of importance of these seasonal, novelty and premium items in question five, 16.9% rated them as very important, and 36.4% as important, which, in combination, means that over 50% of the sample considers these products as important or very important; however, over 50% of the respondents agree that only less than 10% of their purchases were comprised in these items (question six), which could be interpreted as the respondents giving high importance to these items but not necessarily spending a lot of money on them. The possible answers were presented as percentages, which oftentimes tends to be misleading and hard to assess.

From the different type of premium products (question seven), the most preferred products were electronic items, imported food, wines, and plasma TV's, in that order.

Question eight asks if these products make Costco more attractive than other similar retailers, to which 14.3% strongly agree and 55.8% agree. This answer could be a hint for supporting the theory that the before mentioned strategy can be the foundation for a competitive advantage.

On question nine, 63.7% of the respondents affirmed that they become upset and/or very upset when a particular item is no longer carried by the store, which was intended to explore some perception and attitudinal attributes of these products. The fact that a large percentage felt upset about not finding these products can be a strong disadvantage of Costco's strategy that requires further analysis.

CONCLUSION

The data implies a clear tendency of Costco members to give a good degree of importance to the seasonal and premium items, and that the "treasure hunt" is not only working very effectively in attracting customers to buy more items and more frequently, but is also creating an interesting competitive advantage for Costco, compared with other strategic rivals like Walmart (Sam's Club), Target and Sears.

This exploratory research supports the possibility for developing the hypothesis that:

H1 = The "treasure hunt" merchandising strategy implemented by Costco is very effective in increasing store sales and enhancing Costco's positioning in the competitive landscape, and therefore creating a competitive advantage. A subsequent descriptive, conclusive research study will be necessary to test that hypothesis.

APPENDIX A: SURVEY

1. Do you shop at COSTCO? If you answer "No, never", you have completed the survey so please click submit at the end and thank you for your time.
 - a. Yes
 - b. No
2. What is the first thing that comes to mind when you think of COSTCO? (using word completion)
3. How often do you shop at COSTCO?
 - a. About once a week
 - b. About once every two weeks
 - c. About once a month
 - d. Every three months or so
 - e. Occasionally
4. Please rate the reasons why you like COSTCO: (using Likert itemized ranking scale of very important, important, somewhat important, neutral, not important)
 - a. price
 - b. location
 - c. quality
 - d. new and exciting products
 - e. seasonal items
 - f. service
 - g. variety
 - h. return policy
 - i. food samples
5. COSTCO offers seasonal products before other retailers, as well as new products, specialty products, imported goods, fancy wines, etc., which are not your "regular" shopping products. Please rate how important this is to make you go to COSTCO (using Likert itemized ranking scale of very important, important, somewhat important, neutral, and not important).
6. What percentage of your typical COSTCO purchase is comprised of new-to-the-store or seasonal items?
 - a. 0 to 10%
 - b. 11 to 20%
 - c. 21 to 40%
 - d. 41% or more
7. Rank the following COSTCO categories as one for the most important, two for the following, and so on, until seven to the least important category/product (possible responses one to seven ranking)
 - a. Books/DVD/CD
 - b. Clothing
 - c. Electronic items
 - d. Imported food
 - e. Plasma and other TV's
 - f. Sporting goods
 - g. Wines
8. The fact that COSTCO has new, seasonal and ever-changing products makes it more attractive than other similar retailers.
 - a. Strongly agree
 - b. Agree
 - c. Indifferent
 - d. Disagree
 - e. Strongly disagree
9. How upset does it make you when you go to COSTCO to get a particular item and you realize they no longer carry it?
 - a. Very upset
 - b. Upset
 - c. Neutral
 - d. It is the way they operate
10. Your demographic information
 - a. Gender – male or female
 - b. Age bracket
 - i. Less than 25
 - ii. 25 to 40
 - iii. 40 to 50
 - iv. 50 to 60
 - v. More than 60
 - c. Ethnic background
 - i. Caucasian
 - ii. African-American
 - iii. Hispanic
 - iv. Pacific islander
 - v. Native American
 - vi. Other

APPENDIX B: RESPONSES TO QUESTION 2

-
- Food products
- Big items
- Warehouses
- Standard products
- Low prices, cheap, etc.
- Limited selection
- Bulk merchandise
- Savings
- Food, cleaning items
- Long lines
- Good eating
- More for your money
- The \$100 store
- Convenience/savings
- \$1.50 hot dog and soda
- Great bargains
- Wine
- Quality products
- Savings
- Optic items
- Variety
- Large quantities
- Competitive prices
- Computers
- Chocolates and gifts
- computers

REFERENCES

Boyle. M. (October 25, 2006). A day with Jim Sinegal, the Merchandising Maestro who gets shoppers to buy 2,250 count packs of Q-tips and mayo by the drum. Fortune magazine online, retrieved on 10/25/2006.

Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology*, 39, 5, p. 752-755.

Chevalier, J. (2008, February). State Caskets Sales restrictions: A pointless Undertaking? The Journal of Law and Economics, February.

Davis, M. (2008). Integrity and Values. *New England Journal of Entrepreneurship*. 11(2), 9-12. Retrieved December 20, 2008, from ABI/INFORM Global Database. (Document 1467091411).

Malhotra, N. (2007). *Marketing Research: An Applied Orientation*, 5th edition. Pearson Education, Inc. Upper Saddle River, New Jersey 07458. ISBN 0-13-227946-0

(Money.cnn, 2008) retrieved on March 9, 2009 from: <http://money.cnn.com/magazines/fortune/fortune500/2008/snapshots/2649.html>.

Simonson, I. (1993). Get closer to your customers by understanding how they make choices. *California Management Review*, summer 1993.

RELATIVE IMPORTANCE OF MANAGEMENT FACTORS FOR CIVIL AVIATION FLIGHT SAFETY

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ABSTRACT

Although the fatal accident rate for passenger airlines has fallen dramatically, proactive safety management would be essential to further reduce the accident rates in order to accommodate the rapid growth of air traffic. Historically, accident investigations have focused on primary factors related to mechanical failure and human errors. In recent years, the latent factors behind primary causes have been investigated, shedding lights on management factors that impact flight safety. Industry efforts are turning to identifying opportunities to proactively address management factors as a way of further improving flight safety. This study is aimed to help decision makers to effectively implement safety management by facilitating their financial and human resource allocation. Key organisational management factors are identified by interviews conducted with global safety experts. Weights attached to each key management factor are then estimated by Analytical Hierarchy Process approach based on the survey results. Airlines are operating in an extremely competitive environment. Effective resource allocation is therefore a key for success. Understanding the relative importance of key safety management factors will be useful for effective safety management and planning, safety audit, as well as safety training.

KEYWORDS: Aviation safety, analytical hierarchy process, safety management

INTRODUCTION

Safety remains the highest priority for airlines. According to International Civil Aviation Organization (ICAO). ICAO is an organization that promotes understanding and security through cooperative aviation regulation, the fatal accident rate for scheduled passenger airlines have fallen over the past twenty-five years from 2 per million flights to 0.3 per million flights as a result of efforts on safety management systems for mechanics and flight operations (Learnmount 2005). Historically, accident investigations have focused on primary factors related to mechanical failure and human errors. In recent years, the latent factors behind primary causes have started been investigated, shedding lights on management factors that impact flight safety. Industry efforts are turning to identifying opportunities to proactively address management factors as a way of further improving flight safety.

Airlines today are operating in a highly competitive and changing environment. Mergers that cross national boundaries are becoming increasingly common in today's globalised world. This makes organizations more complex in terms of structures as well as the system to deal with mixed cultures. Changing personnel, volatile market, or economic situation is often considered to influence on corporate priority or culture. Commercial pressures on air transport industries today are increasingly high. One of the major components of airlines' operation costs is a jet fuel cost, whose price tripled between 2003 and 2005 (www.wbcsd.org). Various efforts are being made in order to reduce operating costs since airlines are operating in highly competitive environment. Aircraft often operate up to maximum flying hours and the utilizations of crews reach to the legal limit in order to reduce operating costs. Tough roster hours could well result in increased fatigue of crews. Major airlines' maintenance work is also often outsourced mainly to save operation costs - approximately 51% of maintenance work is outsourced in 2005 compared to 37% in 1996 (Mutzabaugh 2005).

In order to prevent accidents, cultural factor seems to play an important role, as management needs to react appropriately if cultural factor is failing. Safety culture is formed if upper management accepts

responsibility for safe operations, especially the proactive management of risk. Organizations must have sufficient time, information, expertise, training and contingency plans for special situations and events. Thus, the initiative of improving organizations' corporate responsibility practice being driven and reinforced from upper management seems to be crucial.

The objective of this study is to examine how improved daily management practices can increase the level of civil aviation safety in this rapidly growing industry. This study critically investigates the role of organizational management in improving aviation safety performance. The study identifies key management factors for aviation safety based on the analyses of in-depth interviews and questionnaires conducted with experts in the aviation sector. Then, weights attached to those safety management factors are identified by analytical hierarchy process. This study comprises of the following four sections. The next section discusses the main issues of aviation safety management addressed in the literature review. The section three describes the methodology used in this study, followed by the presentation of the findings in the section four. The last section concludes the study and suggests how aviation safety can be further improved.

LITERATURE REVIEW

According to Reason (2001), hazards and errors can occur at all levels of an organization. Safety violations take place due to psychological precursors of unsafe acts, organizational deficiencies including line management decisions, corporate actions including senior management decisions, and inadequate defenses (Reason 2001). Thus, safety management needs the involvement of all the stakeholder groups as well as strong commitments from upper management. Reason (1990) believes that latent failures of the broad management functions of an organization often result in aircraft accidents. Greenfield (1998) claims that accidents can be prevented through good organizational design and management. Flight Safety Foundation, an independent, nonprofit, nonpolitical international organization dedicated entirely to aviation safety, believes that the responsibility for aviation safety belongs to top management (Flight International (2006)). They claim that top management is required to emphasise safety in management's strategic planning, decision making and resource allocation. The vision within an organization, which fosters increasingly an understanding of the importance of safety in the organizations activities, and the responsibility of each individual needs to be developed in order to prevent accidents. Aviation safety audit is a recommended tool of Flight Safety Foundation to maintain a good safety record.

Improving safety is the prime target for airlines and every possible efforts are made to reduce accident rates. However, the question is which part of airline operations need to be more closely investigated in order to improve safety? Little et al. (1990) suggest that there is the need for further investigation on the impact of corporate instability within the aviation environment driven by commercial pressures and pilots distresses on aviation safety. Boeing (2006) has investigated the primary cause of airline accidents with worldwide commercial jet fleet from 1996 to 2005. The most significant cause was flight crew error (55%), followed by airplane (17%), weather (13%), others (7%), Air Traffic Control (5%), and maintenance (3%).

The similar results are found in the study conducted by Lu et al. (2006) on the investigation of the causes of accidents based on 189 final accident reports on the National Transportation Safety Board (NTSB) Aviation Accident Database covering FAR (federal Aviation Regulations) Part 121 scheduled operations between January 1999 and May 2004. The study shows that direct causes of the accidents are led by cockpit crews (24%), ground crews (23%), turbulence (21%), maintenance personnel (13%), foreign object damage such as birds (8%), flight attendants (4%), air traffic controller (2%), manufacturer (2%), and passenger & FAA's discretionary function (e.g., regarding certified approval) for small percentages. Lu et al (2006) have identified errors caused by pilots is especially a significant primary cause - 38% of major airline crashes and 74% of commuter or air taxi crashes worldwide between the years 1983 and 1996.

Other similar study conducted by Bowen and Lu (2004) has assessed the major airline's safety performance in 2001 and 2004. The probability of accidents caused by pilot fatigue was approximately 1.7 cases per one hundred thousand flights. Effective fatigue management requires understanding the relationship between working conditions and fatigue, not merely the simplistic assessment of work-hours scheduled (Harris et al. 2001).

The contributing factors to these identified major causes of aviation accidents are poor situational awareness, misjudgment, ineffective communication, operational deficiency, lack of training, non-compliance with standard operational procedure and fatigue (Lu et al. 2006). For example, there was an incident caused by the failure to close a cargo door properly together with the design of the cargo door latch, or other incident caused by the loss of the vertical stabilizer due to improper maintenance. There were also drunk pilot incident which could well result in serious accidents. Crew awareness and monitoring of navigational systems can prevent CFIT (controlled flight into terrain) accidents. Some pilots believe that advanced electronic navigation systems coupled with flight safety management system computers, or their over-reliance could also be partially responsible for these accidents. Crew Resource Management (CRM) or the aviation safety reporting system is a common method widely used to improve the human factors of aviation safety. Salas et al. (2001) stat that Crew Resource Management (CRM) training is generally perceived to produce positive reactions, enhances learning, and promotes desired behavioral changes.

Flight International (2006), the world's leading provider of aerospace news, believes that international aviation safety problems are becoming regionalized and related to ageing technology. According to Flight International (2006), there are two common factors of airlines that are involved in accidents. Those airlines are often based in countries with struggling economy and have a poor safety record compared with the world average figure. The reasons behind this tendency could be due to the fact that safety oversight in these countries is not their political priority. This may indicate that an airline's culture regarding obeying regulations reflect that of its country's political environment. Safety culture can be reflected in organizational systems in place, attitudes, priorities, and actions, which vary widely across organizations. One of the important elements of a safety culture is a "no-blame" system that allows air and ground crews to report instances of human and mechanical error without fear of retribution. One well-known industry resource for flight safety improvement is Civil Aviation Safety Team (CAST). CAST is a government-industry cooperative group that has its goals as reducing the United States (US) commercial aviation fatal accident rate by 80% between 1997 and 2007, and working with international organizations and regulatory authorities to reduce the worldwide accident rate. CAST encourages worldwide adoption of the program, which includes emphasis on developing a safety culture.

Literature review shows that highly sophisticated safety monitoring systems in terms of engineering, maintenance, operation and crew function already exist. However, the coverage of organizational management issues at all levels is not well covered in great details. For example, the International Air Transport Association (IATA) has a safety audit system called the IATA Operational Safety Audit (IOSA) (IATA, np). The IOSA is an evaluation system designed to assess mainly the operational management and control systems of an airline. The Canadian Civil Aviation authority has a more comprehensive Safety Management System Assessment Guide, which covers broad general safety issues including roles, responsibilities, and involvement of employees as well as the importance of communications(Civil Aviation, np). The Australian Civil Aviation Safety Authority has a guidance material of safety management system (www.casa.gov.au). This system briefly includes the importance of the senior management commitment as well as safety officers' responsibilities.

RESEARCH METHODOLOGY

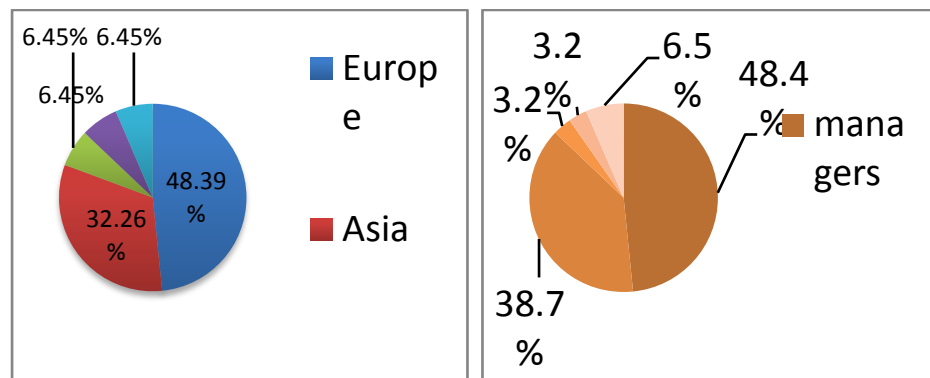
This study has two research questions. First, what are the key organizational management factors which are likely to affect on aviation safety. Second, what is the relative importance of the key organizational management factors. The study has applied an approach of mixed research method that is both qualitative (interview) and quantitative (questionnaire). Qualitative research produces complete and detailed description of research topics, whereas quantitative research provides statistically reliable and generalisable results. Quantitative research classifies features and counts their occurrences. Findings of the quantitative analysis can be generalised to a larger population, and direct comparisons can be made. However, the picture of the data which emerges from qualitative analysis is much richer than that obtained from quantitative analysis.

This study has first conducted ten in-depth exploratory interviews with carefully selected experts on aviation and safety in order to understand their perceptions about aviation safety and its relationship to organizational management. The interview analysis has collected smaller but focused sample rather than large random samples usually collected for quantitative analyses. Open ended questions regarding aviation safety and organizational management factors to improve aviation safety have been asked to each interviewee. The sample of interviewees covers flight safety experts, airline managers and pilots in Taiwan, France, Unites States, Bangladesh, and Colombia. Various nationalities were selected in order to examine any cultural variations. The author has numerous experiences in interviewing with a wide variety of individuals, possessing a proved interview skill. Hence, the study has collected the highest standard of data without any subjective bias. The interviews have identified key organizational management factors for improving aviation safety performance from expert points of view. The interviews were mainly conducted by telephone, due to the diverse location of the respondents' organizations, and lasted for 1 hour on average.

A questionnaire was then designed to pair-wise rank the key management factors being identified in the interview analysis. The sample size for the questionnaire is much larger than the one for the interview analysis, therefore statistically reliable results can be obtained. The questionnaire was pre-tested with master students at Toulouse Business School in France, in order to make sure the questions are clear and understood in a consistent manner (Dillman 1978). After the pre-test, some modifications have been made in order to correct ambiguity and misleading parts of the questionnaire, including wording. We have contacted with each respondent by email explaining the purpose of the study, together with the questionnaire attachment. Several follow-up efforts including email and telephone reminder were made in order to obtain better response rates.

The questionnaire has asked respondents to conduct pair-wise comparison of the nine key organizational management factors according to their impact on flight safety. The questionnaire has also invited respondents to suggest additional key management factors. The explanation of what each factor indicates was given. The geographical location of the organization's headquarters that respondents are based in was also asked in order to observe a multicultural variation in the perceived importance of the management factors. The questionnaire was responded by 31 key representatives in aviation sectors globally. Although the sample size is not so large, it is large enough to draw scientific conclusions. Descriptions of the questionnaire respondents are illustrated in Figure 1. The questionnaires were responded from Europe (48.39%), Asia (32.26%), US (6.45%), Latin America (6.45%), and the rest of the world (6.45%). The respondents cover wide variety of the field: managers (aircraft manufacturers, airport, space industry) (48.4%), engineers (38.7%), air traffic controllers (3.2%), defense (3.2%), and safety experts from academic institutions (6.5%).

Figure 1: Descriptions of the Questionnaire Respondents



Analytical Hierarchy Process

The analytic hierarchy process (AHP) is used in this study to calculate the weights given to each identified key safety management factor. The Analytic Hierarchy Process, developed in 1970s by a mathematician Thomas Saaty, is a method for formalizing decision making where there are a limited number of choices but each has a number of attributes and it is difficult to formalize some of those attributes. AHP is a useful tool for making decisions that are complex, unstructured and contain many attributes. The process can be divided broadly into three steps: the description of a complex decision problem as a hierarchy, the prioritization procedure, and the calculation of results (Nataraj 2005). A problem is arranged into four hierarchy levels with Level 1: overall goal or focus of the decision, Level 2: factors or criteria for the decision, Level 3: sub-factors, Level 4: decision options. The prioritization is given by assigning the number from the scale developed by Saaty to represent the importance of the criteria. These attributes are compared pair-wise and input into the calculation. According to Nataraj (2005), there are two primary benefits for the application of the AHP. One is the AHP breaks down the complex problem with many factors by relating pairs of factors. Second, quantitative analysis and subjective judgments of the decision makers can be connected in relating the factors.

In order to extract the interviewees' preferences, they are asked to rank between 1 and 9 how important each factor is compared to another factor. Although there are some limitations attached to this method such as its arbitrariness in ranking between 1 and 9, the method is considered to be a powerful tool to measure preferences.

There are similar studies looking into aviation issues using analytical hierarchy process. Yoo & Choi (2006) have identified the relative importance of the factors and elements concerned with the improvement of passenger screening at airports using analytic hierarchy process on surveyed data. Lima et al (2007) have conducted pair wise comparison of decision criteria for air cargo companies in Brazil.

FINDINGS

Key Organizational Management Factors

All the interviewees have stated that management factors do influence flight safety outcomes significantly. However, they claim that there are too few studies about airline management factors contributing to aviation safety, or driving primary causes of safety violation. Some of the interviewees have claimed that most of the airline managers on a daily basis (especially in small airlines) are more

concerned about everyday business decisions, such as those concerning airline productivity or financial performance than about safety as an ongoing daily and a long-term matter. Some possible reasons for such attitude could be explained as pressures to present results to airline shareholders, consider flight safety expenditures more as a cost than an investment, a lack of knowledge about the causal dynamics of flight safety, or inadequate communication regarding business decision and safety goals. There was also a fear among the interviewees that training budgets might be reduced to achieve operational cost savings as training is an expensive activity. The interviewees strongly believe that training is one of the key factors for safety improvement that is directly impacted by organizational management.

Some interviewees suggest that airline flight safety would be better understood as a complete *flight safety management system* rather than a *flight safety program*. This is because flight safety in a system concept is interconnected to all airline activities. Each of airlines' systems, such as financial, operation, human resource, maintenance, training, ground support, information systems are also involved in flight safety. Furthermore, a system approach to flight safety is a useful way to analyze and understand the contribution of the airline organization to flight safety. System elements would include the operation environment, aircrafts, flight crews, operating procedures, and airline organization.

The interviewees all stress that airline managers play an important role in flight safety outcomes. Drivers of the majority of maintenance errors include management, organization, communication, and human performance. The great majority of factors contributing to maintenance errors are internal to an airline organization. These internal factors could be observable, measurable, and controllable by management to at least some degree. Managers implement performance policies and processes, establish organizational structures and communication and reward systems, manage resources, as well as devise and review operating procedures. Managers are also responsible to develop and to maintain a good safety climate within the organizational culture. A good safety climate is characterized by employees sharing similar positive behaviors and attitudes about organization safety. These include management as well as employee commitment to safety, swift and effective management action on safety matters, and the efficient safety communications within the organization. Flight safety is considered as a very technical and specialized-area, therefore most airlines managers give most or all of the responsibility for flight safety to the Flight Safety Department. This behavior reduces the opportunity to gain vital supports and commitments from all the other areas of the organization, and also discourages an involvement of key management and other employees in flight safety.

According to the interviewees, unions can have a positive or negative effect on safety. Therefore, airline and union management should give a priority to a close and cooperative working relationship in the area of safety. Business changes, such as mergers, are also perceived to disrupt operational processes or organizations themselves with follow-on effects that can impact flight safety. Thus, the implementation of business changes must be carefully planned and executed for minimum disruptions to processes, employees, and operations. Many pilots in a wide variety of airlines being interviewed observe that there is a frequent tendency for managers with inadequate experience on safety or lack of flying experience to fill senior operational positions. Their concern was that these managers might not understand the implications of their decisions.

Based on the analysis of the interviews with experts, the following fifteen management factors listed in Table 1 are considered to have significant impacts on aviation safety. They are safety culture, adequate training, effective safety monitoring system of errors and deviations, flight safety program management, crew coordination, capability (knowledge about safety) and turnover of key management personnel, communication between management and employees, staff workload management, outsourcing of ground services (business changes, specially during busy peak periods), decision-making under workload pressure, management relations with unions, funding for flight safety program, airline's financial condition, merger & organizational changes, and organization's budget constraints. Note that there was no

noticeable significant cultural variations in the perception of the interviewees on key management factors for aviation safety were identified.

Table 1: Fifteen Key Management Factors for Aviation Safety

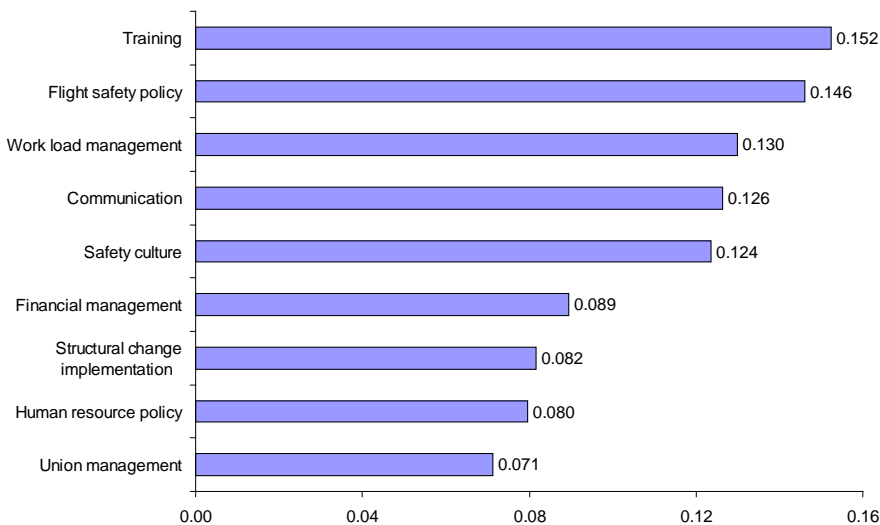
Safety culture	Good corporate culture towards safety can be the key for safety improvement
Adequate training	Regular and effective training can enhance organizations' safety
safety monitoring system	Effective monitoring systems of errors and deviations can reduce their occurrences
flight safety program management	Effective flight safety program can enhance safety
crew coordination	Effective crew management can enhance safety
capability (knowledge about safety) and turnover of key management personnel	The level of knowledge and high turnover of key safety management personnel can affect on the quality of organization's safety systems
communication from management to employees	Transparency and good flow of information across organizations is important to improve organization's safety performance
staff workload management	Heavy workload can reduce productivity level that is likely to increase errors
outsourcing of ground services	Major business changes (such as outsourcing), specially during busy periods might affect on organization's safety performance
Decision-making under pressure	Workload pressure can affect on the quality of decisions
management relations with unions	Union strikes or threats might affect on organization's safety performance
flight safety program funding	Inadequate funding for a flight safety program can reduce the quality of the system
airline's financial condition	Tight financial condition can affect the quality of decisions and practices
merger & organizational change	Organizational changes can lead to corporate cultural clash
budget constraints	Budget constraints can affect the quality of decisions and practices

AHP Results

The fifteen management factors, which being identified as significant for aviation safety improvement, are reduced to nine factors by combining some similar factors. The reduced factors are namely training, flight safety policy (including program & system), work load management, communication, safety culture, financial management (safety program funding, budget constraints & general financial condition), structural change (outsourcing, merger & organizational) implementation, union management, and human resource policy (crew, management personnel, including their decision-making).

The results show that the most significant safety management factor is training (0.152) as depicted in Figure 2. The second significant factor is flight safety policy (0.146) followed by workload management (0.13), communication (0.126), safety culture (0.124), financial management (0.089), structural change management (0.082), human resource management (0.08), and union management (0.071).

The result was somehow surprising as the previous similar research found that safety culture is the most significant parameter (Morimoto 2007; Braithwaite 2001), whereas this research showed medium importance. There may be several reasons to explain this difference. First, many engineers responded valued safety culture not the most significant. There was also the tendency that European respondents stated safety culture more important than other elements.

Figure 2: Relative weighting of key management factors

CONCLUSION

This paper has identified key management factors that should be prioritized during decision making process as well as allocating financial and human resources. Analytical hierarchy process is employed in order to obtain relative weights of each management factors. The results show that the most significant safety management factor is training (0.152), followed by flight safety policy (0.146), workload management (0.13), communication (0.126), safety culture (0.124), financial management (0.089), structural change management (0.082), human resource management (0.08), and union management (0.071). These weights attached to each key management factors will be useful for effective safety management and planning, safety audit, as well as safety training.

The difficulty of obtaining the questionnaire results globally is worth noting. The reason behind is assumed to be due to the sensitivity of the topic, as airlines are cognizant of potential exposure to legal liability or regulatory intervention.

REFERENCES

- Boeing (2006) Statistical Summary of commercial jet plane accidents, <http://www.boeing.com/news/techissues/pdf/statsum.pdf#search=%22Biman%20Bangladesh%20Airlines%20DC-10%20crash%22>
- Bowen, BD & Lu, C-T (2004) 'Proposing a comprehensive policymaking mechanism: the introduction of policy research construct' *International Journal of Applied Aviation Studies*, 4 (1) 31-44
- Braithwaite, G, R (2001) *Attitude or latitude?*, Ashgate publishers
- Dilman, D.A (1978) *Mail and telephone surveys: the total design method* (Santa Barbara, CA, Wiley Interscience)
- Flight International (2006), *Airline Safety Review 2006*, <http://www.flightglobal.com/SectionHome/SectionDefault.aspx?NavigationID=195&CategoryID=10253&SlotID=6>

- Greenfield, Michael A (1998) *Normal Accident Theory: The changing face of NASA and Aerospace*. A training presentation. 17 Nov. 1998
- Harris, W.C., Sachau, D., Harris, S.C., and Allen, R. "Relationship Between Working Conditions and Commercial Pilot Fatigue Development." *Proceedings of the Human Factors and Ergonomics Society* (2001): 185-8.
- Helmreich R.L (1998), 'Error management as organizational strategy' In proceeding of *the IATA Human Factors Seminar*, Bangkok, April 20-22, pp.1-7
- Helmerich R.L & Meritt, A.C (1998) *Culture at work* Aldershot, UK, Ashgate
- Learmount, David, (2005), "Safety First." *Flight International*. 25 Jan. 2005. 4 Jan. 2006.
<<http://www.flightglobal.com/>>
- Lima, M, G, Pires, C, C, Piratelli, C, L, Belderrain, M, C, N, Correia, A, R (2007) 'Using analytical hierarchy process for analysis & choice of Brazilian cargo airlines, *Airlines*, 39
- Linstone, H, A & Turoff, M, (2002), (ed.), *The Delphi Method: techniques and applications*, <http://www.is.njit.edu/pubs/delphibook/>
- Little, L.F., I. C. Gaffney, K. H. Rosen, and M. M. Bender, (1990), "Corporate Instability is Related to Airline Pilots' Stress Symptoms." *Aviation, Space, and Environmental Medicine* 61: 977-82.
- Lu, C-T, wetmore, H, & Przetak, R (2006) 'Another approach to enhance airline safety: using management safety tools', *Journal of Air Transportation*, 11 (1), 113-140
- Morimoto, R (2006) 'Corporate responsibility for civil aviation safety' in *Contemporary issues in business ethics*, Mary W. Vilcox and Thomas O. Mohan (ed.). Nova Publishers
- Mutzabaugh, Ben, (2005) "Today in the Sky: Is Maintenance Outsourcing an Airline Safety Risk?" *USA Today*. 7 March
- Nataraj, S, 2005, 'AHP as a decision-support system in the petroleum pipeline industry', *Issues in Information Systems*, 6 (2)
- Reason J T, 2001, *Managing the risks of organizational accidents*, Ashgate Publishing, Hampshire
- Salas, E, Burke, C S, Bowers, C A, Wilson, K A, (2001), 'Team training in the skies - Does crew resource management (CRM) training work?', *Human Factors*, 43 (4), pp. 641-674
- von Thaden, T. L., D. A. Wiegman, A. A. Mitchell, G. Sharma, and H. Zhang, (2003), *Safety Culture in a Regional Airline: Results from a Commercial Aviation Safety Survey*. University of Illinois at Urbana-Champaign
- Yoo, K, E & Choi, Y C (2006) 'Analytic Hierarchy Process approach for identifying relative importance of factors to improve passenger security checks at airports' *Journal of Air Transport Management*, 12, 135-142
- IATA, www.iata.org/ps/services/iosa
- Civil Aviation, www.tc.gc.ca/CivilAviation/maintenance/Tp14326/Evaluation.htm

AND HIRING OF VIRTUAL EMPLOYEES IN THE ONLINE LEARNING ENVIRONMENT

Bob Barrett, American Public University

ABSTRACT

This paper will provide an overview of current recruitment and hiring methods used in the traditional hiring versus online hiring of educators. When organizations are seeking qualified personnel to teach for their educational institutions, they may also need to gather and assess more information in order to best determine which candidate best “fits” the needs of the organization and position. As a result, there is a growing need for interviewers to capture more substantial data in order to help assist others in the hiring process. Further, they may need to employ different methods for recruiting and hiring.

Due to the technological advancements in the online environment, online instructors must have a different type of skills sets in order to compete in today’s online learning environment. As a result, interviewers and HR personnel must create and implement different practices and procedures in order to determine the best possible candidate for an online teaching position. Thus, this paper helps to provide an open forum for the reader and others to determine if there is a need for change.

IMPACT OF GLOBALIZATION ON THE HUMAN RESOURCE MANAGEMENT IN ORGANIZATIONS

Petra Skalova, University of West Bohemia

ABSTRACT

The employees stand for the main company resources that determine a company's success. This is a reason why human resource management represents general priority for economical growth of companies. The presumption of the growth of economy is mainly quality human resource management and co-ordination of human efforts in business process. Overall economical results of their working activity are given mainly by style of their management, by their corporate environment as well as by corporate culture. All these factors are affected by culture and by habits of particular countries where the companies are located. This paper focuses on impact of globalisation on the human resource management in organisations. Beyond actual trends in this field here are described the problems that the companies must solve because of current world economic crisis.

KEY WORDS: Economic crisis, human resources, knowledge management, motivation, personnel costs

INTRODUCTION

Employees become the main driving power determining corporate performance. Human resource management is responsible for increases in work efficiency and for growth in companies' competitive advantage. It is necessary to ensure employees' development and their knowledge advancement to provide a company with high-quality employees. This is important not only for managerial positions but also for other employees.

„Human resources represent the single most important cost in many organizations. How effectively a company uses its human resources can have a dramatic effect on its ability to compete (or survive) in an increasingly competitive environment.“ (Gómez-Mejía, 2001),

Quality employees bring success for their companies and they are important part of their competition ability. This is the reason why each company should try to sustain its skill and quality employees for long time. The important aim of companies should be to have right employees with right knowledge on the right places in the right time. This is why is necessary successfully manage people and cope with all methods of human resources management. From this reason it is appropriate to motivate employees and to increase their knowledge for example by implementation of knowledge management.

Managers should create also appropriate work environment for their employees in order not to increase their fluctuation. High fluctuation yields higher personnel costs, which are connected mainly with recruitment, training and adaptation of new employees in work environment. These arguments explain why companies cannot disengage their personnel costs from all motivation factors not even in current period of economic crisis.

Currently there is a period of economic crises and most of companies reduce their costs. This concerns not only about production costs but it also influences human resource area. This situation has of course strong negative impact on motivation and development of employees. Companies reduce mainly social benefits. Educational costs are also being kept down. Economies of particular states are hit by increasing unemployment rate caused by mass lay off employees. This situation is not good both for

single companies and state economy as whole. Newerthelles, it is necessary to deal with this fact and find a way how to run human resources efficiently under this condition.

UNEMPLOYMENT CONSEQUENCES

Each company chooses the employees who are able to achieve both their own and company's success as well. Success achievement is predicted mainly by their characters (self-discipline, ability of learning and cooperation) and also by their knowledge and skills. Quality Employees are the base for quality work performance. That is why each company should be aware of their employees' contribution for its development and competitive ability.

This fact is important everytime not only today, when all companies are affected by conomic crisis. Economic crisis in business environment shows itself mainly by growth of unemployment, that has negative effect on economic situation of each country.

Economy of any country is not able to create as great output as it is possible. The losses are perceptible namely in cyclic unemployment.

This fact bears to Okun's Law, that explains the empirical relationship between cyclical movements in GDP and unemployment. "The law states that when actual GDP declines 2 percent relative to potential GDP, the unemployment rate increases by about 1 percentage point." (Samuelson, 2005)

Unemployment is a basic economic problem, that has large economic and social impacts. Unemployment is a market situation when the sources are not used sufficiently and incomes of employees are low. This situation interacts their economic as well as social positions. It is documented that unemployment negatively influences human psyche and it is a reason of higher incidence of cardiac diseases, alcoholism and suicides.

The economic aspects connected with unemployment were defined by Hannah Herlemann (2008, p. 185) as „everything connected to the economic growth and attachment of human resources to financial relations. This can be reflected as costs (personnel costs), investment (in staff) and the reaction upon development on the market that need an economic reponse. Personnel costs are all costs that are beeing generated through the factor of labour, directly and indirectly.

The most important and biggest factor within the personnel costs is the salary, followed by other social costs, pensions, funds. The second kind of costs shall be the investment. Here stated as the investment in the employees. This can be done in a material way, such as special facilities for the staff." The third mentioned costs help companies to keep their competitive ability (higher selary, better equipment etc.).

The personnel costs can be devided also in personnel basis (earnings, the direct work payment, salary) and add-on costs (indirect salary, social payments, fringe costs) too. (Herlemann, H., 2008, p. 185)

Here are different disposals of particular countries for reducing of economic crisis impacts whose consequence will be lowering of unemployment. They consist in state employment policy as well as in perspective legislation and overall social activities of particular countries. When the unemployment is going up the companies reduce their personnel costs whereas the overall amount of add-on personnel costs are raising.

Although the process of the economic crisis in the Czech Republic is not as dramatical as in the USA we can meet its impacts almost everywhere. Its consequences are extended and the solution of this matter will not be easy.

ECONOMIC CRISIS AND COMPANIES' PERSONNEL ACTIVITIES

Among consequences of contemporary economic crisis we can involve insufficiency of financial assets, demand reducing and sales' decrement of particular companies. Entire lack of order makes its felt in production limitation and in necessity of solution of staff utilization. The impacts of economical crisis are apparent mainly in human resources management.

If managers want to keep the economic run of their companies they should use the efficient managerial methods in current difficult economic conditions as well as use eligible workforce. All managers are important elements in managing process. Mainly personnel managers play significant role. That is because they make decisions about using of employees, who deal with all personnel matters because they are responsible which employees and which costs will take share in their companies' output and how they will have influence on overall efficiency of these companies.

The main responsibilities of human resources management are:

- Personnel requirements planning,
- Personnel recruitment,
- Personnel selection,
- Personnel orientation and training,
- Personnel deployment and sustainment,
- Personnel appraisal,
- Personnel development,
- Personnel layoff.

Contemporary economic crisis has powerful impact on human resource management of companies. These impacts are not only in increase of unemployment but also in other factors that relate to sustain of staff, their valuation, education, remuneration and motivation.

Each company should realize which employees are needed for its activities. That is why suitable and well-timed employee planning is necessary. It is important to determine qualification of required employees as well as their knowledge, skills and capability. Well done employee planning and employee sustainment by using wellchosen motivation methods can save lot of financial assets that connected with personnel costs.

This fact is agreed by Gómez-Mejía (2001), who states that: „Human resources planning is the process an organization uses to ensure that it has the right kinds of people to deliver a particular level of output or services in the future.“

He also mentions costs that can accrue from unsuitable planning of employees and from their laying off. „A failure to plan can lead to significant financial costs. For instance, firms that lay off large numbers of employees are required to pay higher taxes to the unemployment insurance system, whereas firms that ask their employees to work overtime are required to pay them a wage premium.“ (Gómez-Mejía, 2001)

Even if the current high unemployment facilitates easier possibilities of staff aquisition, it is necessary to sustain current quality employees and not to decline their job performance because of inappropriately choosed economy measure. Cost reducing is important because of economic reasons especially in these days. But they can be reduced only deliberately, that means only there where the future run of company will not be jeopardized.

In the personnel field we can meet with following costs (Gómez-Mejía, 2001):

Recruitment costs:

- Advertising
- Campus visits
- Recruiter time
- Search firm fees

Selection costs:

- Interviewing
- Testing
- Reference checks
- Relocation

Training costs:

- Orientation
- Direct training costs
- Trainer's time
- Lost productivity during training

Separation costs

- Benefits
- Separation pay
- Unemployment insurance cost
- Exit interview
- Outplacement
- Vacant position

Companies invest lot of financial assets in personnel costs. The main task of personnel managers should be convenient managing of these costs. That is why managers must create transparent plans of personnel costs and detailed strategy of future using of their workforce. Effectivity of using workforce pays off and it helps to all companies to face up to unfavourable economic conditions.

In agreement with enunciations of personnel officers the following list of activities is very often used in the field of human resource management in companies these days:

- masse lay off,
- redundancy lay off,
- stop hiring personnel agencies' external workers,
- employment relationship is terminated within the probationary period,
- fixed-term employment relationship is terminated on the expiry of the agreed period without being prolonged,
- flextime is used,
- working hours are shorted (only 4day working week is used because of shortage of works contracts),
- the employees with lower wage demand are employed,
- the firm effectivity is increased by using outsourcing,
- personnel costs are declined (for example in field of benefites),
- costs for education and training of employees are minimalized.

It is necessary to take an objective approach to employees' performance and reduce personnel costs according to their performance and their approach to working aims. Mass reduction of personnel costs could result company's workforce decrease. Well trained workforce would have no problem with finding a new job inspite of high unemployment time. There could be a remarkable leak of intellectual capital, whose replacement would demand lots of add-on personnel costs.

„Intellectual capital is just as important for traditonal businesses as for next economy Wunderkinder creating patents and intellectual property. It is the future of all business-literally. It is the only meaningful way to gauge the potential energy of a company. No innovation will ever take place without investments in intangibles.“ (Lei Edvinsson, 1997)

CONCLUSION

The economic crisis is not a problem of only one country. Its impacts are perceptible all over the world. Better utilization of employees and reducing of unemployment could be done in future mainly by following list of activities:

- growing employees' skills and qualification,
- increasing flexibility of both, employees and employers; especially by using a part-time job, a flexible or an irregular working hours and jobs from home,
- taking advantages from EU labor market offers,
- using national programs for increasing employment and possibilities of the European Social Fund.

However, today in time of an economic crisis, companies try to cut their costs significantly and run their business more effectively, they should not do this hazardly. Managers should deeply consider reducing of costs. In many companies we can find a cut-down of human resources costs. Incentives and educational costs are reduced very often. However reducing number of employees is not exceptional.

Because the possibility of lay off is regulated by national law, it happens, that in some companies employees are dismissed according to minimal legislative and administrative difficulties more often than according to their working abilities. Managers should not forget that staff is the main driving force of a company and that is why the workers should be layed off very carefully.

Consequences of economic crisis are evident especially in raising of unemployment that negatively affects production of state economy. Influence of economic crisis on human resources management in particular companies has extremely impact on social and economic state of population. That is why companies should solve these problems with sufficient discretion and they should value presumable impacts of their decision not only on progress of their companies but also on economic progress of their state economy and future use of current workforce.

REFERENCES

Edvinsson, L. – Malone, M.S. *Intellectual Capital*. New York: Harper Business, 1997.

Herlemann, H. *Human Resource Management: the Connection Between Economic and Social Aspects*. In: Concepts of Management: New Trends & Challenges in Management. Vizja Press&IT. Warsaw. 2008, p. 185 – 193.

Gómez-Mejía, L. – Balkin, D., B. – Cardy, R., L. *Managing Human Resources*. Prentice Hall. New Jersey. 2001. ISBN 0-13-011333-6

Samuelson, P. A. – Nordhaus, W. D. *Economics*. 18th ed. New York. McGraw-Hill: 2005. ISBN 0-07-287205-5

BIOGRAPHY

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THE ROLE OF FINANCIAL STATEMENTS ANALYSIS IN IMPROVING COMPANY'S PERFORMANCE, DETERMINING SOLVENCY AND FORECASTING BANKRUPTCY

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ABSTRACT

Within the globalization, as a world-wide process, companies become multinational and operate on international level. The activities resulting from globalization comply with the thesis that the future is in the big companies. Thus, the big companies are created through mergers or acquisitions of the smaller ones (big fish eat little fish). However, the occurrence of the world economic crisis confirms the thesis by Carl Marx that greed will destroy the capitalism. The financial analysis plays vital role in determining the solvency of companies entering into business. This is of significant importance for both the supply and demand, as the company's solvency represents image for the results achieved and the conditions that certain business is facing. It is a reflection of its rating, financial position, reputation within the business environment and a benchmark to be considered and followed by those entities which are behind or on a lower level in terms of their performance within a given hierarchy. The financial crises originating in USA has for a consequence bankruptcy of various financial and non-financial institutions, spreading rapidly over the other continents. Thus, the role of the financial analysis is vital for predicting bankruptcy. It is considered to be a new analytical approach which will be used as a signal or on-time-warning for undertaking certain measurements by companies' management to avoid the risk of bankruptcy and major economic failure. The objective of this paper is to reflect the role which the financial analysis plays in company's operations and the knowledge it provides for determining the solvency and forecasting bankruptcy. This is in function of achieving better results in future by eliminating the negative and retaining and/or strengthening the positive aspects of businesses' current performance.

BIOGRAFIA

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PROJECT FINANCE – THE ROLE OF INTERNATIONAL FINANCIAL INSTITUTIONS

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ABSTRACT

The International Project Finance Association (IPFA) defines Project Finance as the following: 'The financing of long-term infrastructure, industrial projects and public services based upon a non-recourse or limited recourse financial structure where project debt and equity used to finance the project are paid back from the cashflow generated by the project'. 'Project finance' is not the same as 'financing projects', because projects may be financed in many different ways. Traditionally, large scale public sectors projects in developed countries were financed by public-sector debt; private-sector projects were financed by large companies raising corporate loans. In developing countries, projects were financed by the government borrowing from the international banking market, multilateral financial institutions such as the World Bank, European bank for Reconstruction and Development (EBRD), European Investment Bank (EIB) and other regional banks. The purpose of this paper is to explain and analyze international sources of project finance and the role of International Financial Institutions in project finance. Originally, IFIs were devoted to financing attempts to restore peace in the wake of conflicts and to international financial transactions, but their activity has since evolved and they now focus primarily on providing multilateral funding for development projects and resolving problems created by international indebtedness.

INTRODUCTION

The growth of project finance over the last 20 years has been driven mainly by the worldwide process of deregulation of utilities and privatization of public-sector capital investment. This has taken place both in the developed world as well as developing countries. It has also been promoted by the internationalization of investment in major projects: leading project developers now run worldwide portfolios and are able to apply the lessons learned from one country to projects in another, as are their banks and financial advisers. Governments and the public sector generally also benefit from these exchanges of experience. Private finance for public infrastructure projects is not a new concept: the English road system was renewed in the 18th and early 19th centuries using private-sector funding based on toll revenues; the railway, water, gas, electricity, and telephone industries were developed around the world in the 19th century mainly with private-sector investment. During the first half of the 20th century, however, the state took over such activities in many countries, and only over the last 20 years has this process been reversing. Project finance, as an appropriate method of long-term financing for capital-intensive industries where the investment financed has a relatively predictable cash flow, has played an important part in providing the funding required for this change,

FEATURES OF PROJECT FINANCE

Although the term 'project financing' has been used to describe all types and kinds of financing of projects, both with and without recourse, the term has evolved in recent years to have a more precise definition. For instance, Peter K. Nevitt and Frank Fabozzi (2009) define Project Finance as follows:

A financing of a particular economic unit in which a lender is satisfied to look initially to the cash flows and earnings of that economic unit as the source of funds from which a loan will be repaid and to the assets of the economic unit as collateral for the loan. A key word in the definition is initially. While a lender may be willing to look initially to the cash flows of a project as the source of funds for repayment of the loan, the lender must also feel comfortable that the loan will in fact be paid on a worst case basis.

This may involve undertakings or direct or indirect guarantees by third parties who are motivated in some way to provide such guarantees.

Project finance structures differ between these various industry sectors and from deal to deal: there is no such thing as "standard" project finance, since each deal has its own unique characteristics. But there are common principles underlying the project finance approach.

According to E.R. Yescombe (2002) some typical characteristics of project finance are:

- It is provided for a "ring-fenced" project (i.e., one which is legally and economically self-contained) through a special purpose legal entity (usually a company) whose only business is the project (the "Project Company").
- It is usually raised for a new project rather than an established business (although project finance loans may be refinanced).
- There is a high ratio of debt to equity ("leverage" or "gearing")—roughly speaking, project finance debt may cover 70-90% of the cost of a project.
- There are no guarantees from the investors in the Project Company ("nonrecourse" finance), or only limited guarantees ("limited-recourse" finance), for the project finance debt.
- Lenders rely on the future cash flow projected to be generated by the project for interest and debt repayment (debt service), rather than the value of its assets or analysis of historical financial results.
- The main security for lenders is the project company's contracts, licenses, or ownership of rights to natural resources; the project company's physical assets are likely to be worth much less than the debt if they are sold off after a default on the financing.
- The project has a finite life, based on such factors as the length of the contracts or licenses or the reserves of natural resources, and therefore the project finance debt must be fully repaid by the end of this life.

A Project Finance transaction involves the mobilization of debt, equity, contingent equity, hedges and a variety of limited guarantees through a newly organized company, partnership or contractual joint venture (a project vehicle). These commitments and instruments are mobilized through the project vehicle for the purpose of building a large, capital-intensive facility and operating a discrete business activity. In such a transaction, lenders look to the assets of the project vehicle as collateral and its projected cash flow for full recovery of their loans.

MAJOR PARTICIPANTS

A greenfield development involves a large number of project participants (see Figure 1). The discussion below segregates these participants into two categories: (a) participants found in all Project Finance deals; and (b) participants found in some, but not all, deals.

Participants Found in All Project Finance Deals

Sponsor(s) - A project sponsor(s) may consist of an individual but more often is organized as a company. It usually has some previous experience in the implementation and operation of the project that is being undertaken.

Project Vehicle - Sponsor(s) generally organize a special-purpose (incorporated or unincorporated) vehicle that is registered in the host country for the purpose of implementing and operating a given project. Where a corporate joint venture or limited partnership is used, the rights and obligations in terms

of funding, administration, profit sharing, transfer of interests, termination and other issues are defined in a shareholders, or joint venture, agreement.

Sponsor(s) are required to make capital investments in the project vehicle according to the terms of this agreement. In almost all cases, there is usually a designated lead sponsor. In the case of a corporate joint venture, the lead sponsor is the leader of the consortium and in the case of a partnership, it is the dominant partner under the venture arrangements.

Construction Contractors -The construction contractor is the entity that builds the project under an engineering procurement and construction (EPC) contract, the terms of which guarantee the fixed-price, required specifications and schedule of construction and commissioning associated with the facility. The EPC contractor backs up its guarantees through contractual liquidated damage (LD) provisions in addition to performance bonds, retention bonds and other instruments contractually imposed on the contractor and which can be called upon to remedy any breach thereof.

Lenders - There are many types of lenders. Those of particular interest in this article include: Multilateral and bilateral agencies. Multilateral organizations encompass organizations such as the World Bank, International Finance Corporation (IFC) and Multilateral Investment Guarantee Agency (MIGA). The term also includes regional development banks such as the Asian Development Bank (ADB) or the Inter-American Development Bank (IADB). Multilateral institutions are often present, through their loan and guarantee products, in Project Finance transactions located in developing countries - where a great deal of this type of finance takes place.

Private placement and bond market - Investors in capital market instruments generally shy away from projects that are not able to achieve an investment grade rating of BBB or better although this is not always the case. Established bond markets are in US, UK, Germany and Japan. Other bond markets in Europe and Asia are only now emerging.

Insurance Providers - The project sponsor(s) will procure all insurance coverage required by applicable law. In addition, the terms of the service agreement and the requirements of lenders often result in the need to obtain a broader portfolio of insurance policies and coverage. In some cases, sponsor(s) may seek additional insurance coverage, such as political-risk insurance, to protect their investment.

Other Parties - Depending on the project, there may be other parties involved, e.g. third-party equity sources (straight equity provided by parties which are unaffiliated with the sponsor(s)), or mezzanine investors or lenders (whose participation may take the form of convertible debt). Mezzanine investors tend to be passive, totally uninvolved with operations of the facility. There are also potential local partners who, unlike investors, do expect to participate active in the operations of the project. Finally, there are the project managers who are designated by the active sponsor(s) to run the facility as well as other parties who assist during the development or operation period, e.g. financial advisors, engineering consultants, environmental advisors and lawyers.

Participants Found in Many but Not All Project Finance Deals

Off-taker - The off-taker is the name given to the entity that is the single purchaser of all of the project output subject to a formal contract. In some deals, there may be more than one off-taker, but this is relatively uncommon. Other projects may not have any off-takers, or off-take agreements, e.g. a toll road, container port or mass transport system. When an off-take agreement exists, it generally defines the minimum amount of revenue that will be generated by the project vehicle based on a minimum level of product or service that is to be sold at prices (including annual escalation) that are well defined.

Third-Party Operator - The third-party operator is responsible for the operations and maintenance of the project. The operator customarily receives a fee, subject to upward or downward adjustments based on performance results of the project. When a third-party operator is not used in a project, one of the sponsors may undertake this role. However, if the operator is a shareholder of the project vehicle at the time of contract negotiation or later, a conflict of interest arises in the negotiation and implementation of the O&M agreement between the project vehicle and the operator.

'Project finance' is not the same as 'financing projects', because projects may be financed in many different ways. Traditionally, large scale public sectors projects in developed countries were financed by public-sector debt; private-sector projects were financed by large companies raising corporate loans. In developing countries, projects were financed by the government borrowing from the international banking market, multilateral financial institutions such as the World Bank, European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), Inter-American Development Bank (IDB), Asian Development Bank (ADB), African Development Bank (AfDB) or through export credits.

INTERNATIONAL FINANCING INSTITUTIONS (IFIS)

International Financing Institutions (IFIs) are also known as Multilateral Lending Agencies (MLAs) or Multilateral Development Banks (MDBs). All are owned by governments - the World Bank by governments around the world, and the other IFIs by governments in their respective regions as well as from other developed countries. IFIs can play an important part not just as direct lenders to projects, but also in mobilizing private sector funding for projects in developing countries. Private-sector lenders are more comfortable about lending to developing countries under the sponsorship of or in parallel with an IFI because of the IFI's general involvement in the economy of the Host Country, the importance of its general lending programs to the economy, and its ability to access the host government at the highest level should the project run into political difficulties (although the degree of their influence in these respects differs widely between different countries). This gives the Project Company the protection of an IFI "umbrella," which can also of course benefit investors.

An important factor in encouraging private-sector lenders to participate in IFI-arranged financings is the "preferred creditor" status that arises from the practice of providing a preference to IFIs when resources for repaying external creditors are limited, and not involving IFI loans in country debt reschedulings. This status was established to reduce the risk to IFIs (and their shareholders) due to their special role within the international financial community. It is important to note that this preferred creditor status exists by custom and not by law, but it has been honored in practice where countries have run into debt problems.

The IFIs have also developed a variety of guarantee instruments for political risk that have further encouraged private-sector lenders' involvement in developing countries' projects in recent years.

IFIs pay more attention than private sector-lenders to examining whether the project to be financed is appropriate in the wider economic context of the Host Country. This can be a double-edged sword, however, as some Host Governments resent attempts by IFIs to use lending to a particular project as a means of promoting a wider politico-economic agenda. Similarly, if a project gets into trouble, an IFI may have a more long term agenda in dealing with the problem that may not be relevant for a lender or investor who is simply trying to get the loan repaid or recover the equity.

The IFIs discussed in this part of the article consist of the following institutions (Multilateral Development Banks):

- The World Bank
- International Finance Corporation
- Multilateral Investment Guarantee Agency
- European Bank for Reconstruction and Development (EBRD)

- European Investment Bank
- Inter-American Development Bank (IDB)
- Asian Development Bank (ADB)
- African Development Bank (AfDB)

THE WORLD BANK

The International Bank for Reconstruction and Development (IBRD), normally known as the World Bank, was founded in 1944, and is an international organization owned by most world governments. Its affiliates IFC, IDA, and MIGA have been added to the World Bank Group since its original foundation. According to Philippe Benoit (1996) it's lending mandate is to provide credits to governments (originally for reconstruction in Europe after the Second World War, and, from the 1960s, for developing countries), and therefore its immediate relevance to project finance, which is always a private-sector activity, might appear limited; however, the increased importance of private-sector funding for infrastructure in developing countries has inevitably led to some change of emphasis in the World Bank's approach.

Direct Loans. The World Bank first encouraged private-sector bank involvement in its activities through cofinancing operations, also known as B-Loans. Under this structure the private-sector bank lends in parallel with the World Bank (which is providing the A loan in this context), and benefits from the preferred creditor status of World Bank loans. The way in which the World Bank itself can provide loans to private-sector projects is by using the Host Government as an intermediary. This can be done by the World Bank's providing funding to the host government, and the latter lending it directly to the Project Company, or, more commonly, via a local development bank or agency.

Partial Risk Guarantee. The Partial Risk Guarantee covers the standard investment risks of foreign currency convertibility and transfer and expropriation, but not political violence or war risk. Creeping expropriation is also not covered. The Guarantee also provides direct coverage for changes in law and for breach of contract: therefore, political risk not covered directly can be covered indirectly by imposing a contractual obligation in a Government Support Agreement.

Partial Credit Guarantee. The World Bank can provide a guarantee for part of the loan provided by private-sector lenders; the main use of this has been to cover the later repayments of a loan if the lenders are not willing to lend for the required term.

Enclave Guarantee. The World Bank also provides Enclave Guarantees in IDA countries. The scope of the guarantee is therefore limited to expropriation, changes in law, war and civil strife, and also excludes currency convertibility and transfer risks, since these should not arise as revenues are earned offshore.

INTERNATIONAL FINANCE CORPORATION (IFC)

The International Finance Corporation (IFC) is a member of the World Bank Group. IFC is the largest multilateral source of loan and equity financing for private sector projects in developing countries, and is therefore the only member of the World Bank group that does not need direct host government involvement in projects as a basis for its financing. IFC's particular focus is to promote economic development by encouraging the growth of productive enterprise and efficient capital markets in its member countries.

Eligibility. To be eligible for IFC financing, the project must usually be located in a developing member country. Exceptions are made for projects in information technology or other sectors where the project can be located in an industrialized member country as long as the benefits of the project primarily accrue to developing country members.

Projects must be private sector dominated, technically sound, and have good prospects of being profitable. Projects must benefit the local economy and follow the environmental and social standards of the IFC and the host country.

Types of Projects Funded. The IFC finances projects in all types of industries and sectors, including manufacturing, infrastructure, tourism, health and education, and financial services.

Environmental Opportunities Facility. This special facility provides catalytic funding for projects that produce goods or services that reduce pollution or improve the use of scarce resources such as water or energy.

Financial Instruments

IFC limits the total amount of own-account debt and equity financing it will provide for any single project. For new projects the maximum is 25% of the total estimated project costs, or, on an exceptional basis, up to 35% in small projects. For expansion projects IFC may provide up to 50% of the project cost, provided its investments do not exceed 25% of the total capitalization of the project company.

Loans. Own Account loans (or A-Loans) are generally in the range of \$USD 1 million - \$USD 100 million subject to the limitations above. IFC lends at market rates and is willing to extend loans where repayment is from the project's generated cash flow.

Equity. IFC will take long-term (8-15 years) equity positions of 5%-15% in private companies or investment funds in developing member countries.

IFC also offers a full range of quasi-equity products (debt & equity), syndicated loans from commercial banks, currency, interest rate, and other risk management products, and partial credit guarantees.

How to Apply for Financing

There is no standard application form for IFC financing. A company or entrepreneur, foreign or domestic, seeking to establish a new venture or expand an existing enterprise can approach IFC directly. The Corporation is organized by industry sector group and by region. IFC also has a network of field offices abroad. Investors hoping to secure IFC financing will have to submit a variety of information including: project description, financial information, business structure, market prospects, technical and environmental feasibility, investment and financing requirements, projected timetable, and evidence that the project fits into the host country's economic development strategy.

MULTILATERAL INVESTMENT GUARANTEE AGENCY (MIGA)

The Multilateral Investment Guarantee Agency (MIGA) was created in 1988 as a member of the World Bank Group to promote foreign direct investment into emerging economies to improve people's lives and reduce poverty. MIGA fulfills this mandate and contributes to development by offering political risk insurance (guarantees) to investors and lenders, and by helping developing countries attract and retain private investment.

Eligibility. To be eligible for MIGA's investment guarantees, the investor and host country must both be members of the agency, and the projects must be located in a developing member country. Corporations are eligible if they are incorporated in a member country or owned by nationals of a member country. Investments must be new, such as startups, expansions, or modernizations and have a three year minimum duration. Investments must support local development goals, be financially viable, and adhere to MIGA's environment, labor and corruption, guidelines.

Types of Projects Funded. Most sectors are eligible for MIGA guarantees, including financial services, infrastructure, oil and gas, mining, telecommunications, services, agribusiness, and manufacturing. MIGA will not insure investments in gambling, tobacco production and processing, highly speculative investments, defense, illegal drugs, or the production of spirits.

Financial Instruments

Investors can choose any combination of the four types of coverage: Transfer Restriction, Expropriation, Breach of Contract, and War and Civil Disturbance. Equity investments can be covered up to 90 percent, and debt up to 95 percent, with coverage typically available for up to 15 years. MIGA can cover up to \$USD 200 million per project, which may be supplemented through MIGA's coinsurance and reinsurance programs. Pricing is based on the type of project and any potential risks, and varies according to country and sector. MIGA can insure investments in projects with or without the involvement of another member of the World Bank Group.

Coinsurance Program. The Cooperative Underwriting Program (CUP) is a coinsurance program designed to encourage private insurers to cover political risk insurance for projects alongside MIGA. Under the CUP, MIGA is the insurer-of-record and issues a contract of guarantee for the amount of insurance requested by an investor, but retains only a portion of the amount for its own account.

Reinsurance Program. Reinsurance is obtained from both private and public insurers. MIGA can also provide reinsurance; however, the primary insurer's contract must contain certain provisions required by MIGA, such as those concerning MIGA's environmental and labor standards.

How to Apply for Coverage

Investors need to submit a preliminary application for MIGA coverage before any investment commitments are made. Once the financing plans are established, a more definitive application will be required. Investors hoping to obtain MIGA coverage will have to submit a variety of information including: project description, financial information, business structure, market prospects, technical and environmental feasibility, investment and financing requirements, projected timetable, and evidence that the project fits into the host country's economic development strategy.

EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT (EBRD)

The European Bank for Reconstruction and Development was established in 1991 when communism was crumbling in Central and Eastern Europe and ex-Soviet countries needed support to nurture a new private sector in a democratic environment. The EBRD uses the tools of investment to help build market economies and democracies in 27 countries from Central Europe to Central Asia.

Eligibility. To be eligible for funding, projects must be located in an EBRD country of operation. The project must have good prospects for profitability and include a significant contribution in cash or in kind by the project sponsor. Projects must benefit the local economy and comply with the environmental standards of the EBRD and the host country.

Types of Projects Funded. The EBRD funds projects in most sectors depending on the needs of private investors. Projects that are in line with the EBRD's strategy for a given country are likely to receive preference. The EBRD will not fund defence-related activities, the tobacco industry, substances banned by international law, or stand-alone gambling facilities.

Financial Instruments

The European's Bank's private-sector activities resemble those of IFC. The EBRD can finance private sector projects for amounts ranging between €5 million - €250 million. The average amount of involvement is €25 million. The EBRD funds up to 35% of the total project cost for a greenfield project or 35% of the long-term capitalization of an established company Loans. The EBRD lending terms are designed based on project needs. Maturities can range up to 15 years and can include a grace period. EBRD can lend on both corporate and project finance terms. Interest rates are set at market rates.

Equity. EBRD offers a variety of equity products including ordinary and preferred stock, debentures, and income notes. The Bank will invest in the range of €2 million - €100 million in industrial, financial sector, or infrastructure projects. EBRD will hold only a minority position and requires that a clear exit strategy be determined prior to any investment. The EBRD can also offer a variety of guarantees covering specific partial risks or all risks for a given project. This includes debt and equity guarantees, and local currency loan guarantees.

How to Apply for Financing

Investors interested to get financing from the EBRD must contact the bank investment division, and request the application form for project financing. In the project financing the EBRD has been active, among other things, in the telecommunications, electricity, petrochemicals, and infrastructure fields. The application form requests information on the investor, the host country, the amount of financing required and a project description.

EUROPEAN INVESTMENT BANK (EIB)

The European Investment Bank was created in 1958 as an autonomous body within the European Union to finance capital investments furthering European integration by promoting EU economic policies. It is a not-for-profit bank and is owned by the member countries of the EU. The bank provides loans and financing for projects within the EU and in over 150 countries.

Eligibility. The Bank usually finances larger scale projects. Projects must further a European Union economic policy objective, assist the preparation of candidate countries for EU membership, or contribute to the EU's external partnership and development assistance policies. The Bank does not discriminate on the basis of location or the nationality of the borrower.

Types of Projects Funded. About 85% of EIB lending goes to projects located within the European Union. Outside the EU, the main focus of the Bank's lending is in the Accession countries but EIB also finances projects in Africa and South Africa, the Caribbean, and the Pacific Regions, and in Latin America and Asia. EIB focuses on projects in the energy, infrastructure, and industrial sectors.

Financial Instruments

Direct Loans. The EIB will not finance more than 50% of the total project cost. Loans terms can range from up to 12 years in the industrial sector, to 20 years or more for infrastructure projects. Projects should involve a capital investment of EUR 25 million or more.

Structured Finance Facility (SFF). The EIB has established the SFF to offer senior loans and guarantees, mezzanine financing and project related derivatives to high-risk infrastructure projects.

How to Apply for Financing

There is no standard procedure, official application form, or required documentation for a preliminary proposal to the Bank. Initial contact to discuss a proposed project can be in any form, by telephone, fax, e-mail or letter. The Bank will then review the investors own comprehensive feasibility studies, and make a preliminary assessment of the technical, environmental, economic, financial, and legal aspects of the project.

INTER-AMERICAN DEVELOPMENT BANK (IDB)

The Inter-American Development Bank (IDB) Group is a Multilateral Development Bank established in 1959 to help accelerate economic and social development in Latin America and the Caribbean. The IDB private sector program helps meet the growing demand for capital to support private sector infrastructure and capital market initiatives in Latin America and the Caribbean.

Eligibility. To be eligible for IDB support, sponsors should seek to develop a private infrastructure project, or expand an existing enterprise that provides infrastructure services in Latin America or the Caribbean. Projects must be located in an IDB borrowing member country and be majority-controlled by a firm from a member country. The borrower must be a majority private sector company. Projects must clearly benefit the host country with priority given to projects that provide basic services, generate employment, and utilize the human, financial, and material resources of member countries. Projects must demonstrate financial and technical viability and must comply with the environmental and social requirements of the IDB and host country.

Types of Projects Funded. IDB focuses its support on infrastructure projects including energy, water and sanitation, transportation, and communications.

Financial Instruments

Finance. The IDB can provide loans on both a corporate finance and project finance basis. Maturities are generally set for 8-15 years although terms of up to 20 years are available in specific circumstances. The IDB can lend up to 25% of total project cost, to a value of \$USD 75 million. For projects located in a pre-specified range of countries—typically smaller economies with limited market access—the IDB provides support for up to 40 percent of project costs. Interest rates are determined based on market rates.

Political Risk and Credit Guarantees. The IDB offers a variety of political risk products covering up to 50% of project cost or \$USD150 million. Investors can acquire insurance against breach of contract (by government), currency convertibility and transferability guarantees, and other political risks. The IDB can also provide credit guarantees of up to \$USD 75 million or 25% of project cost.

How to Apply for Financing

Clients should contact the IDB Private Sector Department to discuss their proposal in detail. There is no standard application process for IDB private sector financing. Prospective borrowers interested in requesting project funding will be asked to provide a description of the project, ownership structure, financial structure, business plan, feasibility studies, environmental, social, and health aspects, and details on the positive development impact of the project.

ASIAN DEVELOPMENT BANK (ADB)

The Asian Development Bank (ADB) is a Multilateral Development Bank dedicated to reducing poverty in Asia and the Pacific. Established in 1966, the Bank is now owned by 61 member countries, mostly from the region.

Eligibility. To qualify for Bank assistance, projects must be located in a developing member country of the bank and be majority-owned by the private sector. The Bank aims to act as a catalyst and will be less willing to finance projects when commercial finance is readily available. Projects must be financially viable with significant economic and social merit. Projects must have a positive development impact by supplying basic needs, transferring technology, or expanding and improving the private sector in the host country. The Bank also considers the environmental and social impact of the project, its corporate governance structure, and any procurement needs to ensure international best practice.

Types of Projects Funded. The ADB focuses on infrastructure (including social services) and financial services. Infrastructure includes telecommunications, power and energy, water supply and sanitation, ports, airports, and toll roads. The Bank will also fund health care, education, and services to government agencies. The ADB will help private financial intermediaries in banking, leasing, venture capital financing, merchant banking, microcredit, small and medium enterprises, private equity funds, mutual funds, insurance, securitization, credit enhancement, and credit rating. The Bank will sometimes consider private industries and agribusiness if they are connected with core capital markets or infrastructure sectors, and have special economic merit.

Financial Instruments

Total Bank support for any project may not exceed either 25% of total project cost or \$USD 75 million. The Bank cannot be the largest single investor in an enterprise.

Loans. Bank loans are denominated in hard currencies only (USD, Yen, or Euros). Interest rates are set at market rates while maturities vary by project and include a grace period for repayment.

Equity. ADB equity investments must be for less than 25% of the total share capital. The Bank will dispose of its position as soon as the development objective of the project has been fulfilled.

Political Risk Guarantees. The Bank can offer coverage against expropriation, currency inconvertibility or non-transferability, political violence, and breach of contract. Guarantees can apply to loans and debt instruments, but not equity. It is also a requirement that the Bank have direct participation in the project (i.e. standalone guarantees are not available).

The Bank can also play a role in mobilizing additional debt from other banks, through parallel financing, co-financing, or credit guarantees.

How to Apply for Financing

There is no standard form for applications. Proposals should include a description of the project, the role the Bank is expected to play, technical, environmental, and financial feasibility studies, a financing plan, risk analysis, ownership structure, and information about the project sponsors, among other information.

AFRICAN DEVELOPMENT BANK (AfDB)

The African Development Bank Group is a Multilateral Development Bank supported by 77 nations from Africa, North and South America, Europe, and Asia. As part of the Bank's private sector strategy, funding can be provided directly to private sector enterprises for projects with a significant development impact located in regional member countries.

Eligibility. To be eligible for Bank assistance, an enterprise must be located and incorporated in a regional member country of the Bank and be majority owned by private sector interests. Funding can be extended for start-up companies, expansions, or modernizations. The investment must bring benefits to the host country (technology transfer, employment creation, export earning, etc.) and be consistent with the country's economic development objectives. Projects must be financially viable with the potential for an adequate rate of return on capital invested. All projects must comply with the Bank Group's Environmental Assessment Guidelines and the prevailing environmental regulations of the host country.

Types of Projects Funded. The Bank will finance projects in various sectors including energy, manufacturing, transportation, infrastructure, extractive industries, banking and finance, tourism and other service industries. The Bank does not participate in real estate development projects or provide direct trade or housing finance to enterprises. Export-oriented enterprises that use local raw materials are given preference.

Financial Instruments

Loans. The Bank offers term loans denominated in a variety of major and local currencies. Interest rates are set to reflect market rates. Bank loans generally run for terms of 5 to 12 years with suitable grace periods reflecting the implementation schedule and projected cash flow of the borrower.

Equity and Quasi-Equity. Bank equity investments may take a variety of forms, including common shares and preferred stock, with or without participation features. In most instances equity instruments are denominated in local currency. The Bank will divest its shareholdings at a fair price once the objective of the Bank investment is considered achieved.

The Bank also offers a variety of Loan Guarantee, Syndication, and Underwriting products. The Bank can assist companies in mobilizing domestic and external financing from other multilateral and bilateral agencies and private financial institutions. The AfDB also extends lines of credit to public and private sector financial institutions in regional member countries for on-lending to SMEs and other corporate clients.

How to Apply for Financing

To enable the Bank to promptly assess the eligibility of a project for investment, interested enterprises should submit a feasibility study including a description of the project, the sponsors, cost estimates, foreign exchange requirements, financing plan (indicating the amount of AfDB financing desired) market prospect (including proposed marketing arrangements), and implementation plan (including the status of government approvals).

After this information is assessed, the Bank will convey its preliminary views to the applicant enterprise and may also ask for additional details and documents for further processing. Inquiries and applications may be addressed to the Head of the Private Sector Unit in Tunis.

CONCLUSION

Project financing involves non-recourse financing of the development and construction of a particular project in which the lender looks principally to the revenues expected to be generated by the project for the repayment of its loan and to the assets of the project as collateral for its loan rather than to the general credit of the project sponsor.

Project financing is commonly used as a financing method in capital-intensive industries for projects requiring large investments of funds, such as the construction of power plants, pipelines, transportation systems, mining facilities, industrial facilities and heavy manufacturing plants. The sponsors of such projects frequently are not sufficiently creditworthy to obtain traditional financing or are unwilling to take the risks and assume the debt obligations associated with traditional financings. Project financing permits the risks associated with such projects to be allocated among a number of parties at levels acceptable to each party.

In developing countries, projects were financed by the government borrowing from the international banking market, multilateral financial institutions such as the World Bank, European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), Inter-American Development Bank (IDB), Asian Development Bank (ADB), African Development Bank (AfDB) or through export credits.

Originally, International Financial Institutions (IFIs) were devoted to financing attempts to restore peace in the wake of conflicts and to international financial transactions, but their activity has since evolved and they now focus primarily on providing multilateral funding for development projects and resolving problems created by international indebtedness. The five institutions that comprise the World Bank Group make it primarily an instrument that provides multilateral finance - through co-financing by its member states - for development programmes. Together with the beneficiary countries, the World Bank draws up and finances programmes and offers advice in a variety of areas including infrastructure, employment, education, public health, social development and the environment. The respective regional development banks finance specific development projects within the area in their remit, very often in conjunction with the World Bank. The European Bank for Reconstruction and Development is mainly active in Eastern Europe.

REFERENCES

African Development Bank, (2005), *African Development Report 2005*, Oxford University Press, New York and Oxford.

Asian Development Bank, (2005), *Asian Development Bank Annual Report 2005*, Asian Development Bank, Manila.

Bakker, Age F. P., (1996), *International Financial Institutions*, Addison Wesley Longman, London and New York.

Benoit, P., (1996), *Project Finance at the World Bank: An Overview of Policies and Instruments*, World Bank, Washington.

Bronstone, A., (1999), *The European Bank for Reconstruction and Development: The Building of a Bank for East Central Europe*. Manchester University Press, Manchester.

Finnerty, J. D., (1996), *Project Financing*, John Wiley & Sons, New York.

International Finance Corporation, (1999), *Project Finance in Developing Countries*, IFC, Washington.

Inter-American Development Bank, (2005), *Inter-American Development Bank Annual Report 2005*, Washington, DC: IDB.

Multilateral Investment Guarantee Agency, (2000), *Investment Guarantee Guide*, World Bank, Washington.

Peter K. Nevitt and Fabozzi, F. (2009), *Project Financing*, 7th edition, Euromoney Books, London.

Yescombe, E.R., (2002), *Principles of Project Finance*, Academic Press, London.

World Bank Project Finance and Guarantees Department, (2000), *World Bank Guarantees Handbook*, World Bank, Washington.

World Bank Project Finance and Guarantees Department, (2000), *Leveraging Private Finance for Emerging Markets*, World Bank, Washington.

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SUSTAINING COMPETITIVENESS IN A GLOBAL ECONOMY: INSIGHTS OFFERED BY TOTAL FACTOR PRODUCTIVITY INDICATORS FOR THE U.S.

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ABSTRACT

Determination and implementation of effective policies that enhance and sustain U.S. competitiveness internationally requires a clear understanding of the concept of competitiveness as it relates to a nation. This paper addresses the ambiguity that surrounds the notion of nations competing, and presents a TFP-based model that more adequately measures the state of U.S. international competitiveness. TFP growth is estimated using data from key sectors of the U.S. during 1986-1997. Results indicate that the U.S. remained competitive over this period, even though other popularly used indicators discussed in the paper appeared to suggest otherwise. Appropriate policy measures are discussed.

INTRODUCTION

This study seeks to offer more adequate criteria of measuring the ability of U.S. firms to compete in the international market. The study addresses the misconception of using trade performance criteria alone, as an indicator of ability to compete internationally. The concept of competitiveness has gained importance in recent decades from perspectives of growth and development, and has become one of the central preoccupations of government and industry in every nation (Porter, 1990). It is a particularly fundamental subject for the United States considering its leadership role in the world economy. Given that the ability to compete in the international market is increasingly becoming an indicator of economic health, ultimately, living standards in the U.S. will be impacted by the competitiveness of its firms in the international market.

THE MEANING OF INTERNATIONAL COMPETITION

Ezeala-Harrison (1998) defines international competitiveness as the relative ability of a country's firms to produce and market products of standard or superior quality at lower prices relative to rivals in the international market. This ability determines the country's relative performance in international trade. That is, where international trade may be an "engine" that drives economic growth of nations, international competitiveness represents the "fuel" that empowers that engine (Ezeala-Harrison, 1999).

The notion of a competitive nation is not as clear as that of a competitive firm. Ultimately, competitiveness is determined at the industry level. Most research in international competitiveness examines firms and industries to determine what gives some countries advantages in certain industries. Thus, Porter's (1990) contributions prove to be crucial in that he suggests an approach that focuses on resources and their productivity, both of which are firm level parameters of competitiveness. The definition that relates competitiveness to productivity necessarily measures the efficiency of the production process in terms of output obtained for units of input used. The challenge with this approach is that of obtaining productivity measures without leaving out the contributions of any inputs used in the production process.

It would be misleading to attribute changes in productivity to changes in the use of a single factor of production because factors are used in combination with other factors in the production process. While any list of measurements of productivity can cover a substantial number of factors, no list can be exhaustive. In this study, a framework that uses total factor productivity (TFP) measurements as indicators of international competitiveness is presented. TFP measures the relationship between output and its total factor inputs. It is a residual measure of changes in total output not accounted for by total factor input changes, after the output of the weighted sum of all inputs has been determined. This approach is suited to overcome the problem of attributing changes in productivity to changes in the use of a single factor of production. Also, TFP measurement is not subject to diminishing returns, unlike increments of capital and labor (assuming a combination with a fixed factor). These qualities enhance TFP's suitability as a tool for analyzing international competitiveness.

Given the definition of competitiveness offered in this study, a country's state of competitiveness is shown to be a dynamic phenomenon due to changes in either or both micro and macro level packages of parameters. Sustainability of competitiveness will endure if the sources of a firm's cost advantage are difficult for competitors to replicate or imitate. Therefore, TFP can be thought of as the level of technological advancement.

TFP is calculated as a Solow residual from real income after accounting for the contribution of various factor inputs of production. It is well established that most of the difference in income between countries is attributed to TFP (Porter, 1990; Ezeala-Harrison, 1995; Krugman, 1996; Klenow and Rodriguez-Clare, 1997; Hall and Jones, 1999; Aiyar and Feyrer, 2000). To this end, a methodology to calculate Solow residuals values for the U.S. economy is formulated.

METHODOLOGY

Following Ezeala-Harrison (1995, 1996, and 1999) in the study of Canada's international competitiveness, a TFP analysis derived from the application of a Solow residual approach to be applied to the U.S. case is presented. It is assumed that the aggregate production function is of an implicit form:

$$Y_i = Y_i(L_i, K_i, R_i) \quad (1)$$

where: Y = quantity of output (GDP),
 L = labor input,
 K = capital input,
 R = amount of natural resources,
 and subscript i denotes the i^{th} sector.

The growth rate of output in each sector of the economy is made up of the sum of the products of each input's marginal productivity and the rate of expansion the input. This can be shown from differentiating equation (1) with respect to time, t , as follows:

$$dY_i/dt = (\partial Y_i/\partial L_i \cdot dL_i/dt) + (\partial Y_i/\partial K_i \cdot dK_i/dt) + (\partial Y_i/\partial R_i \cdot dR_i/dt) \quad (2)$$

Assume that each sector is characterized by a Cobb-Douglass production function of the type:

$$Y = \lambda L^\alpha K^\beta R^\gamma$$

where λ = TFP index

α = factor share of labor

β = factor share of capital

γ = factor share of material resources

Therefore, the growth rate of output can be shown as:

$$dY/dt = (\partial Y/\partial \lambda \cdot d\lambda/dt) + (\partial Y/\partial L \cdot dL/dt) + (\partial Y/\partial K \cdot dK/dt) + (\partial Y/\partial R \cdot dR/dt)$$

That is,

$$dY/dt = d\lambda/dt + \alpha \cdot dL_i/dt + \beta \cdot dK_i/dt + \gamma \cdot dR_i/dt \quad (3)$$

Changes in λ (TFP growth) over time for the i^{th} sector of the economy are given as:

$$d\lambda_i/dt = dY_i/dt - (\alpha_i dL_i/dt + \beta_i dK_i/dt + \gamma_i dR_i/dt) \quad (4)$$

Substituting (3) into (4) we obtain:

$$d\lambda_i/dt = (\partial Y_i/\partial L_i \cdot dL_i/dt) + (\partial Y_i/\partial K_i \cdot dK_i/dt) + (\partial Y_i/\partial R_i \cdot dR_i/dt) - (\alpha_i dL_i/dt + \beta_i dK_i/dt + \gamma_i dR_i/dt)$$

That is,

$$d\lambda_i/dt = dL_i/dt (\partial Y_i/\partial L_i - \alpha_i) + dK_i/dt (\partial Y_i/\partial K_i - \beta_i) + dR_i/dt (\partial Y_i/\partial R_i - \gamma_i)$$

Since α_i , β_i and γ_i are factor shares, then:

$$\alpha_i = \frac{(\partial Y_i/\partial L_i)}{(Y_i/L_i)}, \quad \beta_i = \frac{(\partial Y_i/\partial K_i)}{(Y_i/K_i)}, \quad \gamma_i = \frac{(\partial Y_i/\partial R_i)}{(Y_i/R_i)}$$

Therefore:

$$d\lambda_i/dt = dL_i/dt (\alpha_i Y_i/L_i - \alpha_i) + dK_i/dt (\beta_i Y_i/K_i - \beta_i) + dR_i/dt (\gamma_i Y_i/R_i - \gamma_i)$$

or:

$$d\lambda_i/dt = \alpha_i \cdot dL_i/dt (Y_i/L_i - 1) + \beta_i \cdot dK_i/dt (Y_i/K_i - 1) + \gamma_i \cdot dR_i/dt (Y_i/R_i - 1) \quad (5)$$

This gives the measure of TFP growth for any given sector of the economy. Therefore, the aggregate TFP change for the n sectors of the economy, where $i = 1, 2, 3, \dots, n$ is given as:

$$\lambda^* = d\lambda/dt = \sum_{i=1}^n \{ \alpha_i \cdot dL_i/dt (Y_i/L_i - 1) + \beta_i \cdot dK_i/dt (Y_i/K_i - 1) + \gamma_i \cdot dR_i/dt (Y_i/R_i - 1) \} \quad (6)$$

This obtains the national measure of TFP growth, posited as a more appropriate index for measuring competitiveness. Competitiveness is thus presumed to be the relative effective utilization of resources (the components of the production function) in the most efficient manner. Equation (5) can be used to show that the growth in any particular factor's productivity depends on the growth in the TFP. For example, for labor productivity:

$$dL_i/dt (Y_i/L_i - \alpha) = d\lambda_i/dt - \{ \beta_i \cdot dK_i/dt (Y_i/K_i - 1) + \gamma_i \cdot dR_i/dt (Y_i/R_i - 1) \}$$

Capital productivity:

$$dK_i/dt (Y_i/K_i - \beta) = d\lambda_i/dt - \{ \alpha_i \cdot dL_i/dt (Y_i/L_i - 1) + \gamma_i \cdot dR_i/dt (Y_i/R_i - 1) \}$$

Resource productivity:

$$dR_i/dt (Y_i/R_i - \gamma) = d\lambda_i/dt - \{ \beta_i \cdot dK_i/dt (Y_i/K_i - 1) + \alpha_i \cdot dL_i/dt (Y_i/L_i - 1) \}$$

Appropriate data for the U.S. is employed to compute the trend values of:

(i) sectoral TFPs (λ_i) using equation (5). This way, comparisons can be obtained for intersectoral TFP performance, thereby obtaining a picture of relative competitiveness of the various sectors of the economy.

(ii) aggregate TFP growth over time, λ^* , using equation (6). Besides indicating whether or not, and at what particular points in time the economy might (or might not) be losing the ability to sustain its relative competitiveness, this operation also gives an indication of the potential competitiveness profile of the U.S.

THE EMPIRICAL ANALYSIS AND DATA

The empirical analysis of this study provides insights and possible conclusions about the state of U.S. competitiveness. Further, when compared to U.S. trade performance in recent decades, the analysis allows us to ascertain the extent to which the growing trade deficits experienced by the U.S. economy during the 1980s and 1990s are (are not) a sign of a loss of its competitiveness, given the understanding of what constitutes competitiveness, as presented here. Conclusions that emerge from the empirical analysis enable us to offer policy recommendations and propositions for future research.

The data employed in the analysis covers the years 1986-1997, and is adapted to the standard industrial code (SIC) format. Some variables in the model may not be directly measurable, hence the need to employ proxies in our estimation. For each sector, the factor share inputs (α, β, γ) are proxied by the size of the respective input expenditures of each of these factors for the given sector in proportion to total input expenditures for that particular factor across all sectors. The relevant data is readily obtained from the U.S. Bureau of Economic Analysis (BEA). While data on all input variables is complete and readily available for the particular period specified, the level of accuracy in the tertiary (service-related) sector estimations cannot be verified with reasonable confidence. This is because, admittedly, output measurement for the service sector proves to be challenging, and there is little consensus on how it can be done.

Output (Y) data is proxied by real GDP values, and is also readily available from the BEA. The dependent variable, international competitiveness, is proxied by TFP index obtained from the U.S. Bureau of Labor Statistics (BLS). The data used in the analysis is a combination of time series range of the years 1986-1987, and cross-section across a sample of 12 major industries that represent the three broad sectors of the U.S. economy namely: primary, secondary and tertiary.

The regression analysis is conducted as follows: the dependent variable is the index for international competitiveness, and is proxied by the BLS TFP index for the U.S. The independent variables are: the product of rate of human resource development and productivity of labor; the product of rate of investment growth and productivity of capital; and the product of rate of raw materials discovery and productivity of raw materials. The regression is run using equation (6), the linear form of which is written as:

$$IC = \omega_0 + \omega_1 L^* + \omega_2 K^* + \omega_3 R^* + e_i \quad (7)$$

Where,

ω s = parameter estimates

L^* = product of labor input share growth rate and its average productivity

K^* = product of capital input share growth rate and its average productivity

R^* = product of raw material factor input share growth rate and its average productivity.

e_i = error term

The data was screened using standard econometric screening procedures to ensure that it met the necessary requirements before conclusions can be drawn. The model was tested for violations of multiple regression assumptions. Following successful data screening and violation tests, we ran regressions on equation (7) for each of the sectors previously described. Table 1 shows the results obtained.

RESULTS OF THE ANALYSIS

The results for the primary sector show that all variables are statistically significant at 95% confidence level, except for R^* . The F-statistic seems to indicate that the overall fit of the model is significant. The R^2 value is also significantly high for the primary sector. The relationship between the independent variables and the dependent is positive as is expected. The coefficient for L^* seems to indicate that competitiveness for the U.S primary sector is largely driven by labor productivity and expansion rate.

The secondary sector results returned a significantly high R^2 value. Similar to the primary sector, all variables are statistically significant at 95% confidence level, except R^* . All explanatory variables show a positive relationship with the dependent variable as is expected. K^* had the highest co-efficient in the secondary sector, which seems to indicate that competitiveness in the secondary sector is largely influenced by K^* . This result supports the idea that innovation is crucial to sustaining competitiveness (productivity increases) for the secondary sector. The F-statistics seem to indicate that the overall fit for the model is significant at 95% confidence level.

Generally, the tertiary sector results show a departure between theory and practice. Also, the results obtained from the tertiary sector seem to offer little insights than anticipated. It was expected that an analysis of the tertiary sector, which is dominated by service industries, would offer meaningful insights into the state of U.S. competitiveness, given that more than 70% of the U.S. output is accounted for by the service oriented sector.

A positive relationship is observed between international competitiveness and the explanatory variables except for R^* . Suspicion is that this unexpected result may be explained by either one of two factors: inadequacy in data and measurement procedures for the tertiary sector as previously mentioned, or a possible misspecification of the model. According to the results in Table 1, the F value for the tertiary sector was relatively low, even though the F-tests indicate an overall model fit at 95% level of confidence. The results seem to show a relatively strong influence of L^* on competitiveness as indicated by the coefficient values. However, the results for the tertiary sector analysis must be taken with caution for the reasons explained.

It is also important to note that the dependent variable, which is proxied by the U.S. TFP index obtained from the BLS, does not factor the contributions of most of the tertiary sector industries. This may help in explaining the diluted nature of results obtained for the tertiary sector.

Table 1: Regression Results of Equation (7)

Dependent variable: TFP Index

Method: Least Squares

Sample (adjusted): 1988-1997

Included observations: 10

Number of cross sections: 12

Total panel observations (balanced): 120

Variable	Coeff.	Std. Error	t-Statistic	P-value	VIF
(constant)	-0.00165	0.001	-2.666	0.037	
Primary L*	0.102	0.020	5.135	0.002	1.015
Primary K*	0.04665	0.012	4.018	0.007	1.061
Primary R*	0.007294	0.011	0.646	**0.542	1.047

R-squared	0.893	Mean dep. var.	0.000264
Adj. R-square	0.840	S.D. dep. Var.	0.0025036
S.E. of regression	0.0010009	F-Statistic	16.771
Sum of squared resid.	0.000	P-value	0.003
Durbin-Watson Stat.	1.943		

Variable	Coeff.	Std. Error	t-Statistic	P-value	VIF
(constant)	0.002532	0.001	3.550	0.012	
Secondary L*	0.04128	0.024	1.720	0.054	2.390
Secondary K*	0.006106	0.022	2.756	0.033	1.596
Secondary R*	0.235	0.130	1.811	**0.120	1.679

R-squared	0.742	Mean dep. var.	0.002456
Adj. R-square	0.614	S.D. dep. Var.	0.0012545
S.E. of regression	0.0007798	F-Statistic	5.764
Sum of squared resid.	0.000	P-value	0.034
Durbin-Watson Stat.	1.937		

Variable	Coeff.	Std. Error	t-Statistic	P-value	VIF
(constant)	0.007721	3.707	0.008		
Tertiary L*	0.04908	0.043	1.139	0.029	1.761
Tertiary K*	0.00103	0.015	0.089	0.053	1.785
Tertiary R*	-0.0948	0.044	-2.150	**0.069	1.263

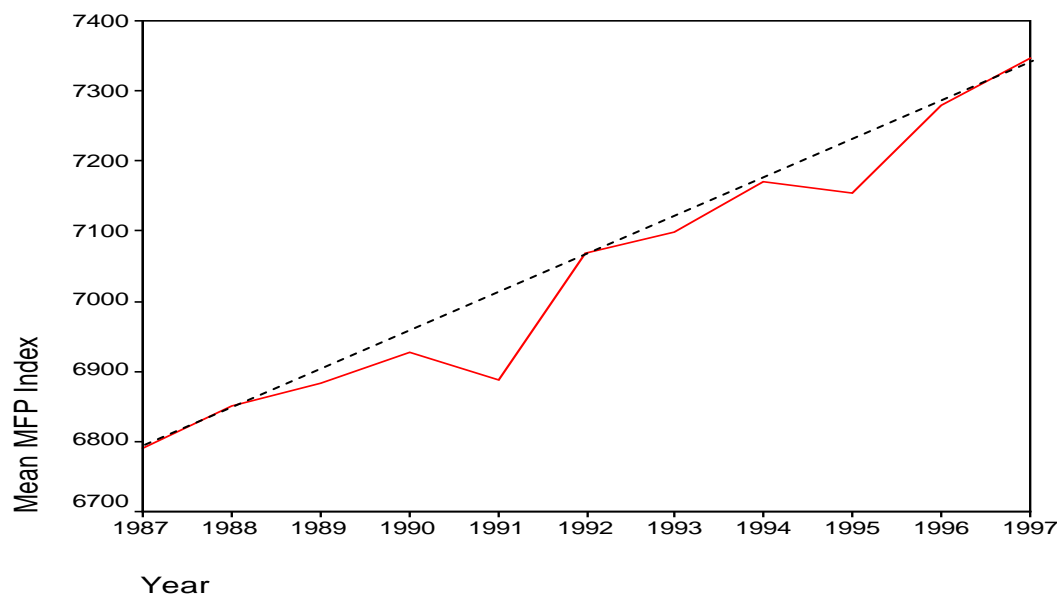
R-squared	0.603	Mean dep. var.	0.0007008
Adj. R-square	0.433	S.D. dep. Var.	0.0020784
S.E. of regression	0.0015653	F-Statistic	3.544
Sum of squared resid.	9971381	P-value	0.056
Durbin-Watson stat.	2.023		

*This table shows results obtained from a regression run on equation (7). ** We suspect that the P-value results for all sectors, which seem to indicate insignificance of the R* variable, may be due to the fact that the TFP index value computed for the U.S. by the Bureau of Labor Statistics does not take into consideration the contributions of material inputs. It focuses mainly on labor and capital contributions.*

Graphical Analysis

Figure 1 depicts the aggregate TFP growth trends for the U.S. over the years 1987-1997. The figure indicates an upward trend in economy wide TFP. During this period, the U.S. continued to experience large trade deficits, which were widely interpreted as a symptom of loss of competitiveness. The trends seem to support the study's argument that trade performance alone must not be taken as an indicator of competitiveness.

Figure 1: U.S. National Aggregate TFP Trends



This figure shows TFP growth trends for the U.S. during the period 1987-1997

POLICY ANALYSIS AND CONCLUSIONS

The results obtained show that in general, productivity increases in each of the sectors analyzed is directly related to competitiveness of the U.S. The secondary sector, which is dominated by manufacturing industries, was found to be the dominant when it comes to impacting competitiveness, as indicated by its relatively high mean value for the competitiveness index.

The implication is that improvements in TFP growth for the secondary sector are likely to improve the U.S. competitive position abroad relatively more than improvements in the other sectors. In particular, manufacturing is an integral part of the U.S. and global economy. It has proven to be a part of the network of inter-industry relations that create a stronger economy and the conditions for growth. According to the U.S. Bureau of Economic Analysis (BEA) and Bureau of Labor Statistics (BLS), the sector currently accounts for about 14% of the GDP and employs some 14 million workers. An International Monetary Fund report (IMF) ranks U.S. manufacturing sector as the world's largest. In fact, according to the IMF, the U.S. manufacturing alone would be the world's 7th largest economy, nearly equal to China's economy. In international trade, manufactures account for about 60% of all U.S. exports in goods and services. Therefore, appropriate policies must be aimed at productivity increases in the secondary sector, particularly manufacturing. More specific, TFP growth, which is driven by innovation technologies and technology-based entrepreneurship, should top the agenda of policies aimed at building and sustaining U.S. international competitiveness.

Previously failed policies such as trade protectionism should be avoided. Useful frameworks such as those used by this study to understand the dynamics of competitiveness, obtain that it makes sense to talk about competitiveness at the industry level, and points us to micro-level parameters as a point of focus in improving the competitive position of the U.S. A TFP criterion seems to be a better indicator of the U.S. firms' ability to compete internationally. Focusing on international trade performance alone as the sole indicator of the ability to compete internationally presents problems that render it a misconception.

REFERENCES

- Aiyar, Shekar and Feyrer, James (2000), "A Contribution to the Empirics of Total Factor Productivity," Research Manuscript, Brown University.
- Buckley, P.J., Pass, C.L. and Prescott, K. "Measures of International Competitiveness: A critical Survey," *Journal of Marketing Management* 4 (2), 1988.
- Coldwell, Daniel,III, "The Question of International Competitiveness," *Advances in Economics Research* 6(3), August 2000: pp. 417-426
- Ezeala-Harrison, F. (1995), "Canada's Global Competitiveness Challenge: Trade Performance Versus Total Factor Productivity Measures," *The American Journal of Economics and Sociology*, 54(1), January :pp.57-78.
- Ezeala-Harrison, F. (1996), "Canada's Competitiveness: Should we Judge Trade Performance or Total Factor Productivity?" Research Paper Prepared for Department of Foreign Affairs and International Trade, Ottawa, January.
- Ezeala-Harrison, F. (1998). Conceptions and Misconceptions of International Competitiveness. *Briefing Notes in Economics*, Vol.37, November.
- Ezeala-Harrison, F. (1999). *Theory and Policy of International Competitiveness*, Westport, CT: Praeger.
- Fageberg, J. (1985). A post-keynesian approach to the theory of international competitiveness. *Norsk Utenrikspolitisk Institute, NUPI Notat*, November.
- Farrugia, Nadia (2002). Constructing an index of international competitiveness for Malta. *Bank of Valletta Review*, Vol.2, Autumn.
- Hall, Robert and Jones, Charles, I., "Why Do Some Countries Produce So Much More Output per Worker Than Others?" *Quarterly Journal of Economics*, February 1999.
- Klenow, Peter and Rodriguez-Clare, Andres (1997), "Economic Growth: A Review Essay," *Journal of Monetary Economics*, December.
- Krugman, P. (1996), *Pop Internationalism*, Cambridge, MA: MIT Press.
- Leontief, Wassily, et al (1953). *Studies in the Structure of the American Economy*. New York, NY: Oxford Press.
- Porter, M, E. (1990). *The Competitive Advantage of Nations*, London: Macmillan.

THE ETHICAL AND NON ETHICAL FUNDS: AN AGE-COHORT ANALYSIS

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ABSTRACT

The international financial systems have always based their funding and investment activities on the parameters as performance, capital and interest. However, the financial crisis that struck the United States and invested Europe has shifted the attention towards the theme of an ethically oriented finance. This one is based on the assumption that the operators of the financial sector use as benchmarks the capacity of producing social and environmental benefits, leading thus to greater corporate crisis prevention and development of a sustainable economy. The aim of this research is to analyze a data set of mutual funds under Italian and abroad law, collected on www.morningstar.com and based on 109 ethical funds and 110 unethical funds. The aim is to highlight some funds characteristics such as performance, typology, geographical area of location, management fees, investments selecting criteria. Particularly the study is developed through a cohort analysis to put in evidence the performances of the cohort of funds in the period 1980-2008. The research highlights how some factors have a positive impact on the survival of mutual funds and that these awards especially the ethical funds.

JEL: G20, G21, C40, C44

KEYWORDS: Ethical fund, non ethical fund, cohort analysis.

INTRODUCTION

In the financial global current crisis, the concept of socially responsible can be a useful tool in support of finance and a basis for the investment choices. The ethical finance is created to support the activities and meet the needs of the persons that carry out social investments for which the selection and management process is carried out according to not only economic criteria but also social and environmental criteria. It is known that an ethically-oriented finance is based on the assumption that operators of the financial sector use as a benchmark the ability of the investment to produce social and environmental benefits.

The change of behavior in a more social sense should fund all those businesses that produce social and environmental benefits, leading thus to a greater corporate crisis prevention and to a development of a sustainable economy (Capriglione, 1997; Rothschild, 1993; Sen Amartya, 1986; Signori et al., 2005). It is important review the international markets guidance: financial intermediaries, such as banks, the mutual funds and the financial institutions, promote the ethical portfolio selection through the ethical funds.

The aim of this research is to analyze a data set of mutual funds under Italian and abroad law, collected on www.morningstar.com and based on 109 ethical funds and 110 unethical funds.

The aim is to highlight some funds characteristics such as performance, typology, geographical area of location, management fees, investments selecting criteria. Particularly the study is developed through a cohort analysis to put in evidence the performances of the cohort of funds in the period 1980-2008.

The remainder of the paper is organized as follows. Section 2 discusses the ethical mutual funds market, sections 3 and 4 present the data and the methodology, section 5 describes the principal findings, while section 5 concludes the paper.

THE ETHICAL MUTUAL FUNDS MARKET

The ethical investment has been defined as «a set of approaches which include social or ethical goals or constraints as well as more conventional financial criteria in decisions over whether to acquire, hold, or dispose of a particular investment» (Cowton, 1999, p. 60). Social investment includes a number of activities, such as social screening (e.g., ethical mutual funds), community investment (e.g., investment in local development initiatives), and shareholder activism (e.g., shareholder resolutions or active dialogue with companies). The activity of social screening and in particular ethical mutual funds is the most popular of these categories of social investment, and appears to be drawing the greatest attention among investors.

The ethical mutual funds do not invest in companies that have a low rating or are considered not ethically-oriented by the fund managers (Becchetti and Fucito, 2000; Beltratti and Miraglia, 2001).

The ethical mutual funds are instruments similar to mutual funds of ordinary, not only for the management structure but also for the financial and regulatory aspects. In particular, the ethical funds can be distinguished according to the usual classifications applied to products of traditional asset management (securities and real estate, opened and closed, equities, balanced, liquid, flexible, etc.). However, they differ from the traditional mutual funds in the process of selecting investments to be included in the portfolio. All ethical mutual funds use a series of screens or filters to either intentionally avoid (i.e., exclusionary or negative screens) and/or intentionally select (i.e., qualitative or positive screens) certain companies as part of the fund's portfolio (Cory, 2001; Dal Maso and Bartolomeo, 2001; Lanza et al., 2001; Lewis, 2002; Viganò, 2001). In particular, there are ethical funds which:

1. avoid investing in companies involved in tobacco, alcohol, gambling, military, firearms, or nuclear weapons;
2. avoid companies connected with child labor or that fail to respect animal rights, gay and lesbian rights, diversity, or feminism;
3. include companies that best support the community, diversity, employee relations, the environment, or product quality and safety (Kinder and Domini, 1997).

The ethical funds development is of interest for academic finance, particularly with respect to performance measurement. The empirical analysis of ethical funds dates back as early as 1972 (Moskowitz, 1972). Since then numerous studies have investigated the performance of this investments and compared the findings to the performance of conventional assets. The results of many of these studies show that the performance differential of ethical funds and traditionally managed funds does not deviate significantly from zero. Some studies (Derwall et al., 2005) even find an out-performance of ethical funds portfolios. This is a puzzling result because ethical funds are restricted to a subset of the total investment universe and should therefore exhibit – at best – the same performance as comparable conventional portfolios.

The ethical mutual funds have grown significantly over the past two decades. Despite the ethical funds are still a small segment of the international capital markets. In 2007, according to Eurosif research, the total asset under management in Europe has reached 2.665 trillion of euros. This total amount is made up of 511.7 billion of euro for Core SRI and 2.154 trillion of euros for Broad SRI. The European market of ethical funds has increased from 1.033 trillion of euros in 2005 to 2.665 trillion of euros at the end of 2007. On a like-for-like basis¹⁰, this represents a growth of 102% over two years (Eurosif, 2008). In 2008, a new generation of ethical funds is emerging, the thematic funds, driven by investors' focus on specific sustainability themes in the market where they see strong growth potential. Technological innovations, the creation of new markets through government regulations that reward sustainable practices (such as carbon markets), and an increased spending on health, by both governments and

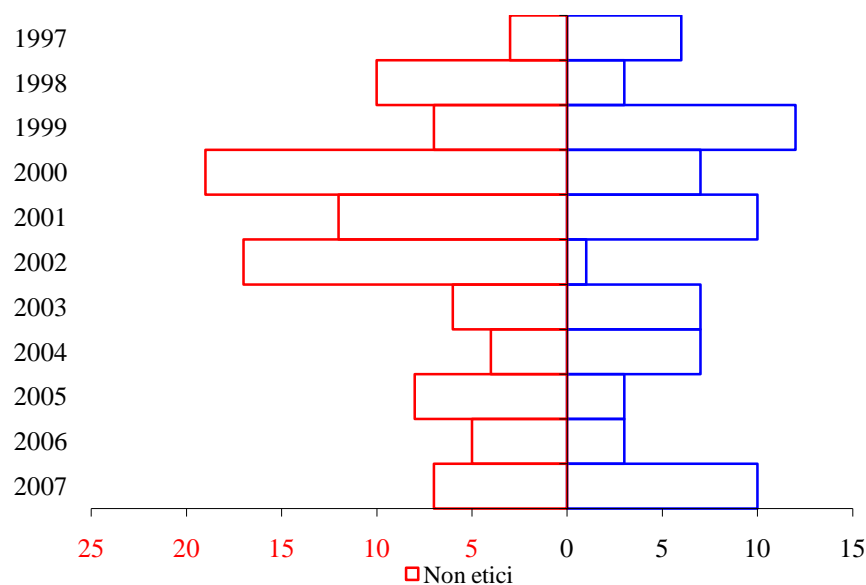
consumers all present investment opportunities. In particular, the funds focusing on themes such as water, climate change, renewable energy, eco-efficiency or health and nutrition, have multiplied since 2006.

In Italy, the ethical funds are still a small portion of total assets under management. In 2007, the Core SRI accounts for about 3.4 billion of euros, which means 0.32% of total assets under management to national level. The growth rate since the last survey in 2006 is 23% for Core SRI. The Broad SRI has increased remarkably: from 0.09 billion of euros in 2005 to 240 billion of euros in 2007. The prevalence of the retail component, as opposed to the institutional one, in the Italian SRI market still sets it apart from other markets. Unlike other European markets, the institutional investor market is still very small (6% of total Core SRI) due to the relatively recent start of the pension system (second and third pillars). Despite the current retail market crisis, investment funds are still the preferred investment vehicle for SRI investors. The market is very concentrated with the first three players accounting for more than 95% of total asset under management. The crisis of the Italian funds industry seems structural and only major changes in regulation, as well as the market forces, could adjust the situation. However, even in the most optimistic scenario, SRI in the retail sector is likely to remain a niche market.

DATA

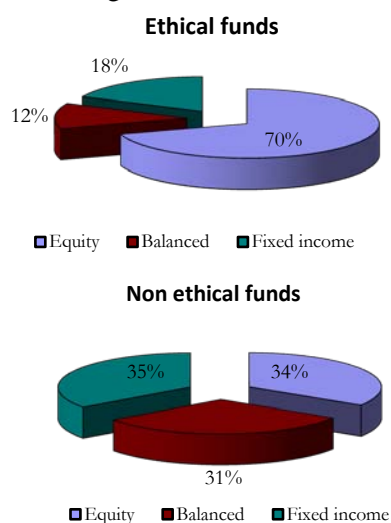
The data analyzed refer to the mutual funds under Italian and abroad law, representative of ethical and unethical funds. The data are collected on www.morningstar.com and are related to some funds characteristics such as performance, typology, geographical area of membership, management fees, investment selecting criteria.

Figure 1: The pyramid of the mutual funds



As regards the ethical sector, it is represented by 109 funds and it is divided in the different categories indicated by Assogestioni: equity (76), balanced (13) and fixed income (20). As regards the non ethical sector, it is representative by 110 funds and it is based on the following categories: equity (37), balanced (34) and fixed income (39) (figure 2).

Figure 2: The categories of mutual funds



The asset of the ethical funds is in media equal to 275,96 million of euros, while the asset of the non ethical funds is on average equal to 156,04 million of euros. Furthermore, the data are analyzed by analysis of the performance recorded from the ethical funds and unethical on 30 December 2008 to 10 years. Particularly, it is noted that the performance on average registered by the traditional funds is better than that registered by the ethical funds and that the minimum and maximum values are registered on a 1 year (table 1).

Table 1: The Ethical and Non Ethical Funds Performances

	Ethical funds						
	1 month	3 months	6 months	1 year	3 years	5 years	10 years
<i>Average</i>	-6.54	-3.18	-14.82	-19.50	0.32	4.87	0.64
<i>Dev_st</i>	4.16	3.14	7.36	11.87	3.47	3.66	2.15
<i>Min</i>	-16.72	-13.55	-28.52	-44.54	-9.77	-2.54	-3.29
<i>Max</i>	12.49	4.59	0.39	24.52	9.51	14.04	3.81
<i>Asimmetry</i>	0.80	-0.77	0.76	0.87	-0.22	0.44	-0.42

	Non ethical funds						
	1 month	3 months	6 months	1 year	3 years	5 years	10 years
<i>Average</i>	-0.87	-8.13	-11.76	-18.20	-5.38	-0.27	0.12
<i>Dev_st</i>	2.23	10.72	16.28	20.83	6.87	2.64	3.05
<i>Min</i>	-8.18	-33.43	-49.02	-53.60	-20.66	-6.85	-5.85
<i>Max</i>	2.50	6.92	15.16	11.33	3.70	6.85	3.52
<i>Asimmetry</i>	-0.78	-0.38	-0.23	-0.19	-0.27	-0.02	-0.77

THE AGE-COHORT ANALYSIS

The study is developed through a cohort analysis to put in evidence the performances of the cohort of funds in the period 1980-2008. The funds of the sample were grouped into five cohorts with five years amplitude except of the first that is broader and of the last that is less broad. Each cohort was analyzed highlighting the performance registered in the different periods and comparing the performance of each

cohort with that recorded by generations of non-ethical funds. The age-cohort of the ethical funds is represented in the figure 3.

Figure 3: The age-cohort of the ethical funds

10					
5			54	135	148
0		8	46	89	59
	4	4	42	47	12
	1980-1990	1991-1995	1996-2000	2001-2005	2006-2008

The first generation includes the funds born between 1986 and 1990 that are equal to 4 in the first year of life, to 8 after five years and to 54 after ten years. The second generation is based on 4 funds in the first year, too. However it became more consistent during the years with 46 funds after five years and 135 funds after ten years. The third and fourth generations are similar in the first year with respectively 42 and 47 funds, but we can observe as the third cohort is wider than all the cohorts analyzed. Interesting observations may be comparing these age-cohorts with that based on non-ethical funds (figure 4).

Figure 4: The Age-Cohort of the Non Ethical Funds

10					
5			84	142	119
0		20	64	78	41
	6	14	50	28	25
	1980-1990	1991-1995	1996-2000	2001-2005	2006-2008

THE EMPIRICAL RESULTS

From the analysis of the performance of each cohorts we can observe as the ethical funds are characterized by a negative value respects to the non ethical funds. As regards the first generation, the yield up to three years is positive, while that in one year is very negative and tended to decrease in recent months. The other four generations have positive returns for up to three years and have negative values for a year although in decreasing order. Particularly, values are in sharp decline are recorded in the second and fourth cohort of funds (figure 5).

Figure 5: The Performance of The Ethical Funds Cohorts

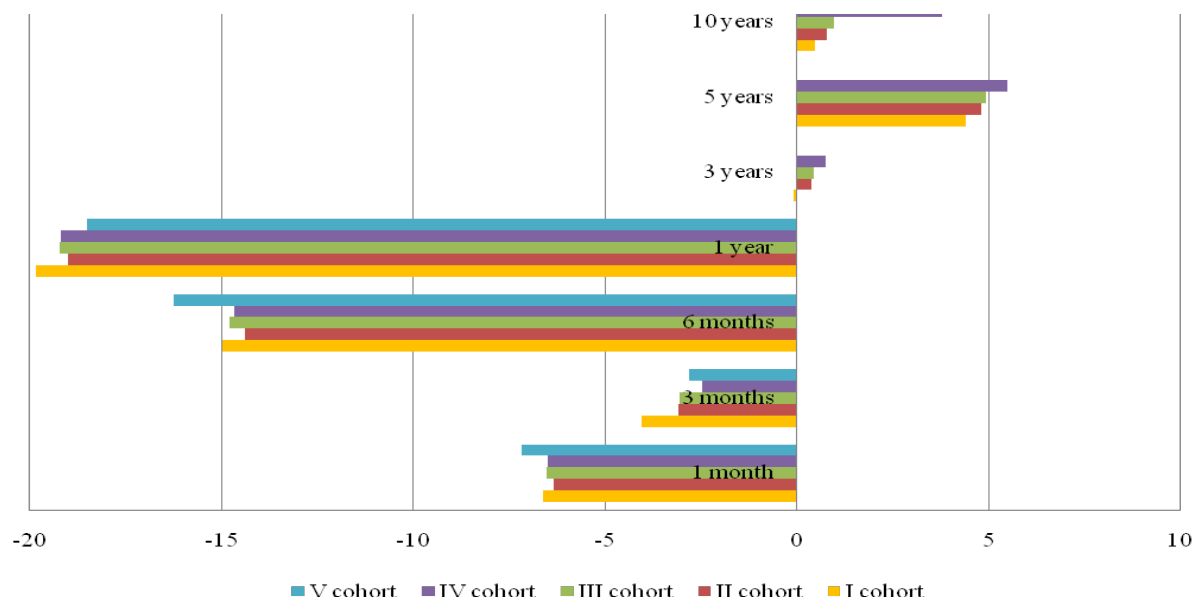
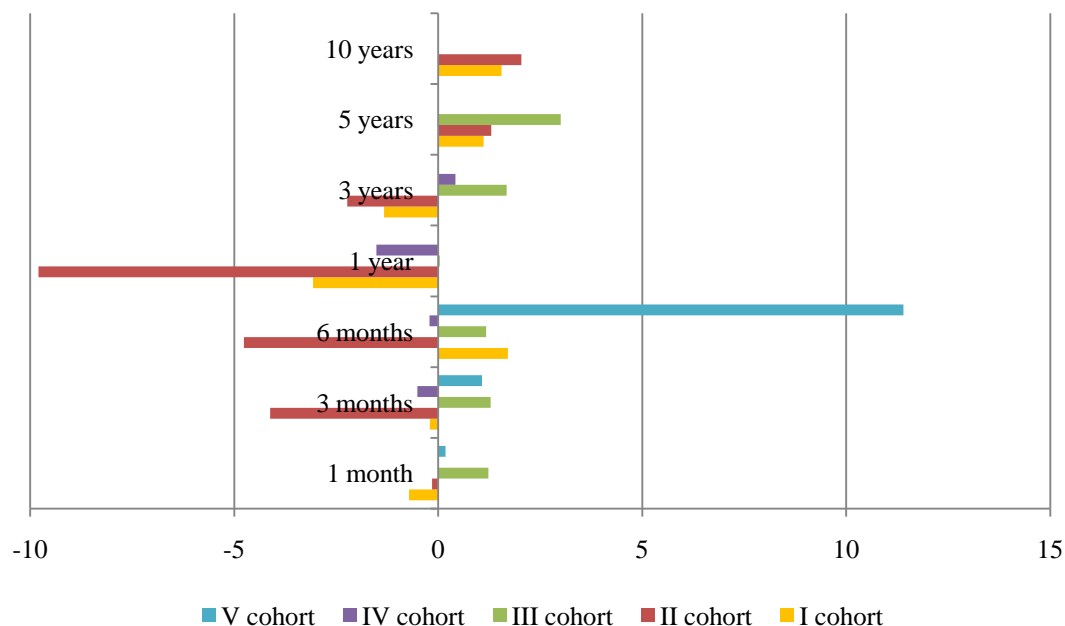


Figure 6: The Performance of The Non Ethical Funds Cohorts



Instead of the non ethical funds we can observe different values. Specifically all the cohorts have an alternative performance trend. In fact the first and the second generations have a performance that worsens in the last months, while the fifth generation is characterized by a high performance (figure 6). The high performance on 1 year of the fifth generation is due to mostly presence of the balanced and bond funds that have governed better signals to the financial crisis of last year.

The comparison between the two figures shows that before of the financial crisis the generations of ethical funds showed significantly higher performance compared to the generations of non-ethical funds. This indicates that the inclusion of ethical criteria in portfolio choice improves the performance of funds. During the financial markets crisis both categories of funds showed negative signals. However, the generations of ethical funds are most affected because our sample is composed predominantly of Italian equity funds that use an outdated approach. Particularly, many Italian funds focus only on negative criteria to avoid investing in companies involved in tobacco, alcohol, gambling, military, firearms or nuclear weapons; they do not use positive criteria to select companies that best support the community, diversity, employee relations, the environment, or product quality and safety.

Indeed, a company listed on the Stock Market that is able to offer guarantees about the environment protection and respect for human rights and workers, or to adopt transparency standards in business management and managers remuneration, and to maintain a relationship of dialogue constructively with shareholders, denotes a state of good health. All these characteristics show that, in the long period, the company will reach a more stability; it will be able to improve its ability to create value, and thus get a better financial performance. However, in Italy, the complex and rigorous analysis that allows identifying the socially responsible companies is often lacking; in fact:

1. on 16 ethical funds located in Italy, only three (Credit Suisse Equity Fund Future Energy, Valori Responsabili Azionario and Dexia Eqs Sustainable Green Planet) invest on financial securities;
2. of these three funds, two (Credit Suisse Equity Fund Future Energy and Valori Responsabili Azionario) recorded a performance at one year significantly higher than the industry average and respectively equal to -3.92% and -15.90%;
3. all other ethical funds available for the Italian saver displayed on financial securities in high percentages.

CONCLUSIONS

The devastating effects produced by the latest crisis of the markets have shown, clearly, the need not to continue to assert the uniqueness of the rules that underlie the financial assets. For example, after the mortgage crisis the most important rating agencies have been accused of failure and have been subject to strong criticism for not being able to promptly assess the risk of structured products.

The ethical funds should, therefore, represent an attempt to replace the use of money to the social relations. In this sense, the owners and managers of financial assets begin to integrate the risk and return analysis with environmental and social considerations. Consequently, issuers are also measured according to their level of social responsibility. The creation of socially responsible securities portfolios implies recognition of the efforts deployed by the best companies in terms of human rights respect and total lack of involvement in illegal activities. The socially responsible finance could then activate a virtuous cycle that can produce benefits for individual stakeholders and for society suggesting, moreover, a particular pattern of behavior that precludes the easy profit and the absence of values. It is necessary to recover the moral aspect also and especially in the selection of investments. The data collected and processed confirm this recovery: if the ethical funds continue to outperform the traditional investment instruments in the future years, showing an increase in the number and underwriters of socially responsible, then you can say that the ethical finance won partially his bet.

REFERENCES

Becchetti, L. & Fucito, L. (2000), "La Finanza etica: considerazioni teoriche e simulazioni empiriche", *Rivista di politica economica*, 5, p. 29-67.

- Beltratti, A. & Miraglia, R. (2001), *I fondi comuni d'investimento, il caso italiano*. Carocci Editore, Rome.
- Capriglione, F. (1997), *Etica della finanza e finanza etica*. Laterza, Bari.
- Cowton, C.J. (1999), "Playing by the rules: ethical criteria at an ethical fund", *Business Ethics: a European review*, 8, p. 60-69.
- Cory, J. (2001), *Business Ethics*. Kluwer Academic Publishers, Boston.
- Dal Maso, D. & Bartolomeo, M. (2001), *Finanza e sviluppo sostenibili*, Il Sole 24 Ore, Milan.
- Derwall, J., Guenster, N., Bauer, R. & Koedijk, K. (2005), "The Eco-Efficiency Premium Puzzle", *Financial Analysts Journal*, 61, p. 51-63.
- Eurosif (2008), *European SRI Study 2008*. Paris.
- Kinder, P. D. & Domini, A. L. (1997), "Social screening: Paradigms old and new," *The Journal of Investing*, 6, p. 12-16.
- Lanza, S., Calcaterra, M. & Perrini, F. (2001), *Etica finanza e valore d'impresa*. Egea, Milan.
- Lewis, A. (2002), *Morals, Markets and Money*. Prentice Hall, London.
- Moskowitz, M. (1972), "Choosing Socially Responsible Stocks", *Business and Society*, 1, 71-75.
- Rothschild, K.W. (1993), *Ethics and Economic Theory*. Gower House, Edward Elgar.
- Sen, A.K. (1986), *Etica ed economia*. Il Mulino, Bologna.
- Signori, S., Rusconi, G. & Dorigatti M. (2005), *Etica e finanza*. Franco Angeli, Milan.
- Viganò, L. (2001), *La banca etica. Esperienze in Italia e all'estero, strategie e innovazione nelle scelte operative*. Bancaria Editrice, Milan.

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LIMITING FREE SPEECH IN THE CLASSROOM

Victor Lewis, National University

ABSTRACT

Every day, Americans are faced with new laws, new regulations, and new rules limiting their speech. This continues to occur with alarming frequency, especially in the classroom workplace. The glaring irony in this unfolding drama is that free speech is protected in the supreme legal document in America, the Constitution of the United States. The founding fathers believed that free speech was so important that the First, and most prominent Amendment found therein, expressly, firmly, and broadly, announced the clear intent of the founding fathers to limit the government from abridging the right of free speech for all U.S. citizens. Have we somehow arrived at a place in time where limits on classroom and workplace speech lead to regular discipline and even termination from employment of some of our best and arguably brightest scholars in our classrooms? In the attempt to create sensitive and tolerant citizens, and to sanitize our society, have we thrown valuable First Amendment protections out the window in order to censor teachers in the classroom? Should all academics, regardless of their political ideologies, gender, race, or religion, be wary of what seems to be the steady erosion of their right to speak freely in the classroom or the workplace? Is there anything to be done about recent decisions chilling free speech and free expression of ideas in the classroom and the workplace? This paper will review recent and relevant case law and legal opinions from our American courts as well as scholarly works on the subject. The presenter of this paper hopes to give everyone a better understanding and appreciation of the magnitude of the legal issues and pitfalls that await those who dare to freely express their opinions, thoughts, and arguments in our modern day classroom and workplace forums.

MULTI-CRITERIA DECISION-MAKING APPROACH FOR VENDOR SELECTION AT PUBLIC PROCUREMENTS IN FINLAND

Miikka Blomster, University of Oulu

ABSTRACT

Various criterions affects to the decision making process in public procurements in Finland and one of those is the European Union's public procurement law, which gives a special characteristics to any vendor selection made by public body. In this study author proposes model for evaluating the vendor selection process in public procurements under the public procurement law of European Union. A literature review contains short introductions of the theories used as a background for the research model. It will introduce shortly the concepts of multi-criteria decision-making (MDCM) and public procurement and its characteristics under the European Union's public procurement law. The aim of this study is to propose a multi-criteria decision-making (MCDM) approach to evaluating the vendor selection process in public procurements under the law of public procurements in the European Union. Firstly, the most desirable criterions influencing to the decision making in vendor selection process are identified. This is realized through an evaluation made over thousand vendor selection decisions and the studies in the literature. The research model will be elicited from the results of the evaluation and the literature and proposed as a result of this study.

KEYWORDS: MCDM, multi-criteria decision-making, public procurement, vendor selection

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THE IMPACT OF BRAND PERSONALITY DIMENSIONS ON BRAND PREFERENCE AND BRAND LOYALTY: A STUDY ON MALAYSIAN'S PERCEPTION TOWARDS FOREIGN BRAND COFFEE OUTLETS

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ABSTRACT

Marketing scholars have become increasingly interested in understanding and measuring the symbolic meaning consumers attribute to brands. Aaker (1997) developed a brand personality measure and theoretical framework, which shows reliability, validity and generalizability. Unfortunately, it is not entirely clear from what and to what this brand personality framework is applied in marketing setting. So, this study pertains to use the brand personality measurement framework as the bedrock of this study in investigating four foreign brand coffee outlets (Starbucks, CoffeeBean, Dome and San Francisco Coffee) in Malaysian context along with its impact on coffee outlet brand preference and brand loyalty. The research provides an investigation into key concepts of the brand personality dimensions (Sincerity, Excitement, Competence, Sophistication, Ruggedness and Peacefulness) and consumer's perceptions towards the corporate brand of foreign coffee outlet brand in Malaysian market. Research was conducted using questionnaire by gathering the data from respondents in various cities in Malaysia using purposive and convenience sampling methods. Statistical test such as demographic profiles, reliability analysis and multiple regressions was applied in this research. The results of the analysis revealed that there is differences in consumer's perception on brand personality attribute between foreign coffee outlet brands. Furthermore, the results disclosed that brand personality framework model was significant in explaining the choice, brand preference and loyalty on foreign coffee outlet market in Malaysia. The impact of brand personality perception on brand preference based on each dimension is significant for the foreign brands. It also showed the potential use and impact of brand personality on brand preference and loyalty. The findings of the study have significant implications in the perspective of research on brand relationship with consumer behavior. This study suggests that intangible attributes as if brand personality serves to contribute more on brand perceptions and consumer preference. This requires marketers to get under the skin of the brand and to consider the non-functional that is the personality elements of the brand, particularly among the foreign coffee outlet brand manager entering the international market. The study concludes consumer who determines the attributes and personality traits that matters. As for the case of personality attributes of the brand, there is a need to use direct research among consumers to identify those intangible elements.

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HEDGE FUNDS PERFORMANCE APPRAISAL: A NON-PARAMETRIC APPROACH

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Anne Vanhems, Toulouse Business School

ABSTRACT

Hedge funds have received a lot of attention in recent year due to their low correlation with major asset classes together with their ability to provide significant positive returns. With more than 8,000 hedge funds, the fund selection process becomes more and more challenging. To this regards, hedge funds performance assessment constitutes its cornerstone. Since the pioneering works by Treynor, Sharpe and Jense, a lot of performance measures have been introduced and empirically applied for evaluating the performance of funds. In this paper, we propose to analyze Hedge Funds Performance using a very recent non-parametric technique called m-frontiers method developed by Cazal, Florens and Simar (2002). Contrary to previous studies based on parametric models, this method allows to incorporate many factors that are associated with fund performance in addition to the usual risk and return measures. Moreover, it does not require specification of a benchmark, which is a crucial issue when measuring fund performance (like in the standard multifactors models). At last, we are able to not only to identify inefficient funds but also to estimate the magnitude of inefficiency. Such as analysis would suggest ways in which the inefficient funds can be made efficient.

SERVICE BASED LEARNING IN TEACHING OF FINANCIAL MANAGEMENT COURSES

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ABSTRACT

In this article the author demonstrates that Service Based Learning (SBL) is valuable in incorporating both cognitive and affective perspectives into undergraduate level Financial Management courses, particularly in courses where the teacher uses more traditional, lecture/seminar, methods of teaching. The results show significant differences between students learning abstract concepts, theories and skills in a class where the teacher uses traditional method and students learning abstract concepts, theories and skills in a class where the teacher incorporates SBL techniques. Significant differences also exist between students learning ideas of social responsibility, citizenship, and personal development.

EFFECTS OF INFORMATION TECHNOLOGY ON MODELS OF DISTRIBUTION AND SALES CHANNELS, PERFORMANCE AND PRODUCTIVITY OF BUSINESSES: SOME MARKETING IMPLICATION ON E-BUSINESS

Kozeta Sevrani, University of Tirana, Albania
Klodiana Gorica, University of Tirana, Albania

ABSTRACT

Are computing helping businesses to be more productive? Do those businesses with a higher degree of ICT investment generate more revenues than their low ICT counterparts, other factor being equal? So, it is ICT helping being more productivity the business who are investing in?

INTRODUCTION

The close relationship between business activities, especially productivity, distribution system and the quality of services delivered based on IT application is the central issue discussed in this paper. Most companies today rely on IT. This means that the core business process and the mere existence of the company depend on the normal functioning of various IT services, and IT dependent services. In other words, the focus of most business activities is on services and service management. A successfully delivered service is a result of good organizational skills and synergy of the following three elements: people, processes, and technology.

The development of the Internet and associated technologies has considerably influenced the change in sales and distribution systems in the hotel industry. Many consumers started using the Internet to plan their trips, while the new technologies opened a series of possibilities for all interesting and connecting in distribution and sales. According to Siguaw-Carroll (2005), electronic distribution created a complex network of choices, which has to be handled carefully by both the providers and users of hotel facilities, to secure the *most favorable transaction*.

Are computing helping businesses to be more productive? Do those businesses with a higher degree of ICT investment generate more revenues than their low ICT counterparts, other factor being equal? So, it is ICT helping being more productivity the business who are investing in?

THE NEW ECONOMY ERA

The information age has introduced what is termed the *new economy*, described as:

“When we talk about the new economy, we're talking about a world in which people work with their brains instead of their hands. A world in which communications technology creates global competition - not just for running shoes and laptop computers, but also for bank loans and other services that can't be packed into a crate and shipped. A world in which innovation is more important than mass production. A world in which investment buys new concepts or the means to create them, rather than new machines. A world in which rapid change is a constant. A world at least as different from what came before it

as the industrial age was from its agricultural predecessor. A world so different its emergence can only be described as a revolution” (Wired magazine’s, Encyclopedia of the New Economy <http://hotwired.wired.com/special/ene/>).

Others referred to the phenomenon as the *knowledge economy*; *digital society*; *the network era*; etc. some other simply called it the *digital world*. The realization of the *new economy* underscores the fact that ICTs have become a very important part of and drives the direction of the contemporary economy of the world. Sadly, it has been urged that in the new economy there is a *digital divide*, where those with access to ICT have great advantages over those without access.

EVOLUTION OF INTERNET MARKET IN GLOBAL LEVELS – NEED FOR INTERNATIONAL STRATEGY IN THE NEW ECONOMY

The world has already been moved from the industrial economy to the networked, digital economy. In this new informational era, characterized by the fast growth and development of ICT (Information and Communication Technologies), a further and faster expansion of Internationalization and globalization processes can be easily noted. The economic world has moved from cluster of national economies to a global, wide, international marketplace. Though, the emergence of global business models based on digital technologies and Internet has become an imperative for businesses of all size. Connectivity to the Internet and the effective exploitation of available Internet technologies is at the same time the cause and the effect of new ways to conduct business electronically.

In order to keep pace with the turbulent business environment, businesses are facing and enforcing to adapt new business strategies. In this way, restructuring processes of companies have become important part of a worldwide process of change involving new patterns of production, distribution, communication, competition and co-operation. At the same time, the expectations of customers are increasing at the same rate as information and communication innovations rule the marketplace. Due to that organizations of the 21st century are required to offer fast, efficient and flexible products/services in order to meet the extended demands and challenges of today’s business environment, both to struggle with the competitors and to satisfy very proficient customer needs.

E-business

E-business has become fast growing area in the Internet economy and represents crucial imperative for small and medium size businesses in order to create and maintain competitive advantage on the global market. The rapid adoption of e-business models is shaping the future of global businesses and driving deep and profound changes in the structure of small and medium size businesses practices of organizations and the interactions between companies. The strength points of using ICT are related especially to marketing activities, structural and organizational problems, but especially as follows:

1. *communications perspective* (the delivery of information, products/services or payment by electronic means);
2. *a commercial (trading) perspective* (the capability of buying and selling products/services and information over the Internet and via other online services);
3. *a business process perspective* (the application of technology towards the automation of business transactions and workflows);
4. *a service perspective*: enabling cost cutting at the same time as increasing the speed and quality of service delivery;
5. *learning perspective* (enabler of online training and education),
6. *a collaborative perspective* (e-business is the framework for inter-and intra-organizational collaboration) and

8. *a community perspective* (e-business provides a gathering place for community members).

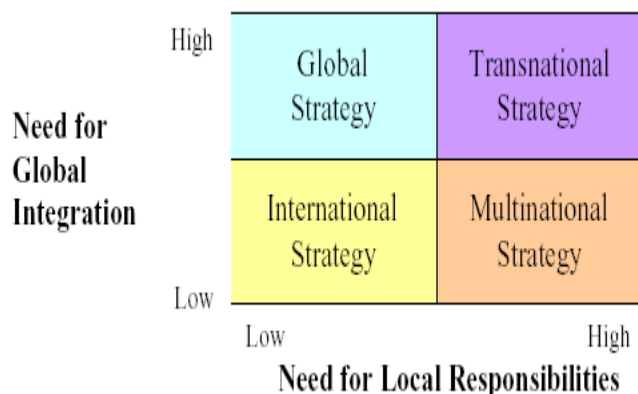
Following the global change, internationalization strategies of the small and medium size businesses have been changing as well. Small and medium size businesses have to think about organizational development in international settings, and have to adopt advanced technologies in their business models.

Businesses in general, implement one of four types of strategic orientations: international multinational, transnational or global. Each strategic orientation is geared to specific market, technological and organizational requirements.

There are some positive effect from adapting those e-strategies:

- the adoption of ICT and the use of the Internet in performing business activities provide companies with almost unlimited opportunity to gather exchange and disseminate information worldwide.
- By the use of the Internet, as global computer network (the network of networks), information flows freely across national borders and beyond and hence influence the process of internationalization. Therefore, companies have to align their current strategies with the ICT strategy or reformulate the traditional ones.
- Having in mind the character of the information and the importance of the Internet, it is evident that the companies' strategies will both have, at the same time, the dimension of internationalization and digitalization.

Figure 1: The Integration-Responsiveness Framework



INCREASE OF ALBANIA BUSINESS PERFORMANCE IMPACTING FROM ICT

Businesses nowadays are facing a lot of problems. The Albanian businesses too are facing the problems of management, controlling, and of course the new changing of environment: going more to IT.

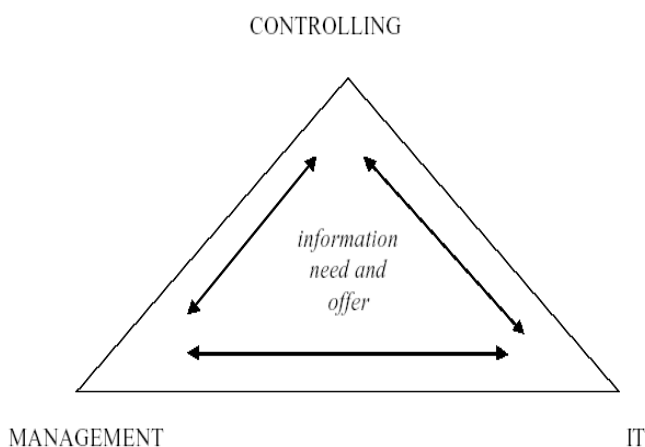
Why IT impact directly on management and control of Albanian businesses?

We have consider controlling as an expert support to the management on its way to business success: the role of controlling varied through time – it served as a filling system in static environment, as a navigator in a dynamically limited surrounding, while in an extremely dynamic environment it is an innovator helping managers in management and decision-making processes through application of new methods and new tools. A controller is responsible for information transparency. Where is business success generated (from which customers, by which products, on which markets, at which times, etc?) What reduces that

success? What enhances it? Moreover, a controller answers the following questions perceived from strategic aspect: Where are the sources of possible future success (from which customers, by which products, on which markets, at which times, etc.?) What could diminish that future success? What could enhance it?

It is not possible to offer a reply to all the se questions without contemporary information technology and tools that it could provide. A controller is always a person with an economic background and is a collocutor wit h information personnel in order to define information offers. The controller's task is to define information that management need and to define information request. That request is base for information needs that must be fulfilled by IT. The task of IT is to implement these demands within information system.

Figure 2: Relation between management, controlling and IT in businesses



The most important IT conditioned incentives:

- necessity of timely, accurate and analytic information as the background for high quality business decisions
- demand for information about present state and future progress of business transactions
- compared to the accountancy, controlling could provide information that are timely and of higher quality
- controlling can offer higher quality monitoring and forecasting of the expenses, as well as the suggestions for cutting them down
- reliable information system and investment into its constant improvement
- transparency in monitoring results
- demand for the department which could harmonies information coming from different sources within the company
- demand for integration and coordination between different aspects of business operations
- introduction of integral data processing system adjusted to the company needs

Also, Albanian businesses, especially medium and big companies, national and international (sometimes) ones, apart from the incentives, encouragements and different types of stimuli, are facing with the obstacles slowing down, even blocking a development. Concerning the fact that affecting those obstacles we can also affect the process of development, they deserve at least the same attention already given to the features stimulating controlling function.

RESEARCH FINDINGS

What result to us very important from Albanian business environments is related to the insufficient professional skills represent a significant limitation to the controlling development. In that respect particularly important are:

- week education
- misunderstanding of controlling as control
- ignorance concerning goals and objectives of controlling
- inadequate education

Albania today is suffering from underdeveloped infrastructure, especially in telecommunications. Even though, it is one of the developing countries which have defined the development of ICT technologies as important part of their strategy. The main goal is to improve the ICT sector and raise its use, productivity and efficiency. Part of Albanian ICT development strategy in the tourism industry, is the engagement of public administration in related projects. The aim of this involvement is the creation of a database of all tourism supply. This is the first step in creating the Destination Marketing System in Albania. While the Albanian tourist industry has a large regional and domestic market, it does not have the international pull of its neighbors. It has serious competition to the north and south—with Montenegro and Croatia becoming increasingly popular destinations and Greece having a well-established draw for tourists. To attract tourists, Albanian businesses have to employ the latest technologies to market their services more effectively.

The main obstacles with who are facing Albanian businesses could be systematically presented as follows:

- obstacles conditioned by the professional skills
- obstacles caused by the management
- obstacles caused by the employees
- IT conditioned obstacles
- obstacles caused by the weakness of the company
- obstacles coming from the environment

Activities for *recruiting ICT specialists* have been quite low in the tourism sector. Enterprises representing 8% of the employees in the tourism sector reported that they recruited or tried to recruit staff with special ICT skills in the past twelve months. The interviewees were asked about their use of online technologies for internal collaboration. Only a minority of the tourism enterprises uses such applications. 32% use online technologies to share documents or to perform collaborative work, 13% to support human resources management. Companies do not use ICT for e-commerce and other types of collaborations between business partners. Online collaboration activities can increase the efficiency of value chain processes. However, online collaboration with business partners with ICTs other than e-mail is not practiced in Albania. 74% of the tourism enterprises in the survey have a presence in a website, and 10% plan to implement one.

Large and medium-sized firms reveal a similar percentage of enterprises having a website: 93% and 92% respectively. In small firms the spread of websites is much lower (67%) but they are trying to catch up, as 10% of them plan to introduce a website – more than in the other size classes. Website content management systems are more often used by large companies (56%) than by medium-sized (36%) and small firms (27%). This is not surprising since this application is rather useful for firms with several departments and comprehensive website content. Albanian tourism operators have realized that, Web sites may be the best way for promotion and a cost-effective way to distribute information and provide

services. Although it's not easy to take the even promotional elements in the Web, there are also a lot of ways to integrate the web –site with the proper business processes in the point where they are related to the inter-organizational processes.

E-BUSINESS: A NEW MODEL FOR DISTRIBUTION SYSTEMS AND SALES CHANNELS

Today in Albania, approximately 90 per cent of tourism businesses are small and owner-operated. There is a range of enterprise, and owner-operator dependent characteristics associated with these businesses, which conspire against progressive “modernization” of business and management practices. Small firms lag behind in all kinds of ICTs so that there appears to be a kind of “digital divide” between large and medium-sized firms on the one hand and small firms on the other hand. However, a large proportion of the small firms is family-run businesses for which technologies such as intranet or LAN are not useful.

The development of the Internet influenced the changes in the distribution and sales systems so strongly that it caused the creation of a completely new market – The Internet market. The magnitude of this market is limited by the degree of penetration and use of the Internet in planning products and services at the generating markets, as well as by the receiving markets' services offer presentation on the Internet. In other words, it means that every service provider can make direct two-way communication with their consumers using the Internet and associated technologies. As a consequence, new marketing systems for the Internet market which is geographically dispersed and homogeneous because that all planning is done on the Internet, are being developed.

In order to be successful in distribution and sales, apart from a classic allotment distribution, the businesses must develop a system for e-distribution. The Internet and associated technologies have enabled businesses to introduce a system for e-distribution.

- own website pages and other associated website pages;
- main reservation offices and central reservation offices of a businesses or group;
- GDS – global distribution systems (Sabre, Amadeus, Galileo, World spam) through which agencies make online or offline accommodation n reservations;
- online tourist agencies (egg. www.booking.com);
- online tour operators (egg. www.hotusa.com).

In the following is representing a new model of distribution and sales channels. This model reflects changing of environment and having present e-systems. The case is adapted especially for hotels, where the distribution system and sales channels are reflecting these new international trends.

This model introduces and makes useful (Chaffey-Mayer et al. (2003)), some other new concept as:

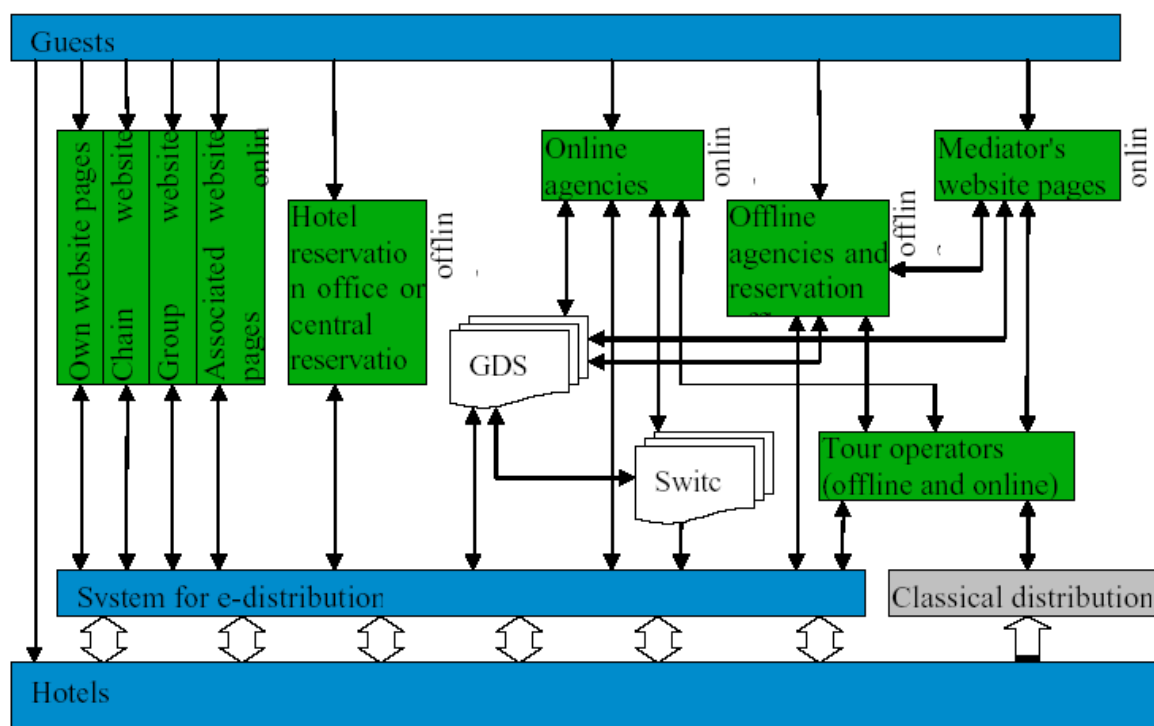
1. *Disintermediation* - decrease or total discontinuation of intermediaries. The benefit from the disintermediation is most frequently linked with the cost savings of distribution and sales, and greater control over the entire sale. With the greater share of own direct sales, their negotiating power towards the intermediaries in the distribution channel increases, creating better results in the sales.
2. *Re-intermediation* – introduction of new intermediaries. Emergence of new intermediaries occurs as a consequence of the re-intermediation of the distribution channels.
3. *Counter-mediation partner* with another independent intermediary, or set up its own independent intermediary. By vertical and horizontal integrations (counter-mediation), numerous new intermediaries in distribution are also created (e.g. Leading Hotels of the World).

The research underline that *the Internet has encouraged disintermediation*, i.e., «bypassing» of certain intermediaries in the distribution in order to achieve a direct sale, thus also achieving a greater profit. Disintermediation can endanger the business activities of a mediator in distribution, which, as a rule, leads to conflict in the distribution channel. The Internet can play different roles in the distribution and that every company must assess what role the Internet will play in its business. Businesses can make use of the Internet solely as a communication channel, a distribution channel towards the intermediaries, and a channel of direct sales to the consumers, or they can use the Internet as a combination of all three. These explain the *conflict of channels* which happens due to ICT.

What follows from this model is related to the introduction of internet agencies which has emerged as new intermediaries. They are intermediaries which makes sales exclusively *using the Internet as a medium and as a platform for communication and sales*. Internet agencies such as Expedia, HRS, Last minute, Bookings etc., represent a new distribution channel for service providers in tourism, but they also represent competition for all the other intermediaries in distribution. (Lumsdom, 1997).

Also, the emergence of the Internet in the last decade has introduced a new «Internet market» which has set new rules of play for marketing, structures, processes, etc. The development of the Internet and associated technologies has influenced the many marketing changes but, in particular, sales and distribution.

Figure 3: New Model of Distribution and Sales Channels in Hotel Businesses Due to E-business



AN ASSESMENT OF ICT IMPACTING ON THE PRODUCTIVITY OF BUSINESSES

This part of the paper focus on the question: how much productive must be considering investing on information technology system of small and medium size enterprises? Nowadays, businesses are competing very dynamically. On one hand, they have to struggle with high competitive pressure, and they need to be very careful in their decisions, since slack resources are often scarce or nil. On the other hand, they are usually much more informal and unstructured in their management style, definition of strategy or decision-making processes. Regarding productivity and investment in ICT form almost all businesses, we have to say that there are considerable differences between small and medium and large companies.

The question of whether ICT investment contributes to productivity is an old one. The so-called “productivity paradox” has attracted the attention of the businesses. Productivity is apparently a very simple concept. It defines in the long term the *success or failure of firms*, and influences global aspects of our lives. Regarding to the business which we are researching for, the concept of productivity allow a comparison of which firms are being more effective in transforming these inputs into outputs.

This comparison and adoption of the productivity term need to take into account some other specific factors as environment, the different types of inputs and how each one of them contributes to the final revenue. Which are main inputs? Typically, the basic inputs considered are capital and labor, which in fact will be converting in a more or less effective way into revenues.

From other side, the relation between productivity and ITC is recently wide studying. Our research line goes and consist in subdividing the basic inputs, capital and labor, into ICT and non-ICT, and to check (in a second phase), whether the ICT part makes a significant difference in the amount of revenue generated. In fact, all our research has gone in this line of direction, the approach is longitudinal, trying to ascertain whether the ICT investment made a particular time is fruitful later on.

An Argument for Albania SME

Albanian businesses are in fact in the growth period of adapting ICT in their management, processes and marketing. It depends by the size and types of organizations. But, by our investigation it has been proved that large firms get a positive payoff out their ICT investment, both form computer capital and for ICT labor expenses. What it is specific for Albanian business is that their investment are more concentrated in computer capital and less in labor, because they link less with the revenue generation.

From the other side, Albanian SME as small and medium businesses, are more flexible and able to respond to consumer needs. Some other Albanian SME is less flexible due to their lack of resources, which forces them to invest incrementally, generating a number of incompatible systems that are difficult to network. This lack of resources may force Albanian SME to consider their investment in ICT as something that should last for a long time, thus contributing to the preponderance of older, isolated systems.

Some empirical dates appear to support such claim: about 11% of SMEs fail to survive in any given year, and in a period of five years, about 80% of all new firms close their activities permanently. What this fact brings relate to additional difficulties to the task of measuring productivity in SME adopting a longitudinal perspective, as it has been traditionally made in large businesses.

We conclude that those organizations that invest in ICT but retain the old structures could even be worse off, getting a negative marginal product out of their ICT investment.

The main idea is that cost associated with ICT investment does not consist in the actual purchase of hardware and software, but in the cost involved in changing and adapting the organization to make an effective use of this new equipment. Because of this idea, the high degree of inertia exhibited by large businesses makes these organizational changes costly, time consuming and risky.

How Much Productive Are SME in Investing In ICT?

The classic innovation literature draws a positive relationship between innovation and business size (Darmanpor, 1992 for a meta-analyses and review). Considering ICT as an innovation, we know that ICT investment in SME is relatively recent phenomenon, linked to the availability of low priced technology. To that extend, we can consider that SME has been traditionally slower than their larger counterparts in devoting resources to ICT.

Two scenarios are intuitively possible:

1. The first one depicts SME as erratic investors. They do not develop anything that resembles a strategic plan for ICT or even for the whole businesses. Instead, they just bring in technology and try to use it without any additional investment, organizational change or even more, training. Furthermore, the lack of financial conditions their possibilities of investing in top technology and keeping it up to date, so they maintain a position of technological laggards. In this scenarios, the likelihood of getting a consistently higher productivity due to such investment appears dubious.
2. The second scenario defines SMEs as savvy investors, capable of overcoming capital and technical limitations and of making wise acquisition decisions based on the knowledge within the business. Also, SMEs must be able to naturally change their flexible and unstructured organizations to take advantage of the newly introduced technology, therefore capitalining on its gains. Lastly, ICT investment contributes to a significant higher output, once the effects of of capital, direct labor and economic industry have been controlled for.

CONCLUSIONS

Regarding to the first part of paper, we underline the following results:

The research findings confirm the thesis that the Internet will have key importance in distribution and sales in businesses in the coming decade. Two basic facts contribute to this. The Internet has already today become a dominant medium for business planning, but the Internet also has a considerable certainty to grow in the coming period.

Such a powerful development of the influence of the Internet and associated technologies clearly points to a need for the businesses to adapt to the newly-emerged online environment.

The Internet enabled businesses, especially small and medium size enterprises and other services businesses and providers to have simple, direct, two-way communication with their clients, thus giving them the possibility to carry out their sales independently, impacting directly on the adjustment of marketing activities to the emergent online environment.

Regarding to the second part of paper, we underline the following results:

IT has to be responsible for adequate data preparation and processing in Albanian businesses. Clear definition of information offer, demand and need can easily close the gap between information, IT, controlling and management.

Also, for permanent business success it is important to establish harmony between operative and strategic dimension (tasks, instruments), harmony between inward and outward orientation of the management and harmony between past and future view.

Regarding to the third part of paper, we underline the following results:

Albanian businesses are in fact in the growth period of adapting ICT in their management, processes and marketing.

Albanian business is that their investment is more concentrated in computer capital and less in labor, because they link less with the revenue generation.

The main idea is that cost associated with ICT investment does not consist in the actual purchase of hardware and software, but in the cost involved in changing and adapting the organization to make an effective use of this new equipment

Our research line goes and consist in subdividing the basic inputs, capital and labor, into ICT and non-ICT, and to check (in a second phase), whether the ICT part makes a significant difference in the amount of revenue generated.

There is a positive correlation between ICT investment and productivity. According to our research, businesses that invest more in ICT tend to have higher revenues than their lower-ICT counterparts, across practically all industries.

REFERENCES

Ballantine, J., M. Levy and P.Powell, "Evaluating information systems in small and medium size enterprises" European Journal of Information Systems, Vol 7, 1998

Blili, S., and L. Raymond, Information Technology: threats and opportunities form SMEs" International Journal of Information Management, Vol 13, 1993.

Burgess S. (2002), Managing technology in small businesses, challenges and solutions, Idea Group Publishing and Information Science Publishing

Chaffey, D., Mayer, R., Johnson, K., Ellis -Chadwick, F. (2003), *Internet marketing: Strategy, Implementation and Practice*, 2nd edition, Prentice Hall, pp. 52.-206.

Ernberg, J. (1996) *ITU: Empowering Communities in the Information Society - An International Perspective*. Empowering Communities in the Information Society Conference, South Africa, May 1996.

E-business Watch , (July 2007) ICT and e-business in the tourism sector, European Commission, Enterprise Directorate General, e-business, ICT technologies and services

Fontaine, M. (1999) AMIC@S in Asuncion: Leapfrogging Development. *TechKnowLogia* (Nov /Dec 1999).

Internet market: the new market for the croatian hotel industry., željko kukurin, M.Sc.
Valamar hotels & resorts, V. Nazora 9, 52 000 Porec, Croatia., Darko PREBEŽAC, Ph.D.
Professor of Tourism Marketing Management, Department of Tourism University of Zagreb,

IT – The Incentives and Obstacles to the Development of Controlling in Croatian Companies., Nidžara OSMANAGIC BEDENIK., Ivan STRUGAR, Bouchaib BAHLI,

Lumsdon, Les (1997), *Tourism Marketing*, International Thomson Business Press, London, p. 187.

Galliers, R.D., Leidner, D.E. and Baker, B.S.H. (edn.) (1999) *Strategic Information Management*, Butterworth Heinemann Ltd.

Marcussen, H., C. (2005), „Trends in European Internet Distribution – of Travel and Tourism Services“, Centre for Regional and Tourism Research, Denmark

Siguaw, J., Carroll, B.: «Evolution in Electronic Distribution: Effects on Hotels and Intermediaries», Cornell Center for Hospitality Research, 2005, pp. 6. I www.synxis.com, taken on 8.6.2006.

Strugar, I., Tipuric, D., Spremic, M., Skansi, (2002), *New Challenges for Business Strategy: Strategic Information System Planning in Croatia*, Global Business Economic Review – Anthology 2002, Selected papers 2002 Business and Economics Society International, Conference, Edited by: Demetri Kantarelis, ISBN: 0-9659831-5-3 pp. 506-519

Zinkhan, G.M. (2002), ‘Promoting services via the Internet: new opportunities and challenges’, *Journal of Services Marketing*, Vol. 16 (2002), no. 5, pp. 412.-423.

Wired magazine’s, *Encyclopedia of the New Economy* <http://hotwired.wired.com/special/ene/>.

Tapp, A., Hughes, T. (2004), „New technology and the changing role of marketing“, *Marketing Intelligence & Planning*, Vol. 22, No. 3, pp. 284.-296.

World Tourism Organisation (2001), *E-Business for Tourism – Practiacal Guidelines for Tourism Destinations and Business*, WTM, 133.-156.

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ISSUES OF THE DEFINITION AND REPORTING OF MORTGAGE LOANS IN ALBANIA

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Edlira Luçi, University Of Tirana

ABSTRACT

Immovable properties are very expensive, and consequently only a limited number of investors can afford to purchase an immovable property without using loans. The most spread method of financing are the mortgage loans. Issues of financing immovable properties in the countries with developed economies and markets are many and they are related to their types, to tax issues according to the relevant country, to the respective financial market legislation for immovable properties, to securing the liquidity in the secondary markets etc. In this paper, we will focus on the issues related to the concept and reporting of mortgage loans in the Albanian banking system. The definition of mortgage loans is very important from the point of view of the quality of the lender's portfolio. Recent Basel recommendations aim at narrowing this concept due to the risk attached to these types of loans, in particular for the difficult conditions of financing for the countries in transition. However, the definition of mortgage loans in Albania is problematic and often varies. There are many distortions of the mortgage loans market. That is why it is important: to have in place the legal base for mortgage loans; to have clearer definitions issued by the Bank of Albania, and monitoring of reporting by the second level banks regarding these types of loans, in order to avoid distortions.

INTRODUCTION

The majority of investments in immovable properties (real estate) are in borrowed funds. Immovable properties are very expensive, and consequently only a limited number of investors can afford to purchase an immovable property without using loans. Furthermore, even when the investor disposes of the necessary funds, he may not agree to “freeze” so much from his budget for a single property. In order to better, clarify the concept of the loan for purchasing immovable properties we have to mention a method of re-classification of immovable properties into land, residential properties, and commercial properties such as hotels, office buildings, trade centers, warehouses etc. These properties are funded from financial institutions such as: commercial banks, pension funds, insurance companies, savings companies etc., where each of them is specialized in particular in one of the categories of the immovable properties.

The most spread method of financing are the mortgage loans. In the developed economies, mortgage loans represent a long-term debt issued to individuals to finance purchases of immovable properties, and the debt is pledged by the mortgage on immovable properties. Hence, in the context of the classification of properties there are residential mortgage loans (housing loans) and commercial mortgage loans (loans for properties that generate revenues.)

Issues of financing immovable properties in the countries with developed economies and markets are many and they are related to their types, to tax issues according to the relevant country, to the respective financial market legislation for immovable properties, to securing the liquidity in the secondary markets etc. In this paper, we will focus on the issues related to the concept and reporting of mortgage loans in the Albanian banking system.

DEVELOPMENTS IN THE DEFINITION OF MORTGAGE LOANS AND ITS IMPORTANCE

Mortgage loan is a long-term loan issued to individuals for purchasing, re-financing, building or improving a dwelling, which is used for living purposes or for leasing, and is pledged with a mortgage on this dwelling (Mortgage Loan Minimum Standards Manual, April 2004, EBRD).

The definition of mortgage loans in Albania is problematic and often varies. Initially, mortgage loans served to finance immovable properties, which represented the object of the mortgage, meaning the purpose of the loan and the collateral represented the same property (Regulation on Capital Adequacy, Bank of Albania, decision no. 58, of 05.05.1999). However, recent Basel recommendations aim at narrowing this concept due to the risk attached to these types of loans, in particular for the difficult conditions of financing for the countries in transition. Basel recommendations for the Albanian banking system define as credit purpose solely purchasing of houses, i.e. residential purchases, and not other types of immovable properties.

The definition of mortgage loans is very important from the point of view of the quality of the lender's portfolio. The Bank of Albania establishes the regulation of the credit risk management through which it obtains information regarding the quality of portfolio of second level banks (loan term, probability of regular repayment etc.); it also establishes the regulation about the sufficiency of capital through which it obtains information regarding the counterparty quality or risk. However, it does not introduce conditions regarding issuance of mortgage loans. Whereas for the second level banks it is important the risk weight of its assets, since the capital adequacy ratio of the bank should not be smaller than 12%. Therefore, increasing the risk assets reduces this ratio.

$$\text{Capital adequacy ratio} = \frac{\text{Regulatory Capital}}{\text{Risk Assets}}$$

$$\text{Risk Assets} = \text{Asset's book value} \times \text{risk weight}$$

From this perspective, the concept of mortgage loans become particularly important since it represents an asset of the bank, which is weighted with a 50% risk (compared to other types of loans, which are weighted with a 100% risk). Therefore, this is considered relatively safe compared to other assets of the bank since the borrower will do his utmost to repay the loan since he does not wish to lose his home.

At the point when an individual receives a mortgage loan, he enters into two agreements with the given bank: the Loan Agreement (the bank extends the individual a loan) and the Mortgage Agreement (the individual pledges his house by mortgage on behalf of the bank.) If later on, the bank wants to sell this mortgage loan to another financial institution, the latter accepts it if the first agreement (the loan agreement) is packaged together with the second agreement (i.e. the loan with the collateral title). Mortgage securities (securities backed on a pool of mortgage loans) represent a type of investment for a broad public with high sensitivity against risk. Therefore, the secondary market may be generated only based on these mortgage loans since they are considered safe loans. Any other type of housing loan, which uses as collateral other types of property, represents an added risk for the bank, is considered housing loan, and represents an asset with a risk coefficient for bank at 100%. Hence, if the collateral used by the borrower is another house in his ownership, the lending risk increases due to other risks such as the earthquake risk, depreciation risk, property conflict risk etc. Additional risk becomes even higher in the instances when a guarantor backs the housing loan, for instance, when the collateral is the house of parents or relatives since the warranty is suspicious for the bank due to possible problems of inherit age, conflicts of interests etc.

Mortgage securities in developed countries are backed by mortgage loans, where the scope of the loan could be a house, a second house, a health clinic, a shop etc., but which at any rate uses this same object as collateral.

The Bank of Albania, in recognition of the Basel directives (related to capital adequacy) acknowledges as a mortgage loan (Regulation on Capital Adequacy, Bank of Albania, decision no. 22, of 24.03.2004) , the loan that concomitantly meets the following conditions:

- Loans which are aimed at purchasing a residential property (i.e. a house, an apartment);
- The borrower is the buyer of this same residential property;
- They have full collateral on a mortgage over a residential property, which is owned by the borrower, and is in use, or is being rented by him.

This has further confused the definition of mortgage loans, in particular by the commercial banks. The reason behind this confusion is the absence of a legal definition for this type of loan in our country. The introduction of such a definition would assist in the creation of the legal conditions for the establishment of the secondary market.

DISTORTIONS OF THE MORTGAGE LOANS MARKET

The implementation of the Basel terms becomes quite difficult, because in Albania there are some restrictive phenomena present such as:

- Many new uncompleted houses have not been registered with the immovable properties registration office yet, as a result of failure to stick to the initial design which could consequently lead to the issuance of the utilization permit, and due to bureaucratic problems in the immovable properties registration office;
- The payment for the house starts with the construction, and not in the end of it, (i.e. the loan is needed in the beginning of the construction works).

Under these circumstances, in order not to impede lending process in Albania, the concept of mortgage loans has been left somewhat evasive, including into mortgage loans even those loans which use as collateral another property, which is however similar to the goal, in the ownership of the borrower

On the other hand, according to the regulation of the Bank of Albania, the category of mortgage loans does not include loans for purchasing other properties such as: construction land, shops etc., or the housing loans which use as collateral commercial properties such as: a shop, since they fall under the risk category and are weighted with a 100% risk. However, there are reservations to this measure as well, since we need to take into consideration that most of the individuals look really for housing loans (for the first house) rather than for investment loans (second house used for leasing). This means that it is difficult to believe that the borrower owns another property to use as collateral. This leads to further distortions because the banks begin to accept as guarantees the houses of parents or close relatives, i.e. co-borrowers. Furthermore, in order to make possible the purchase of houses by a broader range of individuals, some banks have applied several special agreements such as mortgages at carcass, zero level loans, etc.

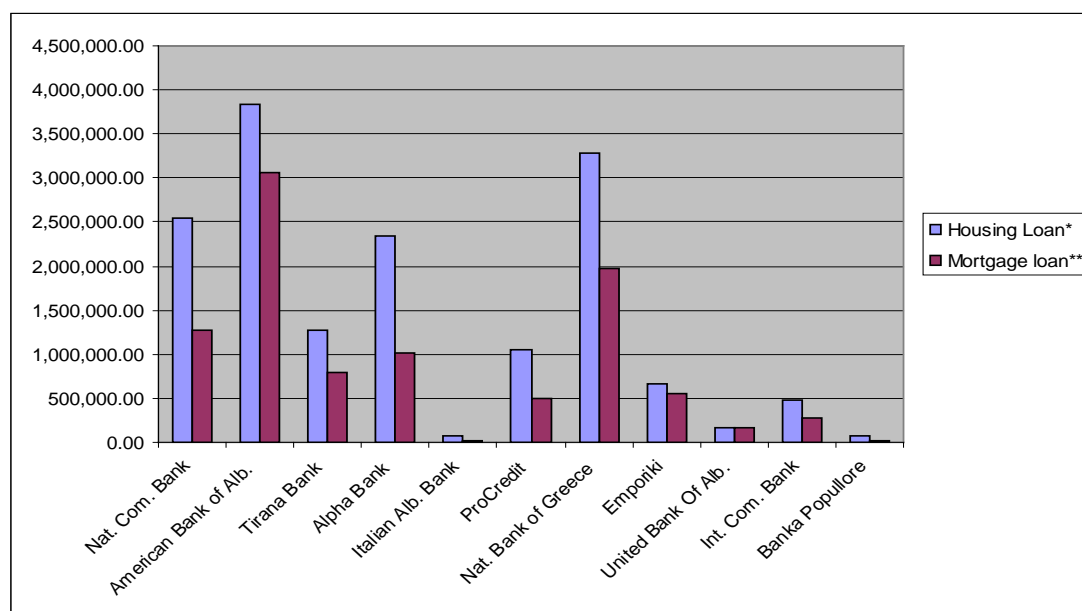
Thus, there are many distortions of the mortgage loans market since the banks report as mortgage loans all of the abovementioned instances, even loans with co-borrowers (while such loans are considered as housing loans, and are weighted with a 100% risk), which is totally against its concept.

These developments of the housing loans market are positive from the social view point for the society in relation to meeting the housing needs, and facilitation of the borrowing process, i.e. making these loans available to an as broad as possible segment of the population. However, on the other hand, only a “clean” mortgage loan can really enable the development of the secondary market, i.e. securing of liquidities (through their sale) which so indispensable for the banks and reducing their risks, as well as for the development of their portfolio by issuing securities backed on these “clean” loans. *The development of the secondary market enhances drastically the potential for financing immovable properties.*

That is why it is important: to have in place the legal base for mortgage loans; to have clearer definitions issued by the Bank of Albania, and monitoring of reporting by the second level banks regarding these types of loans, in order to avoid distortions. Regarding enhanced availability of funds for individuals, this will be made possible through government policies for financing housing (through loan subsidies) and through enhanced banking competition in the mortgage loans market and the housing loans one.

To support this paper, it has been carried out a survey at the second level banks, which participate in the mortgage loan market and at the Bank of Albania, gathering data about the volume of the mortgage loans, housing loans, and real estate loans distributed by them, and other information about implementation of Basel recommendations and reporting the data. Figure 1 indicates better the distortions of the mortgage loans market, which have been identified during the survey.

Figure 1: Ratio Of Mortgage Loans And Housing Loans



*This figure shows the distortions that mean the part of the housing loans that banks report under mortgage loans without being such. That is why gathering of data during the survey has included mainly the notes * and **:*

**Housing Loan (buying or constructing apartment, house or mansion, in city and town)*

***Mortgage Loan (according to the definition of Basel: the scope of the loan is the same subject as the collateral)*

Average ratio of mortgage loans to housing loans is approximately 60%, which means that 40% of the housing loans are guaranteed by other collateral. This ratio varies according to banks, beginning from lower in the lesser experienced banks and with lesser assets in this market to higher rates in larger banks with long history and background. For instance in the American Bank of Albania (oday Intesa San Paolo Bank) (ABA) the ratio is approximately 80% compared to the ratio of 60% in the National Bank of Greece (NBG), and 50% in the National Commercial Bank (NCB). The ratio depends on the policy of the specific bank, the orientation of its assets, and its level of development. For instance, the United Bank of Albania (UBA) has a portfolio of 100% mortgage loans, but we need to consider here their low volume. Hence, we cannot compare this ratio with that of the ABA precisely because they differ a lot from the volume of mortgage loans.

Another issue is that of the system of maintaining of information keeping in the commercial banks. In several instances, during the survey, we had to obtain the information regarding the volume of mortgage loans through the reporting of the banks to the Bank of Albania. For some banks, it has been impossible to obtain information from their database system because of its format. Therefore, based on their reports, in the instance of Tirana Bank, and the ABA there could be data discrepancies regarding the mortgage loans. In addition, in the data obtained from the NCB we cannot distinguish the mortgage loans from zero level credits.

Even though confidence on the accurate reporting by the American Bank of Albania is relatively high, because of its large-scale orientation towards development and enhancement of this product and the long experience since 1999. Whereas Tirana Bank, has a considerable number of loans under the “temporary” loans category in agreement with construction firms, and which are considered as mortgage loans only upon completion of the house and it being mortgaged on behalf of the client, i.e during the second or third year of maturity.

Improving the database system in the second level banks is indispensable not only for their better functioning and for that of the banking system in general, but for more transparency and honest competition in the mortgage loans market. This would facilitate the macro-economic analysis and would assist the decision-makers in their policies (for instance in the housing policy.)

DEVELOPMENTS IN THE HOUSING LOANS MARKET

In particular, during the current days there is a tangible development of the housing loans. Their number has increased drastically, while also there is an increase in the number of eligible clients benefiting from these loans. The procedures are becoming more flexible (regarding their deadlines and loan conditions such as rates, installment, loan term, and eligible clients). There are also efforts being made in the area of marketing of this product. *All of these efforts speak of enhanced banking competition.* The development of this market is the outcome of the development of the overall banking system. In addition, these loans are considered as safe loans for the banks because of the collateral. In addition, the development is due to the very important social aspect of these loans for individuals. *Banking competition regarding this product will help in the facilitation of borrowing terms for many clients.* In the developed countries, the contractual agreement between the banks and client focuses on the installment and not on the interest rates since the housing loans are individual loans, which are repaid by the earnings of the individual, and do not come from the business profit. *Thus, paying no principal for the initial period (in order to facilitate the burden of the client who might not have sufficient income since the first week to repay the installment) and the calculation of an affordable installment for the individual (non-high ratio of installment/earnings) will make this type of loan more affordable.*

Mortgage lending represents a primary objective for few banks, yet. Thus, for instance ABA has managed to disburse on average 40-50 mortgage loans per month. In the NCB, mortgage loans account for 30% of the portfolio, but this bank aims at increasing this percentage since it would lead to portfolio diversification and reduced bank risk. This is despite the fact that there it means more engagement in terms of procedures and not so much income for the bank, reasons which hamper other banks in the development of this product.

Among the bank policies regarding fostering mortgage lending, we may mention launching of affordable packages, while increasing the loan term, and reducing the interest rate, with the final objective for the installment to be as low as possible, perhaps closer to the monthly rent. The purpose behind policy is to adhere to the earnings of the population that are generally low, and this way spreads the product. Special treatment is reserved for the employees of the institutions who get their wages through accounts with the respective banks since this is a guarantee for the earnings. For instance, NCB pursues a special policy for specific groups of population such as public administration, and emigrants. Thus, for instance, for the military officers who work in the Ministry of Defense, NCB offers T-bill rates at +2%, i.e. 1.5% lower than the market. Emigrants have difficulty in terms of borrowing since they do not declare their income, and the bank has to respond to these clients in the currency and rates of their host country, remaining an uncovered segment in terms of the mortgage loans. Therefore, in order to cover this sector, emigrants are asked to provide documentation as to their legality in terms of residence in the host country and regarding their income. Moreover, since the competition in this sector is with foreign banks, these target groups of clients are offered lower rates in euro than resident Albanians. However, the interest rate could be higher than that of the foreign bank, but this difference is compensated with the facilities offered by borrowing in Albania, where we can mention: contractual relations with an Albanian bank; loan destination: a property and a mortgage in Albania; etc.

Other new features that have accompanied the mortgage loan, with the view to enhancing demand from individuals, and facilitating the terms of the mortgage loans are re-financing of mortgage loans and housing loans tied to a time deposit. In the case of the last type of loan, if the individual has a time deposit (in the ABA) in the amount of 30% of the overall loan amount that he needs, then this loan is disbursed by the bank with $\text{Libor} + 2\%$ rate (compared to $\text{Libor} + 5.5\%$ which could be the market). This is an example regarding the calculation of the cost of this type of lending:

Let us suppose that an individual needs a loan of 100.000\$ with a repayment deadline for 10 years, and he has a time deposit of 50.000\$. Thus, the uncovered share of the loan is 50%. Then, to cover 50% of the loan, the $\text{Libor} + 2\%$ is applied, whereas for the uncovered part of the loan, the market rate $\text{Libor} + 5.5\%$ shall apply. Then, the average rate for the mortgage loan, which results from the weighting of the above-mentioned rates, is $\text{Libor} + (0.5 \times 2 + 0.5 \times 5.5) = \text{Libor} + 3.75\%$.

If the annual deposit rate is 2.25% and the income tax is 10%, from the deposit for 10 years, the individual earns $50,000 \times 2.25\% \times (1 - 0.1) \times 10 \text{ vjet} = 10,125\$$.

If Libor is 2.2%, the annual interest rate of the loan is 5.95% and the monthly installment is 1,107.7\$. The total paid interest for 10 years or for 120 months is $1,107.7 \times 120 - 100,000 = 32,924\$$. The net interest paid is $32,924\$ - 10,125\$ = 22,799\$$.

If we are to make the same calculations, but while assuming that the deposit is 100,000\$, so the entire loan can be covered by the deposit, the individual will have to pay a total net interest of 2,387.6\$. Therefore, we notice that the bigger the share of the uncovered loan by the deposit less is the interest that the individual will have to pay.

The two-abovementioned examples, with high deposit amounts are simple for illustration purposes. The individual that is eligible to benefit from this type of loan should have as deposit 30% of the loan, i.e. he should dispose of insufficient funds to purchase the house. Thus, he purchases the house, and pays less interest than normal.

In order to promote housing loans, an article was added to law no. 8402 of 10.09.1998 “On the control and discipline of construction works”, which enables temporary registration since the carcass of the building, due to preliminary crediting of the investor. This law has been applied in a very limited number of cases, and only by few banks such as ABA, NCB, and it calculates as the value of collateral the value of the carcass. In these instances, the carcass is mortgaged on behalf of the construction company, either which plays the role of the co-borrower, or transfers the title to the buyer of the property (but this is very rare since it would mean that the construction company mortgages it twice). Reputable construction firms, who take over the risk of failure of payment from the client, since the execution of the collateral occurs only after the collateral is completed, and mortgaged, are implementing the mortgage since the carcass.

Precisely due to subjective costs of mortgage (twice), difficulties, and procedures for mortgaging the property in the Immovable Properties Registration Office, this type of lending is avoided, and the construction companies primarily do this. The latter are not very interested for this type of clientele since in Albania it is not difficult to find other clients for the finished apartment, so there is still high demand.

Under these circumstances, when the borrowing for purchasing houses, which are not mortgaged (recently finished homes), is impossible if the client does not have in his possession another residential property, and when the manner of the operation of the mortgage at carcass is not common practice, the NCB has introduced zero level loans. Zero level loans are the housing loans since the moment the house has began to be constructed, and for those individuals that do not have other property guaranties. This product is based on a specific contract that the NCB has entered into with several selected construction companies, which means that it is available only for individuals who plan to purchase houses from these companies. He concrete names of the construction companies that have a contract with the NCB for “Zero Level” product: Edil Al-It sh.p.k. (Tirana), Beton Plus (Korçë), Ferrar sh.p.k. (Tirana), Best Konstruktion (Durrës), Teuta Konstruktion (Durrës), Gintas alb Konstruktion (Tirana), Siqeca (Vlora), Sefbi (Tirana), Lura sh.p.k. (Tirana), Ndregjoni sh.p.k. (Tirana), Vlora sh.p.k. (Vlora), Arginert Filia Al El (Tirana), IRZ (Tirana), 4 Grykët (Tirana), Ndërtim Vila (Tirana), Enil-co (Tirana), Besa R (Tirana), Lerenti (Tirana).

The client is credited up to 60% of the value of the house based on a tripartite contract, i.e. bank-construction company- construction company client, without requiring the client to pledge any property that he owns. The bank issues a credit to the individual (the client), the amount of which it moves temporarily under the individual’s account, but the bank pursues the action until this amount is transferred in the account of the builder, with whom the agreement has been entered into. The bank signs with the individual an agreement contract to give the bank the future mortgage. The individual and the builder have both entered a transaction contract. The individual begins to pay off the installments since the moment of the receipt of the credit, and the moment the construction is finished and the house is mortgaged, the house is pledged on behalf of the bank, and the credit is repaid same as a pure mortgage loan. The interest for such loans usually is 1% lower than other types of loans for houses, whereas to the builder for the rendered service, the bank keeps a certain commission fee (lower than 1%). The builder himself, except for those cases when the builder does not “need” to get clients this way (since in Albania houses are still being purchased with cash money) and consequently the builder charges this commission to the client, pays this commission. Therefore, if the client fails to repay the loan, the bank will not have any collateral to execute. The bank is based only on the good reputation of the construction company.

Tirana Bank and ABA are implementing a similar contract, with the only change that the builder places a temporary pledge as a guaranty, which could be a shop for instance. In addition, this is a temporary contract until the moment of mortgaging the purchased house (a moment when the loan is considered a clean mortgage loan). So, the loan is guaranteed temporarily by a mortgage, no matter if it is in the ownership of the borrower, the builder or a third party, until the moment of the mortgaging of the property for which the loan has been issued. The repayment of the principal is up to the wish of the client, and can start immediately upon the receipt of the credit (the first installment after one month according to the French method for the calculation of the installment) and it can be postponed until up to one year, benefiting of a grace period. If the client chooses the grace period, say 9 months, at this period he will pay only monthly interest for the total amount, since it has not yet began the depreciation.

CONCENTRATION OF MORTGAGE LOANS MARKET

The concentration of the market is an element that determines the direction of market progress and results, as well as the type of competition. Two extreme cases of concentration are perfect competition (concentration is small) and monopolistic competition (concentration is absolute).

One type of concentration index is the Herfindal Index (H), which is often used and with qualitative results regarding banking system concentration as in the instance of concentration of deposits, assets, or credits. That is why even in the case of the mortgage loans market we may use the H index.

$$\text{Indeks H} = \sum_{i=1}^n (S_i - \bar{S})^2 + \frac{1}{n} \quad (1)$$

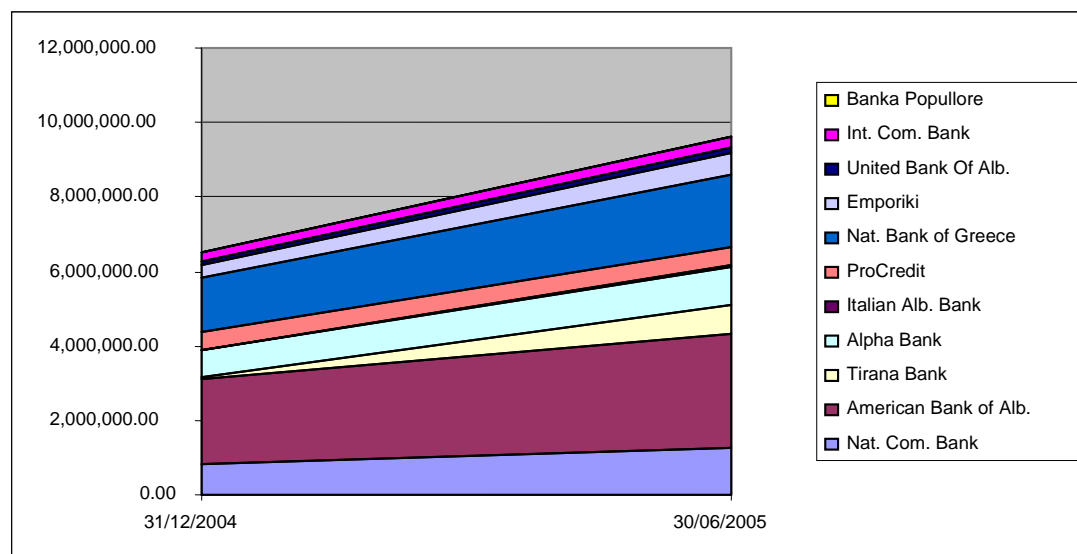
where n represents the number of banks in the banking system (in our case in the mortgage loans market), S_i represents the weight of each bank in the banking system (in our case according to the volume of the mortgage loans) and \bar{S} is the average weight of a bank in the conditions of perfect competition. The H index fluctuates between the level $1/n$ (perfect competition) and one (monopolistic competition). The closer to one, the more concentrated is the market, whereas the closer to the value $1/n$, the more competitive is the market. Let us calculate the H index for the mortgage loans market for the period 31/12/2004 until 30/06/2005, since during this period we have the case of the addition of another bank in this market.

In these two dates, the number of banks in the banking system is respectively 10 and 11 (Bank Popullore is added), and hence $1/n$ is respectively 0.09 and 0.1. From the application of the formula with the data of the survey the conclusion is:

$$\text{Indeks H}_{31/12/2004} = 0.208 \quad \text{Indeks H}_{30/06/2005} = 0.184$$

The value of this index, being relatively close to the value of $1/n$ is an indication of a competitive market. There is a declining trend of concentration, even though the reference period is very short (only 6 months). The majority of the banks began their normal mortgage lending activity only in 2004. The ABA, which is the leading bank in this market, started this activity in 1999, whereas the other two important banks, namely NGB and NCB started this activity respectively by end of 2002 and in 2003. Therefore, we are talking about a *brand new market, which is nonetheless competitive*. The distribution of weights of each bank in the mortgage loans market is presented in figure 2.

Figure 2: Progress And Weight Of Each Bank In The Mortgage Loan Market



This figure shows the progress and the weight of each bank in the mortgage loan market covering two years 2004 and 2005.

This competition has kept increasing since the H was reduced from 0.208 to 0.184. Enhanced competition (with reference to both dates) is explained with *the addition of another bank in the market (Banka Popullore) and with the increase of the activity of the banks*, which has affected the re-distribution of weights. For instance, Tirana Bank from 1.34% in 31/12/2004 in 30/06/2005 occupies a weight of 8.25%, or the NCB from 12.67% has increased to 13.24%. Meantime, the weight of other banks has decreased, for instance the ABA from 34.74% in June 2005 had 31.71%, and so on and so forth.

Reduced concentration or otherwise put enhanced competition is a very positive indicator of the mortgage loans market since it increases the availability of housing funds for individuals with a lower cost.

REFERENCES

Bank of Albania “Regulation on Capital Adequacy”

EBRD (April 2004) *Mortgage Loan Minimum Standards Manual*

INSTAT (2000-2004) “Struktura dhe ndryshimet e ekonomisë shqiptare”

Kripa, Dorina (2007) Monograph “Mortgage loan and Real estate, case of Albania”

Luis (2001) “Mortgage markets in emerging Markets”

University of Wisconsin-Madison (1999) “Emerging real estate markets in metropolitan Tirana, Albania”

www.bankofalbania.org

SHORT BIBLIOGRAPHY

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MEAN REVERSION IN STOCK RETURNS

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ABSTRACT

In view of the limited historical data and conflicting evidence regarding mean reversion in stock returns, there is a need for more empirical studies using innovative methods and new data. This study employs block bootstraps to approximate the true distributions of returns and expand the sample size. Unlike previous studies, which use the value-weighted and equal-weighted returns of U.S. stocks as proxies for returns on large and small company stocks, respectively, this study uses returns on indexes of large and small company stocks provided by Ibbotson Associates. The variance ratios and regression results indicate fairly strong evidence of mean reversion in large company stock returns, particularly for three to four years, during 1926-66. During 1967-2007, large company stocks display very weak mean aversion for one year and mean reversion over five years. There is strong evidence of mean reversion for small company stocks over four to five years in the first subperiod, and weak evidence of mean reversion in 1-year returns, and moderate evidence of mean reversion in 5-year returns in the second subperiod. These findings indicate that, although mean reversion in stock returns has weakened in recent decades, it persists, particularly for small company stocks.

DETERMINING FACTORS RELATED TO PAYMENT DELAY PREDICTION FOR WIDESPREAD NATURAL DISASTER INSURANCE CLAIMS

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ABSTRACT

In the aftermath of major natural disasters such as floods and hurricanes, many insurance claims can be filed in a short time. Claims servicing businesses must manage the process of assigning claims to adjusters, monitoring adjuster and claim progress, and providing information to the insurance company in a timely manner. Many factors influence how quickly this process moves from initial assignment to final payment for both the claimant and the adjuster. These factors include everything from distance from the adjuster's base of operation to the loss location, to the quantity of photographs taken by the adjuster. This study reports the results for a quantitative analysis of factors affecting the time from initial assignment of a specific insurance claim to a claims management service, to the receipt of payment for the claim, for several major hurricane events. It is expected that only certain factors will have significant impact on the time of a claim. By identifying the key factors, insurers and claims handlers can focus management attention on the aspects of the process that will have the most effect on the timely and successful closure of claims, saving the firm money and ensuring quicker payment to both claimants and adjusters.

JEL: G22, C20

KEYWORDS: Insurance, regression analysis, cash flow prediction, timing of payments

BIOGRAPHY

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COLLATERALIZATION OF ASSETS, OVER-EXTENSION OF CREDIT, AND FREE TRADE: AN EMPIRICAL ANALYSIS IN SEARCH OF JUSTICE AND AN EXPANDING MIDDLE CLASS

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David Coulliette, Asbury College

Ken Rietz, Asbury College

ABSTRACT

In the classical framework of thought, justice is viewed as fairness, power is restrained, the disadvantaged are empowered, and the interests of the society as a whole are being advanced. If that is the case then, sectors in the economy would work together in harmony (today that would apply to the production and financial sectors), while convergence would be observed across nations. This paper discusses first international trade as a venue and instrument of justice via capital formation, which in association with legal, social, physical, and financial infrastructures creates and sustains a middle class, without which democracy cannot function (Zakaria, 2003). Finally, the paper tests the above hypothesis by employing a vast number of factors and data from forty-four countries (categorized as frontier, emerging, and developed) and by using the support vector machine (SVM) algorithm. The empirical results verify the hypothesis that trade is a source of creating a middle class, and thus serves as a venue of distributive and commutative justice. The paper concludes with a thesis (which still needs to be tested) that when the financial interests of collateralization and securitization, are separated from production interests at a global level, then financial crises take place, the middle class is destroyed and injustice prevails

INTRODUCTION

In the *Republic*, Socrates refuses and rejects the argument of Thrasymachus who argued that justice always serves the interests of the rulers of the society, the interests of the stronger in our midst. For Socrates justice is the ultimate responsibility of the person and of the State, and should be delegated according to ability and place. Justice cannot be viewed as punishment, retribution or revenge. In ancient times, in Platonic terms, justice was a matter of social harmony and in Christian ethics; it is a matter of mercy. In economic terms we can talk about just wages, just distribution of rewards and of income. Issues of justice come at the forefront when there are exchanges. In his famous 1971 book, *The Theory of Justice*, John Rawls takes the liberal approach to find the proper balance between liberty and equality, with a particular concern for the least advantaged. A few years later his colleague, Robert Nozick takes a more libertarian approach to justice defending a strong notion of entitlement where everyone gets what he or she is entitled to, based on endowments, without any reference to needs or inequalities.

We have the impression that any reference to justice while neglecting the concept of community (ecclesia in theological terms) would have horrified Plato, Socrates, Aristotle and their followers. Cicero long argued that the leading virtue in a society is justice and that the definitive ingredient of justice is merit. Therefore, meritocracy in society is a necessary condition for justice to be administered. Meritocracy at the same time requires the observance of the rule of law, because the rule of law distributes rights and a just law advances fairness. (In the theoretical framework below this will be titled the legal infrastructure.)

If production responsibilities are designated according to merit and ability (Plato and Cicero) then, the responsibility of justice is to enable the individuals across nations to produce according to their natural

and enhanced capabilities and endowments. If we take the concept of justice a step further, we would probably understand that justice is inseparable from righteousness at least in the Platonic and Aristotelian paradigms. In that sense, Plato's central claim of righteousness is "performing the functions for which one's nature is best fitted." It is also interesting to note that both Plato and Aristotle defend non-egalitarian views of justice.

In *The Ethics*, Aristotle gives us a complex concept of justice. The literal meaning of the word justice in Aristotelian ethics is the meaning of righteousness, which is the form of justice that represents complete virtue of the soul which cannot be understood unless it is comprehended within the framework of community, *i.e.*, in relationships. There is no doubt then, that this Aristotelian understanding of justice fits well into the ecclesiastical paradigm of *koinonia*. Aristotle divides this kind of justice into distributive and rectificatory. For Aristotle, the student of Plato, justice should be viewed as fairness.

FREE TRADE AND CAPITAL FORMATION

The pursuit of higher ideals as well as intellectual achievements could only take place when the fear of starvation and the fear of lacking the necessities of life disappear. For the latter to take place, we have to reach a point of creating a middle class that is sustainable. Justice in such a society, where middle class can be created and be sustained, is not achieved overnight, but over time, and its achievement is determined by institutional arrangements.

This is exactly where free trade fits. Even if it is not the purpose of the paper to exemplify the advantages of free trade it would be proper to review that according to both theoretical and empirical evidence, free trade could become an instrument of convergence, of uplifting the poor from their misery, of restraining monopoly and oligopolistic powers, of advancing opportunities to the least in the society, of offering new horizons for the disadvantaged, and certainly of bringing better understanding and dialogue among rivals.

From that perspective international exchanges and international trade becomes an instrument of enhancing the capabilities of persons and especially of the least advantaged. Montesquieu (1989) shows through historical examples, how harbor cities and nearby communities to the port thrived by immigrants who came to those cities to find jobs. The poor found good fortune where international exchanges were taking place, whether it was at Tyre, Venice or the cities of Holland. The ability of the port cities to attract immigrants signifies the concept of mobility, because we all know that without mobility there cannot be social progress.

However, if we read carefully Montesquieu's arguments we will clearly see the underpinning theory which advocates that capital formation is the essence of establishing the framework of prosperity for the average person. Capital formation then could become a cornerstone of having a peaceful society that cares for the least advantaged, for the sustainment of a middle class, and for higher values and ideals. Capital formation and the ability to generate stock of capital is the essence of economic activity and commerce in a society that generates jobs, incomes, and the ability to consume the necessities of life.

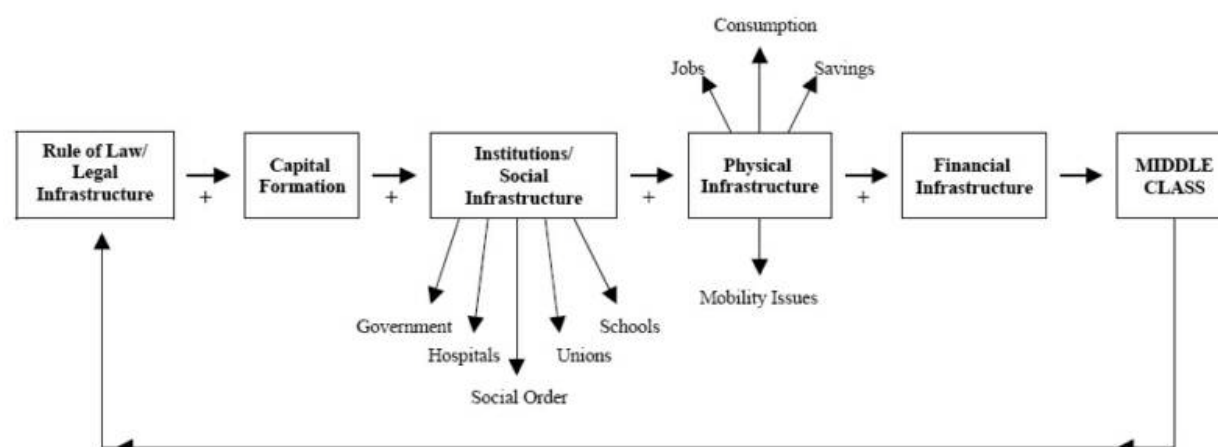
THE THEORETICAL FRAMEWORK

We are very fortunate to have the latest work published by William Bernstein entitled, *A Splendid Exchange, How trade shaped the world*, (Bernstein, 2008), who in a fascinating and elaborate way reminds us that from Mesopotamia in 3000 B.C. to the globalization debates in the Seattle battles, trade is the foundation of capital foundation. Bernstein in his study reminds us how the early traders floated ivory, copper and barley through the Tigris and Euphrates and he reminds us how the Greeks fought wars in order to advance the concept of trade. He also tells us the story of the Chinese and how they carried silk from China to Rome, and how the Portuguese traded spices in the sixteenth century. When he reviews

for his readers how the British came to Jamaica and how American trade policies in the late nineteenth and early part of the twentieth century became the key elements of economic growth, then we could concur with him and Montesquieu that trade is the foundational cornerstone of capital formation.

To that, of course, we should add that it was the ability that the U.S. extended to Europeans to reconstruct themselves and buy American products that helped not only the American producers but also the local communities in Europe for their reconstruction efforts, for employment, for income, for capital formation, and for growth. So unless there is international trade, unless there is the liberty to move things, to buy imported goods, to move capital, to move technology, to move people across nations and communities, unless there is freedom to move financial capital across oceans, there could not be a case of capital formation. The latter is the seed that is necessary for any kind of infrastructure to be produced whether that infrastructure is in the social sector (hospitals or schools), in a physical form (highways, roads, bridges and water systems), or in the financial field (banks, exchanges, brokerages). The buildup of these kinds of infrastructures will create jobs and by creating jobs there will be savings and that savings will become the seed for loans and for credit extension which is necessary for business formation. Now, all the above could be represented in Figure 1.

Figure 1: Schematic Diagram of Infrastructure Support of Middle Class



In a framework like the one, above free trade is advanced for the sake of justice. Therefore, free trade is not an end in itself, it is a means to a higher end and that higher end is to treat equals equally. When we contemplate on the above arguments, we will wonder what has been happening to the distribution of income across nations, what has been happening to inequality and poverty or the concept of convergence among nations? Xavier Sala-i-Martin (Sala-i-Martin, 2006) published a well- documented survey of the world distribution of income, and he concluded that we have been experiencing falling poverty. At the same time he shows that convergence is taking place around the globe, primarily in continents and nations that were characterized prior to the 1970s by extreme poverty and divergence. His chief examples are the nations of China and India along with the whole region of Southeast Asia. Empirical studies throughout the world have documented that free trade of goods, capital, and technology not only reduce prices and enhance incomes, but also act as the conduit for transferring the technologies that enhance productivity, increase competition and therefore, stimulate industries to become more efficient. Competition stimulates efficiency, and over the years study-after-study has documented this phenomenon. Therefore, when we look at studies by Keller (2003), Hay (2001), Edwards (1998), Crafts, (2000), Harrison (1999), and Sachs (1995), we can see that overall economic growth as well as productivity growth can double and sometimes triple when industries become less sheltered from foreign competition.

Mexico is a classic case because it can be demonstrated that after its trade liberalization in 1985 its productivity increased dramatically. The same happened in India as well as in South Korea. These productivity gains, which we clearly understand to be economic gains, take place due to the new and more efficient allocation of resources within industries as well as across industries. Empirical studies have also shown that trade liberalization over the past few decades in Spain, Chile and New Zealand have contributed to rapid growth in productivity as well as greater growth in their economy. While there might be a dispute as to whether trade is directly responsible for greater growth, studies actually diverge in their conclusions (see Franklen (1999) or Rodriguez (2001)). We do have, however, a consensus which says that trade may not be directly correlated with growth, however it stimulates growth indirectly through investments, i.e. we have sufficient evidence of indirect relationship where growth increases in countries via the mechanism of international investments, which in our paradigm is the cornerstone of capital formation. In addition to that, there is ample evidence to point that domestic institutions perform better, and are less corrupt when there is open trade and competition and when nations are open to each other in an accountable manner (Irwin, 2002). We believe that the data in Table 1, taken from Bernstein's book demonstrate our argument, in the sense that open and free trade cultivates the means for the advancement of persons' capabilities via higher incomes which enable them to finance access to mobility networks.

Table 1: Effect of Trade Policy on Per Capita GDP (Bernstein, 2008)

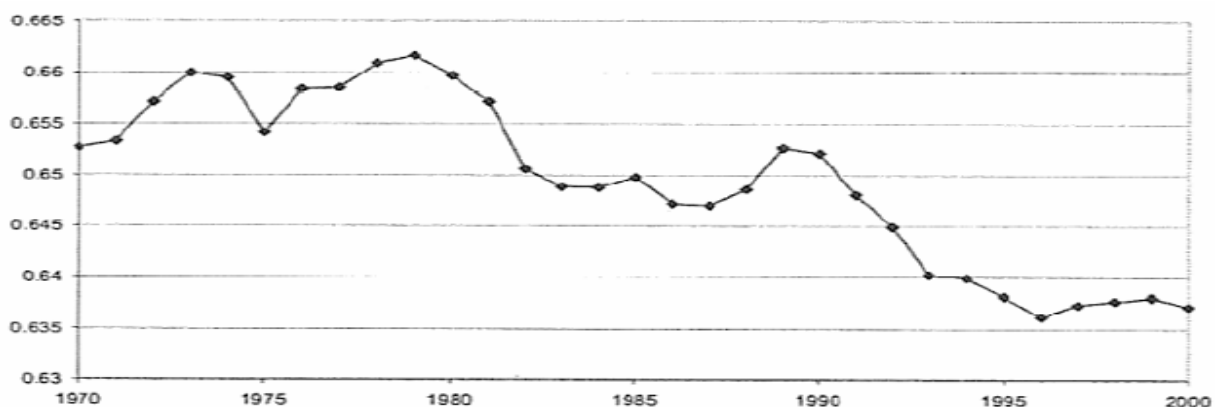
Per Capita GDP in Nations Open and Closed to World Trade					
Always Open Nation	2006 Per Capita GDP	Always Closed Nations	2006 Per Capita GDP	Always Closed Nations	2006 Per Capita GDP
Barbados	\$17,610	Algeria	\$7,189	Iran	\$7,980
Cyprus	\$21,177	Angola	\$2,813	Iraq	\$2,900
Hong Kong	\$33,479	Bangladesh	\$2,011	Madagascar	\$900
Mauritius	\$12,895	Burkina Faso	\$1,285	Malawi	\$596
Singapore	\$28,368	Burundi	\$700	Mauritania	\$2,535
Thailand	\$8,368	Central African Rep.	\$1,128	Mozambique	\$1,379
Yemen	\$751	Chad	\$1,519	Myanmar	\$1,693
		China	\$2,001	Niger	\$872
		Congo	\$1,369	Nigeria	\$1,188
		Cote d'Ivoire	\$1,600	Pakistan	\$2,653
		Dominican Rep.	\$7,627	Papua New Guinea	\$2,418
		Egypt	\$4,317	Rwanda	\$1,380
		Ethiopia	\$823	Senegal	\$1,759
		Gabon	\$7,055	Sierra Leone	\$903
		Haiti	\$1,791	Somalia	\$600
				Syria	\$3,847
				Tanzania	\$723
				Togo	\$1,675
				Zaire	\$774
				Zimbabwe	\$2,607

IS IT CONVERGENCE OR DIVERGENCE?

Of course, there is plenty of literature that reviews the distributional effects of globalization. We could point out reviews by Harrison (1999), Wood (1999), Goldberg (2007). The latter, points out countries that have experienced great forms of globalization - either through more imports and exports or through the magnitude of capital flows - have experienced higher levels of inequality. Particularly on pp.48-49 of that review, the authors point out that countries from different continents have experienced either significant or slight increases in inequality, with the latter being measured either as skill premium between skilled and unskilled workers, or by the Gini coefficient, and sometimes by consumption or income patterns. We need to point out that, as we mentioned earlier, the Sala-i-Martin (2006) article is very emphatic in demonstrating that worldwide poverty has been reduced and convergence has been achieved through globalization.

Sala-i-Martin points out that China has a lot to do with this kind of convergence, and he shows that if we use the \$2 per day income line, then we could clearly see that poverty estimates have experienced a significant decrease in China between 1980 and the beginning of the twenty-first century, from about 48% to less than 15%. For China, Sala-i-Martin reports that more than 250 million people escaped poverty because of globalization. He further reports the same thing for countries such as Indonesia and Thailand with the only exception is Southeast Asia being Papua New Guinea. Overall, and excluding China, more than 200 million people escaped poverty because of globalization in the last quarter of a century. He composes what he calls the WDI (World Distribution of Income) and presents an impressive time-series table of the WDI from the 1970s to the beginning of this century. In that table, we could clearly see that all measures of inequality have been declining, whether we measure inequality using the Gini coefficient or the variance in the logs of income. Moreover, he shows that that ratio of income of the top twenty percentile to the bottom twenty percentile, as well as the ratio of income of the top ten percentile to the bottom ten percentile has been experiencing significant decreases by as much as 30%. Figure 2 below summarizes the WDI from the 70s to the beginning of the twenty-first century.

Figure 2: World Distribution of Income (Sala-I- Martin, 2006)



The argument of this paper is that the significant reduction in inequality which has been empirically demonstrated by Sala-i-Martin is the effect and the outcome of capital formation using the means of international trade. Trade liberalization becomes the venue or vessel of empowering people to experience

upward economic mobility. It is like having many people at a port on the coast and some of them board a vessel, the vessel empowers them to get better acquainted with technologies, to have better access to capital and other resources, exposes them to ideas, to better education, because it takes them away from the port, to new places. The distance between those who are left behind at the port and those who are now sailing away from the port may be rising initially, but the ones who are on the vessel are the ones who are experiencing the phenomenon of being part of the middle class. In another analogy, we can think of a moving escalator, the international trade becomes the escalator of moving people up, enjoying better educational opportunities (social infrastructure), better health care provisions (again, social infrastructure), being able to move around and experience upward mobility, get better jobs, save and invest, i.e., take advantage of the physical and financial infrastructures.

The country, through export-led growth, experiences physical and social infrastructure investments, which eventually empowers the people and the middle class to enjoy savings. Those savings will become the seed for a financial infrastructure, both local and foreign-owned. The emergence of this kind of infrastructure will finance the formation of new vessels, which in turn will bring more people from the port/coast to the ocean, thus sustaining the creation of the middle class.

THE EMPIRICAL RESULTS: METHODOLOGY, SELECTION OF VARIABLES AND COUNTRIES

Since part of the research is to determine which factors in the four infrastructure areas would contribute to the emergence of a middle class (once capital formation has taken place via the means of international trade), the first (and admittedly most subjective) step was to develop an initial list of factors that describe the infrastructure for each country. Data were collected from different sources, such as the World Bank, the IMF, different branches of the UN (UNDP, and UNCTAD), and the World Factbook for the 2005 year. Note that the first step of the algorithm scaled the data by dividing by the maximum absolute value that occurred for each data variable, to prevent the larger-scale factors (such as exports) from overwhelming the smaller-scale factors (such as student-teacher ratio) in the model. This allowed us to readily compare the effectiveness of the coefficients that we obtained.

Since part of the purpose was to establish a proof of concept for using the Support Vector Machine (SVM) and a broad scope of infrastructures, originally it was decided that limiting the number of countries would achieve the purpose. We selected small lists of countries under each of the three categories: frontier, emerging, and developed. Frontier countries are ones that most economists would agree have very few people in the middle class, but have the potential, such as sufficient resources, to develop one. Emerging countries have a middle class that is growing. Developed countries have a mature and stable middle class. An initial run used a very small sample of countries in each category. It was exceedingly successful, prompting an expansion of the lists. This paper details the results of the newer results.

DISCUSSION OF ALGORITHM AND INITIAL RUN

The mathematical technique used to determine the significance of the factors was the Support Vector Machine (SVM). This is a classification method from learning theory that uses a set of input training data $\{(x_1, y_1), (x_2, y_2), \dots, (x_k, y_k)\}$ where the x_i represents vectors of dimension n and the y values are assigned a value of +1 or -1, depending on whether the point is inside a set or not. For the purposes of this study, the x vectors hold the list of factors that describe the state of a given country that may be characterized as having a middle class ($y = +1$) or not ($y = -1$).

In common with most learning algorithm, the SVM algorithm operates in two phases. In the training phase, the SVM model with a linear kernel takes the training data and produces a bias value b and a

vector \mathbf{c} (dimension n) of coefficients. The testing phase of SVM is then run on all the data, using just the n -dimensional vectors even if the y -value is known. The algorithm will calculate the dot product of the coefficient vector with the data vector and then subtract off the bias value. If the resulting number is positive, the algorithm predicts a y -value of +1; if it is negative, the algorithm predicts a y -value of -1. Running the algorithm on the training data verifies that the training phase worked well. This particular implementation of the SVM algorithm uses what is termed a linear kernel. If this kernel works, then increased data and a non-linear kernel should work much better. A non-linear kernel has an additional step when the data is transformed non-linearly before the coefficients are determined.

First, we ran SVM on a collection of 44 countries using 45 factors for each country. The training set was the collection of 17 frontier countries and 10 developed countries. The testing phase consisted of finding the predictions for those as well as the 17 emerging countries. (The same process was used during the reduced factor run of SVM.) The results are summarized in Table 2 below, giving the SVM output value, but not the prediction, which is easy to determine from the sign of the output. The first 17 rows of the table list the frontier countries, the next 17 rows list the emerging countries, and the last 10 rows list the developed countries. There are also two columns. The first numeric column gives the SVM output using all 45 factors for training and testing. The other numeric column will be explained below. The results show very clearly that the SVM algorithm (even with the linear kernel) works very well. The frontier countries, except for Thailand, all fall into the SVM output range of -1.0 to -1.6; the emerging countries mostly fall in the range from -0.8 to 0.0; the developed countries, except for South Korea, fall in the range 0.6 to 1.5. These results, especially for the frontier and developed countries, form a primary validation of the SVM algorithm; it does seem to be doing what we want it to do. The separation between the ranges for the different categories of countries also seems remarkably large, providing further evidence that the algorithm is working.

REDUCTION OF FACTORS

It could easily be argued that with 45 factors and 44 countries, it is easy to expect results of this caliber. So, we attempted to reduce the number of factors used, still regarding the conceptual framework. The factors used in the remainder of this discussion are as follows:

- ❖ For physical infrastructure:
 - Paved roads in kilometers per capita
 - Number of cell phones per capita
- ❖ For social infrastructure:
 - Amount spent on healthcare per capita
 - Literacy Rate
- ❖ For financial infrastructure:
 - Private sector credit as a percent of GDP
 - GDP (PPP) per capita
- ❖ For legal infrastructure:
 - Corruption index (Transparency International)
- ❖ For international trade (in dollars):
 - Exports
 - Imports per capita
 - Foreign reserves per capita

Table 3 below lists the output of the SVM algorithm using only these ten factors, in the second numeric column. The table below lists these ten factors, and the coefficients that the SVM algorithm generates for each. (It should also be noted that results equivalently good can be obtained with only six factors, showing that SVM is more than adequate for separating the categories of countries.)

Table 2: SVM Results with All Factors and Reduced Set

Country	45Factors	10 Factors
Albania	-0.9999	-1.0479
Angola	-1.5701	-1.3473
Bolivia	-1.0987	-1.2265
Ethiopia	-1.6106	-1.4777
Georgia	-1.2053	-1.1505
Ghana	-1.4369	-1.2124
Guatemala	-1.1876	-1.0855
Indonesia	-1.2804	-1.2320
Kazakhstan	-1.0000	-0.8798
Kenya	-1.4301	-1.3824
Lebanon	-1.0003	-1.0088
Morocco	-1.1062	-1.0533
Nigeria	-1.4359	-1.3758
Peru	-1.0963	-1.0486
Philippines	-1.1356	-1.1535
Thailand	-0.9608	-0.8136
Venezuela	-1.0001	-1.0002
Argentina	-0.6834	-0.7224
Botswana	-0.4742	-0.5624
Brazil	-0.7782	-0.9008
Chile	-0.4801	-0.3891
China	-0.1282	-0.6589
Czech Republic	0.4781	0.0827
Egypt	-1.1327	-1.1795
India	-1.1646	-1.1560
Iran	-1.1666	-1.0534
Malaysia	-0.2523	-0.4184
Mexico	-0.8208	-0.7842
Poland	-0.4681	-0.4366
Romania	-0.8441	-0.7429
Russia	0.0256	-0.6292
South Africa	-0.5709	-0.5240
Turkey	0.5125	0.8718
Ukraine	-0.5202	-0.7147
Australia	0.9445	1.0000
Canada	1.0754	1.0976
France	1.2936	1.0998
Germany	1.4943	1.5142
Japan	1.5026	1.0235
Republic of Korea	0.1209	-0.0290
Singapore	0.9340	0.9998
Sweden	1.0516	1.2535
United Kingdom	0.6674	1.0005
USA	1.4181	1.5219

Table 3: Reduced Factor Set

Factor	Coefficient
Paved roads in km per capita	0.2416
Number of cell phones per capita	0.3675
Amount spent on healthcare per capita	0.7636
Literacy rate	0.05407
Private sector credit as a percent of GDP	0.1571
GDP (PPP) per capita	0.9074
Corruption index	0.8518
Exports (billions USD)	0.4490
Imports per capita	0.3133
Foreign reserves per capita	0.2819

The following comments are in order: First, all developed countries, with the exception of South Korea, show up with SVM output values in the appropriate range. This exception appears puzzling at first glance, but an examination of the data shows that it is almost entirely due to a value of the corruption index that is considerably lower than for other developed countries. Second, this time only the Czech Republic shows with a positive prediction, although Turkey is very nearly positive. This complies with the liberalization and openness that both countries have exhibited over the last two decades, both most likely the result of the incentive provided by the future possibility of membership in the European Union. We could then, make the claim that international openness and exchanges serve the purpose of forming capital and thus, advancing the formation of the needed infrastructures which in turn will lead to the creation of the middle class. Third, the relatively weak positions of Egypt, India, and Iran need to be reviewed in a time series before any conclusion is reached... However, it is also worth mentioning that just by trade alone China performs better in the SVM, a fact which by itself could help us understand a little better the value of international trade in forming the necessary cornerstones that a middle class needs.

CONCLUSION: A WORD OF CAUTION AND DIRECTION FOR FUTURE RESEARCH

The empirical part of this paper should be viewed as a proof-of-concept attempt for using a multi-factor and linear approach to quantifying the extent to which international trade forms the basis of capital formation, which in turn advances the formation of infrastructures that create a middle class. These results seem to indicate that using international trade and the infrastructures as have been described above along with the SVM algorithm, is a feasible methodology, and is worth continuing in broadly the same direction.

Our word of caution refers to the outcomes that occur when the financial sector's interests diverge from the real economy's interests. When efforts are being made to sustain prosperity with paper means rather than real assets and real production, a divergence occurs between the real and the financial sector. The latter will tend to produce paper assets which will be over-collateralized, over-securitized, for the purpose of generating significant short-term profits. Table 4 shows the explosion of derivatives and other related instruments (CDOs, CLOs, etc.) in the last few years. It demonstrates the extent of irrational collateralization of "assets", where the financial sector keeps pushing for more and more securitization of paper assets, which will be sliced into pieces and sold to individual and institutional investors.

Of course, it seems that we are just starting to learn the lesson that these paper-assets are nothing more than paper, i.e. there is nothing behind them. This is the phenomenon of extreme and irrational securitization and collateralization that is taking place in the U.S. and the EU, and which has been destroying the financial sector, because it can only create bubbles and bubbles usually burst. The bursting of the bubbles will create in turn instability not only in the economic sector but also in the political and social sectors, and therefore the whole economy's cohesiveness may become unstable and questionable,

which eventually may lead to significant destructions. As direction for future research, it would be interesting to identify the possibility for economies to establish a rule by which they collateralize and securitize assets in a way that will not destabilize the economies. The proposal for future research would be to form an index of internationalization of the economy - whether this is imports and exports as a fraction of GDP, foreign reserves, FDIs, currency swings, technology transfers, etc – and use this index as the compass/anchor of collateralization and securitization, so that the interest of the real economy (production) are not disassociated from the interests of financial capital, and thus do not jeopardize the sustainment of the middle class via misallocation of resources.

Table 4: Outstanding Over-the-Counter Derivatives (Bank of International Settlements, 2008)

Amounts outstanding of over-the-counter (OTC) derivatives										
By risk category and instrument										
<i>In billions of US dollars</i>										
Risk Category / Instrument	Notional amounts outstanding					Gross market values				
	Jun 2005	Dec 2005	Jun 2006	Dec 2006	Jun 2007	Jun 2005	Dec 2005	Jun 2006	Dec 2006	Jun 2007
Total contracts	281,493	297,670	369,507	414,290	516,407	10,605	9,749	9,936	9,682	11,140
Foreign exchange contracts	31,081	31,364	30,091	40,239	48,620	1,141	997	1,134	1,264	1,343
Forwards and forex swaps	15,801	15,873	19,395	19,870	24,525	454	406	435	468	492
Currency swaps	8,236	8,504	9,669	10,767	12,291	549	453	533	599	617
Options	7,045	6,987	9,027	9,602	11,804	129	138	166	196	235
Interest rate contracts	204,795	211,970	261,960	291,115	346,937	6,699	5,397	5,436	4,820	6,057
Forward rate agreements	13,973	14,269	18,117	18,668	22,809	31	22	25	32	43
Interest rate swaps	163,749	169,106	207,047	229,241	271,853	6,077	4,778	4,831	4,157	5,315
Options	27,072	28,696	36,800	43,206	52,275	502	507	579	631	700
Equity-linked contracts	4,551	5,793	6,782	7,488	9,202	382	582	671	853	1,116
Forwards and swaps	1,080	1,177	1,430	1,767	2,099	68	112	147	166	240
Options	3,464	4,617	5,351	5,720	6,603	294	470	523	686	876
Commodity contracts	2,940	5,434	6,394	7,115	7,567	376	871	718	667	670
Gold	288	334	456	640	426	24	51	77	56	47
Other commodities	2,652	5,100	5,938	6,475	7,141	351	820	641	611	623
Forwards and swaps	1,748	1,909	2,188	2,813	3,447					
Options	904	3,191	3,750	3,663	3,694					
Credit default swaps	10,211	13,908	20,392	28,650	42,580	188	243	294	470	721
Single-name instruments	7,310	10,432	13,873	17,879	24,239	136	171	186	278	406
Multi-name instruments	2,901	3,476	6,479	10,771	18,341	52	71	109	192	315
Unallocated	27,915	29,199	35,928	39,682	61,501	1,818	1,659	1,683	1,608	1,233
Memorandum item:										
Gross Credit Exposure						1,897	1,900	2,029	2,034	2,669

REFERENCES

Aristotle (1985), *Nicomachean Ethics*. T. Irwin, trans., Hackett, IN

Bernstein William (2008), *A Splendid Exchange*, Atlantic Monthly Press, NY

Chen, P.-H. & Lin, C.-J. & Scholkopf, B. A Tutorial on v-Support Vector Machines, [available at <http://www.csie.ntu.edu.tw/~cjlin/papers/nusvmtutorial.pdf>] Crafts Nicholas (2000), *Globalization and Growth in the Twentieth Century*, IMF Working Paper, March

Edwards Sebastian, (1998), *Openness, Productivity and Growth: What Do we Really Know?* The Economic Journal, Vol. 108, pp. 383-398

Goldberg P., and Pavcnik N. (2007), *Distributional Effects of Globalization in Developing Countries*, Journal of Economic Literature, Vol. XLV, No. 1

Harrison Ann and Hanson Gordon (1999), Who Gains from Trade Reform? Some Remaining Puzzles, *Journal of Development Economics*, Vol. 59, No. 1

Hay Donald (2001), The Post-1990 Brazilian Trade Liberalisation and the Performance of Large manufacturing Firms, *Economic Journal*, Vol. 111, pp. 620-641

Irwin, Douglas (2002), *Free Trade Under Fire*, Princeton University press, NJ

Keller, Wolfgang, and Yeaple (2003), *Multinational Enterprises, International Trade, and Productivity Growth*, NBER Working Papers, No. 9504

Mill, John Stuart (1910), *The Letters of John Stuart Mill*, ed. Hugh Elliot, Longmans Green, NY

Montesquieu (1989), *The Spirit of the Laws*, trans., Cohler, Miller and Stone, Cambridge University Press, NY

Nozick Robert,(1974), *Anarchy State and Utopia*, Basic Books, NY

Plato, (1982), *The Republic*, G.M.A.Grube, trans., Hackett, IN

Rawls John, (1971), *A Theory of Justice*, Harvard University Press, MA

Sachs Jeffrey and Warner Andrew, (1995), *Economic Reform and the Process of Global Integration*, *Brookings Papers on Economic Activity*, Vol. 25, No. 1

Sala-I-Martin, Xavier(2006), *The World Distribution of Income*, *The Quarterly Journal of Economics*, Vol. CXXI, No. 2

Solomon Robert and Mark Murphy, (1990), *What is Justice?* Oxford University Press, NY

Wood Adrian (1999), *Openness and wage Inequality in Developing Countries*, in *market Integration, Regionalism and the Global Economy*, ed., R. Baldwin et al., Cambridge University press, NY

Zakaria Fareed (2003), *The Future of Freedom*, Norton, NY

SPANISH PROCEEDINGS

FACTORES ECONÓMICOS Y AMBIENTALES PREDICTORES DE LA ACTITUD HACIA LA PRODUCCIÓN DE NARANJA EN MONTEMORELOS, NUEVO LEÓN, MÉXICO EN 2005

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RESUMEN

Esta investigación analiza los factores predictores de la actitud hacia la producción de naranja, de los citricultores del municipio de Montemorelos, Nuevo León, México. La producción de naranja constituye una actividad económica relevante y una de las principales fuentes de ingresos en este municipio, sin embargo, a través del tiempo se ha observado un declive de la producción de naranja debido a diversos factores que han afectado a la región. Los resultados obtenidos permiten observar que existe una actitud favorable hacia la producción de naranja por parte de los citricultores del municipio. Los factores ambientales predictores son: la edad de las plantaciones y las ventajas ambientales, del factor económico son predictores el precio de la demanda, el precio de la oferta y la tecnología. Futuras investigaciones podrían contribuir a mejorar las condiciones de la citricultura en el municipio de Montemorelos, fortalecer la situación de la región citrícola de Nuevo León y promover el desarrollo de la citricultura a nivel nacional. Las conclusiones y recomendaciones de esta investigación tienen especial importancia para todos aquellos que estén interesados en apoyar la situación en que se desarrolla la citricultura el municipio de Montemorelos, Nuevo León, reconocida orgullosamente como la capital naranjera de México.

INTRODUCCIÓN

La importancia de la producción de naranja en el municipio de Montemorelos, Nuevo León, México, es indiscutible, ya que se cultiva una gran extensión y es una de las principales fuentes de ingresos para un gran número de familias que habitan en la región. Este pilar de la economía ha sufrido cambios en los niveles de producción a través del tiempo, lo cual es resultado de diversos factores económicos y ambientales que predisponen la actitud de los citricultores hacia la producción de la naranja. Las dificultades que la citricultura ha atravesado en esta zona han provocado que muchos de los trabajadores que se dedicaban a ella, hayan tenido que abandonarla y dedicarse a otra actividad. Montemorelos es una zona citrícola por excelencia, un municipio dedicado en gran parte a la agricultura. La industria naranjera desempeña un papel muy importante en la economía de Montemorelos, debido a la fuente de ingresos que genera esta actividad. Sin embargo, se han observado variaciones a través del tiempo en el nivel de producción de naranja.

El propósito principal de esta investigación es identificar los factores económicos y ambientales que determinan la actitud hacia la producción de naranja de los citricultores del municipio de Montemorelos, para proveer información relevante a los administradores de las instituciones citrícolas del municipio para la toma de decisiones estratégicas. De esta manera se busca contribuir a mejorar los esfuerzos de desarrollo en esta importante actividad económica. Se considera importante hacer el estudio del estado en que se encuentra la citricultura en la “capital naranjera de México”, para analizar la situación y buscar soluciones o mejoras a los problemas que se presentan. Esta investigación pretende brindar una aportación específicamente al municipio de Montemorelos al analizar y darle un seguimiento a los resultados. Montemorelos a pesar de los problemas que ha enfrentado, constituye una valiosa parte de la agricultura mexicana, por lo que resulta importante el desarrollo de esta investigación, para aportar y ampliar información especial para la prosperidad del país.

REVISIÓN LITERARIA

Importancia de la Naranja

El cultivo de naranja ha sido, y es actualmente, una fuente de importantes recursos para los países productores, ya sea a través de la comercialización en fresco del producto o procesado. A continuación se analiza el papel que desempeña la naranja en un contexto mundial, nacional y estatal.

El estudio realizado por Gaitán (2002) muestra la situación mundial de la naranja, al mencionar que la citricultura es una rama muy importante dentro de la fruticultura. Dice que especialmente la producción de la naranja representa un 62% del total de producción de cítricos, siendo así una de las frutas más producidas en el mundo. En México la citricultura constituye un sector muy importante de la agricultura nacional. La citricultura representa cerca del 45% de la superficie total dedicada a la fruticultura. El cítrico más sobresaliente es la naranja, la cual abarca el 57% de la superficie del sector cítrico cultivado. De la superficie cultivada en México, el cítrico más importante es la naranja ya que aporta el 66%, los limones y limas el 26% y el restante 8% tangerinas, mandarinas y toronja. En el estado de Nuevo León la citricultura ocupa un lugar preponderante en términos de su aportación del 14% de la producción cítrica nacional; contribuye con el 23% del PIB primario que incluye agricultura, ganadería, silvicultura y pesca.

Factores Económicos

Según Bishop (1996), todos los productos que la gente consume provienen de las operaciones del sistema económico y la cantidad disponible de ellos depende de la eficiencia con que opera dicho sistema. Mientras más eficientemente organizada esté la economía, mayor será la cantidad de tales factores aptos para el consumo. El sistema de economía de mercado, para desarrollar sus funciones, descansa en el libre juego de la oferta y la demanda.

Factores Ambientales

De acuerdo con Zúñiga (1990), el factor ambiental es el conjunto de elementos naturales que determinan el desarrollo de las plantas, tamaño y sabor del fruto, así como la disponibilidad de la producción, incluye también las características que afectan dichos elementos. Los factores que se consideran son: clima, riego, urbanización, enfermedades y plagas, fertilización, edad de las plantaciones, topografía y ventajas ambientales de la región.

METODOLOGÍA

Esta investigación es empírica cuantitativa (Grajales, 2004), ya que se pretende medir de manera objetiva y con la mayor precisión posible las variables involucradas: factores económicos de oferta, demanda, factores ambientales y la actitud. De acuerdo con la forma de analizar los datos la investigación es descriptiva correlacional, ya que el propósito es decir cómo es y cómo se manifiesta determinado fenómeno (Hernández Sampieri, Fernández Collado y Baptista Lucio, 2003). El presente trabajo es un estudio de campo ya que se encuentra en una situación real o natural en la que se observan las variables. Es un modelo de corte transversal y de tipo prospectivo debido a que posee la característica de iniciarse con la exposición de una supuesta causa, para luego valorar a una población en un momento determinado hasta comprobar o no la aparición del efecto. Respecto a la población de estudio, procede señalar que la unidad de observación fueron los productores de naranja del municipio de Montemorelos, según el registro actual de miembros inscritos en la Asociación Cítrica de Montemorelos. El instrumento utilizado para medir las variables de estudio fue un cuestionario construido ex profeso, el cual contiene en

la primera sección datos característicos con el objetivo de obtener información específica del grupo de estudio. El análisis de los datos se llevó a cabo por medio de estadística multivariante. El recurso estadístico para valorar las hipótesis es el modelo de regresión lineal múltiple, considerando los factores económicos y ambientales como predictores de la actitud hacia la producción de naranja.

RESULTADOS

Se consideraron tres variables predictoras: demanda, oferta y factores ambientales. El constructo de la variable demanda está compuesto por el precio, los gustos o preferencias de los consumidores y los precios de productos relacionados. El constructo de la oferta depende del precio, costos de producción y tecnología. El factor ambiental está formado por seis elementos: clima, riego, enfermedades y plagas, fertilización, edad de las plantaciones y ventajas ambientales. La variable criterio, que es la actitud hacia la producción de naranja, está compuesta por tres componentes: cognoscitivo, afectivo y conductual.

La variable criterio de este estudio fue el nivel de actitud hacia la producción de naranja y las tres variables predictoras (independientes) analizadas fueron: factores de oferta, factores de demanda y factores ambientales.

Los resultados arrojan que la media aritmética de la demanda (34.02) es superior a la oferta (28.39), mientras que en conjunto forman el factor económico con una media de 62.41, siendo inferior a la media del factor ambiental (73.90). La actitud hacia la producción de naranja refleja una media aritmética de 26.18, lo cual se considera elevado, ya que el intervalo de la variable es de 0 a 30 puntos. Cabe destacar que los resultados muestran una actitud favorable hacia la producción de naranja por parte de los citricultores del municipio de Montemorelos, independientemente de los datos característicos de cada productor.

CONCLUSIONES Y RECOMENDACIONES

Los resultados obtenidos permiten observar que existe una actitud favorable hacia la producción de naranja por parte de los citricultores del municipio. Los factores ambientales predictores son: la edad de las plantaciones y las ventajas ambientales, del factor económico son predictores el precio de la demanda, el precio de la oferta y la tecnología.

Factores Ambientales

Los factores ambientales predictores son: la edad de las plantaciones y las ventajas ambientales. Edad de las plantaciones: Los citricultores de Montemorelos consideran que la edad de las plantaciones de naranja es un factor importante para la producción ($\bar{X} = 4.37$), están de acuerdo en que la vida productiva de los cítricos se ubica entre los 10 y 25 años de edad ($\bar{X} = 3.78$) y opinan que las fincas están en edad avanzada y son poco productivas ($\bar{X} = 3.43$). Este es un aspecto que se destaca debido a que es el principal factor predictor de la actitud hacia la producción de naranja resultante en esta investigación. Según el estudio realizado por Gaitán (2002), el 43% de la superficie sembrada de naranja se ubica en el rango de los 25 a 49 años de edad, el siguiente segmento importante es el comprendido entre los 15 a 24 años que es del 25%. La distribución actual de las edades de las plantaciones prevé un progresivo envejecimiento de la planta productiva en los próximos años. Probablemente debido a esto resultó ser la edad de las plantaciones el principal factor predictor de la actitud hacia la producción de naranja de los citricultores de Montemorelos.

Ventajas ambientales: Los citricultores de Montemorelos consideran que la calidad ($\bar{x} = 4.53$), el tamaño y el sabor de la naranja producida en esta región son superiores a las de la competencia ($\bar{x} = 4.31$).

Además opinan que el municipio de Montemorelos tiene notorias ventajas ambientales con respecto a los demás productores a nivel nacional ($\bar{X} = 3.80$).

Factores Económicos

El factor económico compuesto por los elementos de oferta y demanda, a pesar de ser considerado un factor muy importante en la producción, en los resultados obtenidos en el presente estudio no se considera un predictor de la actitud hacia la producción de naranja, al menos directamente a nivel general, es decir considerando el total de la muestra. Es probable que estos factores afecten la actitud hacia la producción de naranja; sin embargo, no son los principales responsables.

Los resultados y conclusiones obtenidas pretenden ser un factor para la mejora de la producción de naranja en el municipio de Montemorelos, Nuevo León, México. Las recomendaciones realizadas en esta investigación son de beneficio para todos aquellos que estén interesados en esta actividad, para conocer y apoyar la situación en que se desarrolla la citricultura el municipio de Montemorelos, Nuevo León, reconocida orgullosamente como la capital naranjera de México.

REFERENCIAS

Bishop, C. E. y Toussaint, W. D. (1996). "Introducción al análisis de economía agrícola," *México: Centro de Investigaciones Económicas*.

Gaitán, J. (2002). "Situación de la citricultura en el estado de Nuevo León," *Monterrey, Nuevo León, México: Instituto Tecnológico y de Estudios Superiores de Monterrey*.

Grajales, T. (2004). "Cómo elaborar una propuesta de investigación," *Montemorelos, Nuevo León: Publicaciones Universidad de Montemorelos*.

Hernández Sampieri, R., Fernández Collado, C. y Baptista Lucio, P. (2003). "Metodología de la investigación," (3ª ed.). *México: McGraw-Hill*.

Instituto Nacional de Estadística, Geografía e Informática. (1996). "Cuaderno estadístico municipal: Montemorelos, Nuevo León," *México: el autor*.

Zúñiga, V. (1990). "La región citrícola de Nuevo León: actores, condiciones y perspectivas," *Monterrey: Facultad de Filosofía y Letras, UANL, y Colegio de la Frontera del Norte*.

BIOGRAFÍA

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ANÁLISIS DEL NIVEL DE APLICACIÓN DE LAS COMPETENCIAS BÁSICAS DE LA INTELIGENCIA EMOCIONAL POR SUPERVISORES DE OPERACIONES. CASO: PEPSI-COLA VENEZUELA C. A., PLANTA VALENCIA

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RESUMEN

La investigación tiene como propósito analizar el nivel de aplicación de competencias básicas de inteligencia emocional por supervisores de operaciones de la empresa Pepsi-Cola Venezuela C.A. planta Valencia para elaborar propuestas estratégicas en el cierre de brechas y mejorar el clima laboral, las relaciones con los supervisados y apalancar los objetivos estratégicos. Para la medición se tomó el instrumento desarrollado por Ayman Sawaf y Robert Cooper (2008) que mide el nivel de desarrollo de cada una de las competencias básicas de la inteligencia emocional. Los resultados fueron analizados utilizando la matriz DOFA y se elaboraron propuestas estratégicas a ser consideradas por la empresa para garantizar el óptimo desempeño de las operaciones. La investigación fue un estudio descriptivo de campo aplicado a una muestra finita conformada por los supervisores de operaciones. El hallazgo principal de la investigación está referido a suministrar a una referencia respecto a los puntos de oportunidad de su equipo supervisorio para orientar sus estrategias, entre las que destacan la capacitación, evaluación por competencia y feedback para lograr mejoras substanciales en liderazgo, comunicación, clima organizacional, motivación, mejoramiento continuo.

Palabras Claves: Inteligencia Emocional, Competencias Emocionales, Gerencia, Liderazgo, Cambio, Estrategia competitiva.

INTRODUCCIÓN

En la actualidad las organizaciones se enfrentan a una serie de cambios vertiginosos que les exige una amplia capacidad de adaptación. En ese contexto, el cambio se refiere a la habilidad de una organización para mejorar sustancialmente el diseño e implantación de iniciativas para la innovación de los procesos y la producción. Para alcanzar los objetivos de la organización y asimilar con éxito estos cambios son dos las habilidades que han alcanzado una importancia crucial: la adaptación al cambio y el liderazgo efectivo. Por ello que el desarrollo tecnológico y su impacto en los procesos productivos, exigen adicionalmente, una alineación del personal con los cambios que se están produciendo de manera permanente en su labor. La adecuada sincronización a los cambios, por parte del personal, solo es posible cuando existe un compromiso de su parte para obtener una actuación productiva asociada al nuevo contexto de la organización.

En tiempos de cambio se requiere un líder inspirador con capacidad para incentivar más allá del entusiasmo; lo que ha generado un cambio paradigmático importante donde se fortalece la importancia del capital humano en la actividad laboral considerando a su vez el problema de las relaciones humanas como parte de la organización del trabajo. El líder Venezolano se caracteriza por tener una fuerte

tendencia hacia el control y la estructura dejando a un lado en ocasiones lo referente a lo emocional, factor que determina la eficiencia de las relaciones con los demás.

La gestión de la Inteligencia Emocional significa integrar eficientemente lo emocional y lo racional en las relaciones interpersonales, por ello que cobre cada día más relevancia el desarrollo estratégico de competencias en los líderes entre las que resaltan las relacionadas con la inteligencia emocional y que fortalecerán de manera directa el clima organizacional de la empresa.

El objetivo de la presente investigación es determinar el grado de utilización de la inteligencia emocional de los líderes en Pepsi-Cola Venezuela C. A. Planta Valencia utilizando el modelo desarrollado por Ayman Sawaf y Robert Cooper (2008), Cuadro del cociente emocional que mide el grado de desarrollo de las competencias de la inteligencia emocional, diagnostico a través del cual se realizarán propuestas para cierre efectivo de brechas que contribuya con el fortalecimiento del liderazgo medio de la planta.

REVISION LITERARIA

La Inteligencia Emocional Como Estrategia para el Fortalecimiento del Liderazgo.

Para analizar la importancia de la inteligencia emocional como estrategia para el fortalecimiento del liderazgo realizaremos una revisión de los conceptos fundamentales de la inteligencia emocional, las competencias relacionadas y su influencia en el liderazgo a fin de fijar un basamento teórico donde estará fundamentado el análisis de los datos obtenidos en la investigación de campo.

Algunos autores han definido la inteligencia emocional como sigue:

Goleman (1998) la define como la Capacidad de reconocer nuestros propios sentimientos y los ajenos, de motivarnos y de manejar bien las emociones, en nosotros mismos y en nuestras relaciones.

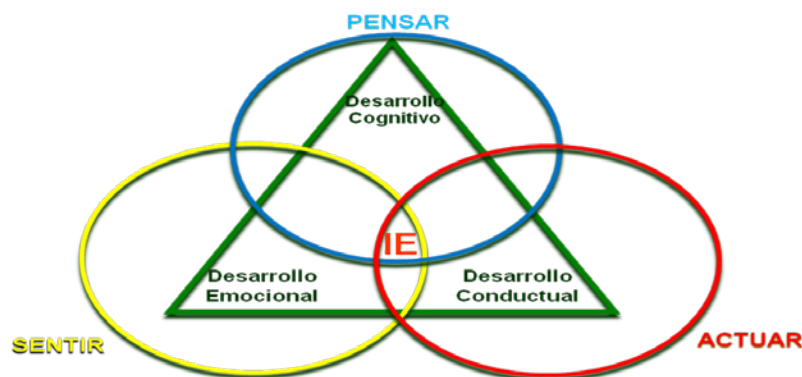
Covey (2005) Es el conocimiento de uno mismo, la autoconciencia, la sensibilidad social, la empatía y la capacidad de comunicarnos satisfactoriamente con los demás. Es un sentido de oportunidad y de adecuación social, de tener el coraje de reconocer debilidades y de expresar y respetar diferencias.

Cooper (1997) Capacidad de sentir, entender y aplicar eficazmente el poder y la agudeza de las emociones como fuente de energía humana, información, conexión e influencia.

Salovey & Mayer (1990) Subconjunto de la inteligencia social que comprende la capacidad de controlar los sentimientos y emociones propios así como las de los demás, de discriminar entre ellos y utilizar esta información para guiar nuestro pensamiento y acciones.

De manera esquemática podemos definir la inteligencia emocional como la coherencia entre el sentir, pensar y el actuar tal como se representa en la figura 1.

Figura 1. Definición Esquemática de Inteligencia Emocional



Fuente: Daniel Goleman (1998).

Todo ser humano debería ser capaz de gerenciar eficientemente sus habilidades. En el mundo empresarial los cambios constantes en el día a día y las presiones propias derivadas de las tareas y responsabilidades en ocasiones causan un divorcio entre lo que se siente y lo que se quiere de manera que son los líderes los que deben canalizar efectivamente sus emociones con el objeto de ser el ejemplo a seguir en sus colaboradores y de este modo controlar situaciones tensas.

Estas habilidades o competencias claves de la inteligencia emocional están conformadas por:

1. Habilidades Personales:

- 1.1 Autoconciencia. Consiste en conocerse a si mismo y usar la información proveniente de este conocimiento en forma productiva, una persona con alto nivel de autoconocimiento conoce sus fortalezas y debilidades, sus deseos y temores y puede actuar de manera tal que permita adaptarse de manera productiva a las circunstancias.

Siendo autoconscientes descubrimos nuestras fortalezas y debilidades y desarrollamos la apertura para la introducción de cambios que nos permitan una adaptación al contexto y una actuación adecuada siempre automotivados a alcanzar nuestras metas.

- 1.2 Autorregulación. Es la habilidad de administrar los estados internos, para establecer mecanismos que faciliten nuestra adaptación de manera adecuada a los retos y nuevas exigencias de la organización. Significa además, la capacidad para manejar las emociones de modo que faciliten las actuaciones personales.

El manejo de las emociones está orientado a utilizar de manera adecuada nuestra emocionalidad, con el objeto de no ceder a los impulsos individuales en las relaciones con los otros, de este modo evitamos que los mensajes con contenido emocional de uso inapropiado imposibilite a las personas para dar respuestas productivas.

- 1.3 Automotivación. La motivación se basa en la actitud que nosotros manifestemos ante la vida y ante todo lo que nos pase. La actitud es influenciada a su vez por los efectos externos e internos. Dependiendo de cómo manejemos nuestra reacción ante esos factores así podremos influir en nuestra motivación.

Es la capacidad de elevar nuestro propio nivel motivacional mas allá de lo que podrían hacerlo factores externos a él, la mejor motivación no es la que viene del entorno, sino que es la que autogeneramos, la que viene de nuestro interior.

2. Habilidades Relacionales

2.1 Empatía. La empatía es la capacidad de percibir el mundo interior emocional y vivencial de otras personas, por lo tanto, es la raíz de la interacción eficaz con otras personas. Así pues, la empatía describe la capacidad intelectual de una persona de vivenciar la manera en que siente otra persona; ulteriormente, eso puede llevar a una mejor comprensión de su comportamiento o de su forma de tomar decisiones. Es la habilidad para entender las necesidades, sentimientos y problemas de los demás, poniéndose en su lugar, y responder correctamente a sus reacciones emocionales.

Las personas con empatía son aquellas capaces de escuchar a los demás y entender sus problemas y motivaciones; por eso poseen normalmente mucho reconocimiento social y popularidad, ya que se anticipan a las necesidades antes incluso de que sus acompañantes sean conscientes de ellas y saben identificar y aprovechar las oportunidades comunicativas que les ofrecen otras personas.

2.2 Habilidades Sociales. Esta competencia de la inteligencia emocional nos permite encontrar el terreno para conectar, persuadir a otros e influir en ellos, mantener unas relaciones positivas y minimizar los conflictos, tener integridad.

Las personas dotadas de esta competencia o de habilidades sociales:

- Utilizan tácticas de persuasión eficaces.
- Tienen habilidades de comunicación, emiten mensajes claros y convincentes.
- Están capacitadas inspirar y dirigir a grupos y personas.
- Son catalizadoras del cambio
- Tienen capacidad de negociar y resolver conflictos
- Saben trabajar con los demás en la consecución de un objetivo común.

2.3 Influencia o Capacidad de Persuasión. Podríamos definir influencia como poseer las herramientas eficaces para la persuasión. En el nivel más básico consiste en la capacidad de despertar ciertas emociones en los demás, ya sea en lo que respecta a nuestro interés por el cumplimiento de un objetivo, nuestro entusiasmo por superar a un competidor o el malestar que nos provoca una determinada injusticia.

Las personas hábiles en el arte de la influencia son capaces de percibir las reacciones de quienes escuchan su mensaje e incluso pueden anticiparse a ellas y conducir a quien le escucha a la meta deseada.

2.4 Habilidades de comunicación. La comunicación es el proceso humano más importante después de alimentarnos, la mala comunicación causa discrepancias, conflictos y malos entendidos. Lo más

importante de la comunicación es saber escuchar, escuchar con los oídos, con el corazón y con el cerebro, abrimos a entender lo que quieren decirnos.

Generalmente escuchamos con ganas de hablar, debemos evitar la tentación de hablar de nuestra propia historia, perder un poco nuestra propia importancia dejar de defender nuestro punto de vista. Colocarnos de manera sincera en el lugar del otro. Esto se logra con entrenamiento. Los seres humanos tenemos la tendencia de escuchar con ganas de hablar de nosotros mismos, de nuestra historia y según nuestros paradigmas.

También debemos escuchar todos los puntos de vista sin apegarnos a ninguno es así como entendemos bien lo que nos quieren decir, así mantendremos nuestra mente libre y podremos ver oportunidades y nuevos caminos para el entendimiento.

2.5 Liderazgo. Es la influencia interpersonal ejercida en una situación, dirigida a través del proceso de comunicación humana a la consecución de uno o diversos objetivos específicos. El liderazgo es un proceso que implica no solo la capacidad de tomar decisiones, sino la habilidad de desarrollar una cierta estabilidad emocional. Esto es el resultado de la gestión de las competencias de la inteligencia emocional "El éxito del liderazgo empresarial no se apoya solamente en la capacidad de tomar decisiones acertada en el momento oportuno. Implica muchas otras cosas desde el punto de vista emocional.

Una persona emocionalmente inteligente además de relacionarse bien con los demás y comprenderlos (habilidades sociales) se conoce bien y se relaciona bien consigo misma (Habilidades Personales). El manejo efectivo de estas competencias será el diferencial en la actuación del líder y en los resultados que obtiene con sus colaboradores. El tipo de relación que logra establecer el líder con sus colaboradores, está regido por la reciprocidad, es decir, los colaboradores buscan en la relación aquello que valora el líder. Esto quiere decir que la calidad de la relación para alinear las motivaciones de las personas con los de la organización depende principalmente del líder de su capacidad para persuadir, entusiasmar y ganar apoyo, la confianza y la lealtad de sus colaboradores.

METODOLOGIA

Para la realización de la medición se tomó en consideración el instrumento desarrollado por Ayman Sawaf y Robert Cooper (2008), aplicado y validado estadísticamente en Estados Unidos a más de 2000 organizaciones y que persigue como objetivo fundamental explorar nuevas maneras de medir y diagramar las dimensiones de la inteligencia humana que contribuyen a la realización personal e interpersonal, al éxito de las organizaciones y al beneficio de la humanidad. El instrumento sirve de guía en la exploración de la inteligencia emocional mostrando aptitudes y vulnerabilidades personales de rendimiento a fin de identificar patrones individuales para el éxito, fue aplicado al 75% de la población de supervisores de operaciones de Pepsi-Cola Venezuela C. A. Planta Valencia, a partir del análisis de resultados se realizarán propuestas estratégicas de mejora a fin de garantizar el desempeño impecable del liderazgo medio de la planta.

El cuestionario se encuentra dividido en cinco secciones subdivididas a su vez en 21 escalas que abarcan la totalidad de las competencias emocionales personales y relacionales. El entrevistado realiza una valoración a los enunciados planteados en una escala primaria (0, 1, 2 y 3) para posteriormente totalizar por cada subdivisión en cada sección e introducir las valoraciones generales en el cuadro sugerido por los autores, donde se determina el desarrollo de cada competencia en función de cuatro niveles: Óptimo, diestro, Vulnerable y Cautela, definidos de la siguiente manera:

Cautela: No tiene la competencia desarrollada, debe tomar acciones de mejora a corto plazo para corregir la situación.

Vulnerable: Tiene un bajo desarrollo de la habilidad en estudio. La misma debe ser trabajada y desarrollada a corto plazo para enmendar la situación.

Diestro: Posee la habilidad en estudio en desarrollo, la cual, mediante un reforzamiento constructivo a corto y mediano plazo, puede llegar al nivel óptimo.

Óptimo: Tiene un alto nivel de desarrollo de la competencia estudiada. Esta imponente fortaleza se debe continuar reforzando con estímulos positivos de forma constante.

De acuerdo a los criterios de los autores y utilizando como base las competencias emocionales definidas por Goleman (1998) se introdujeron estas 21 escalas en las 4 competencias definidas por el autor anteriormente citado de donde se parte el análisis de la data recopilada.

RESULTADOS

Aplicación del Modelo “Cuadro Del Cociente Emocional” Ayman Sawaf y Robert Cooper (2008) a Supervisores de Operaciones Pepsi-Cola Venezuela C. A. Planta Valencia

Los resultados obtenidos de la aplicación del instrumento son los que se muestran en las tablas 1, 2 y 3.

Tabla1: Resultados Aplicación de Instrumento.

DIMENSIÓN DE LA INTELIGENCIA EMOCIONAL EVALUADA:				
AUTO-CONTROL				
PONDERACIÓN	ÓPTIMO	DIESTRO	VULNERABLE	CAUTELA
	4	3	2	1
SUCESOS DE LA VIDA			2	
PRESIONES DEL TRABAJO			2	
PRESIONES PERSONALES			2	
INTENCIÓN		3		
TOTAL	2,25		VULNERABLE	

DIMENSIÓN DE LA INTELIGENCIA EMOCIONAL EVALUADA:				
AUTO-CONOCIMIENTO Y REGULACIÓN				
PONDERACIÓN	ÓPTIMO	DIESTRO	VULNERABLE	CAUTELA
	4	3	2	1
CONCIENCIA EMOCIONAL DE SI MISMO		3		
EXPRESIÓN EMOCIONAL		3		
CONCIENCIA EMOCIONAL DE OTROS		3		
TOTAL	3		DIESTRO	

Fuente. Propia

Tabla 2: Resultados de la Aplicación del Instrumento

DIMENSIÓN DE LA INTELIGENCIA EMOCIONAL EVALUADA:				
EMPATÍA				
PONDERACIÓN	OPTIMO	DIESTRO	VULNERABLE	CAUTELA
	4	3	2	1
CREATIVIDAD		3		
ELASTICIDAD		3		
PERSPECTIVA		3		
INTUICIÓN			2	
RADIO DE CONFIANZA		3		
PODER PERSONAL		3		
INTEGRIDAD	4			
SALUD GENERAL		3		
CALIDAD DE VIDA	4			
TOTAL	3,11		DIESTRO	

DIMENSIÓN DE LA INTELIGENCIA EMOCIONAL EVALUADA:				
HABILIDADES SOCIALES				
PONDERACIÓN	OPTIMO	DIESTRO	VULNERABLE	CAUTELA
	4	3	2	1
CONEXIONES INTERPERSONALES		3		
DESCONTENTO CONSTRUCTIVO		3		
COMPASIÓN			2	
COCIENTE DE RELACIONES		3		
ÓPTIMO RENDIMIENTO		3		
TOTAL	2,800		DIESTRO	

Fuente. Propia.

Tabla 3 Resultados Aplicación Instrumento

DIMENSIÓN DE LA INTELIGENCIA EMOCIONAL EVALUADA	RESULTADO
AUTO-CONTROL	VULNERABLE
AUTOCONOCIMIENTO Y REGULACIÓN	DIESTRO
EMPATÍA	DIESTRO
HABILIDADES SOCIALES	DIESTRO

Fuente. Propia.

Como se observa en la tabla resumen 2 el 75% de las competencias básicas de la inteligencia emocional evaluadas se encuentran en una nivel Diestro, lo que implica que aunque hay un buen dominio de las mismas aun se pueden seguir desarrollando, siendo que la Intuición y la Compasión son los puntos más débiles.

La intuición es una cualidad innata que todos los seres humanos poseemos en mayor o menor medida. La efectividad de los resultados del líder está relacionada con la disposición que el mismo tenga para integrar los aspectos lógicos con los emocionales, la correcta interpretación de las reacciones emocionales contribuyen ampliamente con las relaciones interpersonales por cuanto están vinculadas con el fomento de relaciones basadas en la empatía.

El contexto actual donde se desenvuelve la empresa conlleva de manera implícita la toma de decisiones con alto grado de incertidumbre, para lo cual se requiere un nivel óptimo de autoconocimiento que permita conocer las señales que le indican al líder que va por el camino correcto.

Respecto a la intuición podemos afirmar lo siguiente:

Depende de la conciencia que tiene cada persona de sí misma, por ello que algunas personas sean más intuitivas que otras. Más que un rasgo de la personalidad es una función del cerebro. Viene a ser el modo de pensar “por defecto”, es decir actúa cuando no aplicamos el pensamiento racional. Va directamente relacionada con el autoconocimiento ya que se manifiesta comúnmente en palabras, imágenes, sentimientos o sensaciones viscerales que no todo el tiempo son interpretadas correctamente. Permite leer entre líneas y conocer los sentimientos de los demás al margen de sus palabras. Es una característica innata pero cultivable, parece mostrarse proporcional a la honradez emocional y a la motivación por saber, por descubrir y resolver. Debe ser manejada eficientemente ya que la misma genera motivación, las señales intuitivas nos mueven a la acción, sin embargo es conveniente poner la razón por medio y evitar tomar decisiones precipitadas.

Continuando con el análisis de los resultados obtenidos podemos evidenciar que la competencia emocional del autoconocimiento se encuentra en un nivel vulnerable, lo que indica que es necesario desarrollar planes de acción efectivos para el cierre de brechas. El autoconocimiento es un rasgo distintivo en los líderes exitosos, es la habilidad necesaria para entender nuestras propias emociones así como también las propias fortalezas, motivaciones, valores y limitaciones, así como el impacto que nuestras reacciones generan en los otros.

Los líderes conscientes de sí mismos conocen sus valores, sus objetivos y sus expectativas, saben concretar lo más adecuado para alcanzar el éxito, saben hacia qué camino se dirigen, logran adaptarse a los cambios con flexibilidad tal que logran superar los obstáculos que se encuentran. El líder debe lograr que los integrantes de su equipo logren construir relaciones efectivas que generen la consciencia de trabajo en equipo, objetivos comunes y una visión compartida (alineados con la estrategia y visión de la organización). Si el líder no conoce su propia disposición para emprender oportunidades de mejora y hacer los ajustes necesarios no podrá ser un agente cambio, por el contrario estará modelando conductas que tal vez no sean las requeridas para garantizar el óptimo desempeño del equipo. La autoconciencia posibilita la empatía y la gestión de mejora de uno mismo.

El análisis detallado de los resultados arrojados por el instrumento por competencias es el siguiente:

Tabla 4: Resultados Autocontrol

DIMENSIÓN DE LA INTELIGENCIA EMOCIONAL EVALUADA:				
AUTO-CONTROL				
PONDERACIÓN	OPTIMO	DIESTRO	VULNERABLE	CAUTELA
	4	3	2	1
SUCESOS DE LA VIDA			2	
PRESIONES DEL TRABAJO			2	
PRESIONES PERSONALES			2	
INTENCIÓN		3		
TOTAL	2,25		VULNERABLE	

Fuente. Propia.

En lo que respecta al Autocontrol, se evidenció en la muestra en estudio que se encuentra en nivel “Vulnerable” de aplicación, teniendo como desglose de las variables tomadas las siguientes ponderaciones: Sucesos de la Vida, presiones del trabajo y presiones personales el grupo mostró un resultado en nivel “Vulnerable”. Respecto a su nivel de intención su resultado fue “Diestro”.

Tabla 5. Resultados Autoconocimiento y Regulación

DIMENSIÓN DE LA INTELIGENCIA EMOCIONAL EVALUADA:				
AUTO-CONOCIMIENTO Y REGULACIÓN				
PONDERACIÓN	OPTIMO	DIESTRO	VULNERABLE	CAUTELA
	4	3	2	1
CONCIENCIA EMOCIONAL DE SI MISMO		3		
EXPRESIÓN EMOCIONAL		3		
CONCIENCIA EMOCIONAL DE OTROS		3		
TOTAL		3		DIESTRO

Fuente: Propia

Autoconocimiento y Regulación: en general, en la muestra de estudio se evidenció que se encuentra en nivel “Diestro” de aplicación, teniendo como desglose de las variables tomadas las siguientes ponderaciones: Consciencia Emocional de Si mismo, Expresión emocional y Conciencia emocional de Otros, el grupo mostro un resultado en nivel “Diestro”.

Al respecto se puede concluir que el grupo de supervisores de Pepsi-Cola Venezuela Planta Valencia, posee un nivel aceptable de conocimiento emocional lo que les permite ser conscientes y aceptar sus propios sentimientos, expresar asertivamente sus emociones y reconocer las emociones o sentimientos existentes en su entorno, bien sea con las personas que conviven o trabajan en el día a día; esta representa una fortaleza en desarrollo del grupo en la cual debe seguir trabajándose para alcanzar la valoración óptima de desempeño en esta dimensión.

Tabla 6: Resultados de Empatía

DIMENSIÓN DE LA INTELIGENCIA EMOCIONAL EVALUADA:				
EMPATÍA				
PONDERACIÓN	OPTIMO	DIESTRO	VULNERABLE	CAUTELA
	4	3	2	1
CREATIVIDAD		3		
ELASTICIDAD		3		
PERSPECTIVA		3		
INTUICIÓN			2	
RADIO DE CONFIANZA		3		
PODER PERSONAL		3		
INTEGRIDAD	4			
SALUD GENERAL		3		
CALIDAD DE VIDA	4			
TOTAL		3,11		DIESTRO

Fuente: Propia

Empatía: En general en la muestra de estudio se evidenció que se encuentra en nivel “Diestro” de aplicación, teniendo como desglose de las variables tomadas las siguientes ponderaciones: Con respecto a los subniveles Integridad y Calidad de Vida el grupo mostró un resultado en nivel “Óptimo”; con respecto a los subniveles creatividad, elasticidad, perspectiva, radio de confianza, poder personal y salud general el grupo mostró un nivel “Diestro”; respecto al subnivel intuición el resultado ubico al grupo en condición “vulnerable”.

Al respecto se puede concluir que el grupo de supervisores de Pepsi-Cola Venezuela Planta Valencia, manifiesta como una fortaleza imponente su alto sentido de honestidad combinado con una percepción de bienestar y satisfacción en su vida, que se traduce en un desempeño dentro de las normas y valores de la compañía y una alta motivación en lo personal y en lo laboral. Por otro lado, en el grupo se evidencia

como fortaleza en desarrollo, la apertura con relación a proyectos e ideas nuevas, la habilidad de manejar los cambios en su entorno de forma dinámica y oportuna, la capacidad de sacar lo mejor de cada situación, el desarrollo de la confianza en otros, la habilidad de generar impacto influencia en otros para conseguir lo que quieren y el manejo adecuado de las situaciones de la vida cotidiana para que no impacten negativamente en su salud física y mental; con relación a los puntos anteriores la empresa debería tomar acciones que permitan llevar los valores actuales a niveles Óptimos cuidando que estos no tiendan a volverse “Vulnerables” ya que esto afectaría el desempeño laboral del grupo en estudio pudiendo llegar a truncar el desarrollo de programas novedosos en la compañía, como sistemas de mejoramiento continuo y proyectos vinculados con la mejora de los procesos por ejemplo, además de repercutir en las condiciones de salud física y emocional de las personas evaluadas que a la larga representan importantes pérdidas en la organización. Adicionalmente, se refleja que el grupo de supervisores evaluados presenta como oportunidad de mejora el lograr desarrollar sus capacidades intuitivas para tomar decisiones correctas aun con poca información, lo que representa un factor crítico a ser abordado a prontitud debido a que por el riesgo país actual en el contexto de trabajo un importante número de decisiones que se deben tomar en los procesos de elaboración de productos para consumo masivo poseen un alto grado de incertidumbre, por lo que el desarrollo de esta competencia permitirá que las decisiones tomadas en el día a día sean asertivas y eficaces.

Tabla 7 Habilidades Sociales

DIMENSIÓN DE LA INTELIGENCIA EMOCIONAL EVALUADA:				
HABILIDADES SOCIALES				
PONDERACIÓN	OPTIMO	DIESTRO	VULNERABLE	CAUTELA
	4	3	2	1
CONEXIONES INTERPERSONALES		3		
DESCONTO CONSTRUCTIVO		3		
COMPASIÓN			2	
COCIENTE DE RELACIONES		3		
ÓPTIMO RENDIMIENTO		3		
TOTAL	2,800		DIESTRO	

Fuente: Propia

Habilidades Sociales: En general en la muestra de estudio se evidenció que se encuentra en nivel “Diestro” de aplicación, teniendo como desglose de las variables tomadas las siguientes ponderaciones: Conexiones interpersonales, descontento constructivo, cociente de relaciones y óptimo rendimiento obtuvieron un nivel “Diestro”. Respecto a su nivel de compasión su resultado fue “Vulnerable”.

Al respecto se puede concluir que el grupo de supervisores de Pepsi-Cola Venezuela Planta Valencia, son personas que tienen en desarrollo la habilidad de establecer conexiones profundas con las personas de su entorno, de poder contradecir con eficacia y de manera constructiva los puntos en los que estén en desacuerdo y de lograr resultados altamente satisfactorios tanto en lo personal como en lo profesional, motivado a la atención especial y focalizada que le prestan a las tareas desempeñadas y a su nivel de compromiso con el cumplimiento de las mismas; estas destrezas deberían ser reforzadas por la organización de manera de aprovechar el nivel de progreso de las mismas en la población estudiada. En contraste con lo anterior, debería ser de ocupación para la organización que el grupo de supervisores en estudio mostrara un nivel bajo del desarrollo de la compasión, que implica que la mayoría de las veces se percibe que en algunas situaciones se puede tender a no ayudar y entender a los demás en situaciones difíciles, por lo que se les dificulta el ponerse en lugar de otras personas ante esta clase de eventos, vulnerando por ende la confianza en el equipo de trabajo.

Propuestas Estratégicas para el Cierre de Brechas en Competencias de Inteligencia Emocional.

A fin de desarrollar propuestas estratégicas viables para el cierre de brechas evidenciadas relativas a la aplicación de las competencias de inteligencia emocional se realizó un análisis DOFA que permitirá planificar tácticas que atenderán lo arrojado por el instrumento y a su vez consideraran el entorno particular en el que se desenvuelve la empresa, la cual se muestra a continuación:

Tabla 8 Matriz DO Análisis de Resultados del Instrumento

DEBILIDADES	OPORTUNIDADES
1.1 Falta de apertura como consecuencia del bajo nivel de autoconocimiento, lo que podría traducirse en encasillarse en una misma manera de aproximarse a los colaboradores.	2.1 Implementación de programas de capacitación para el desarrollo de las competencias emocionales.
1.2 No es posible para el líder autorregularse ya que no se conoce con exactitud cuales serán las reacciones ante determinadas situaciones.	2.2 Implementación de programa de mejoramiento continuo en planta.
1.3 Limitaciones en la mejora continua de las actuaciones personales del líder, ya que no reflexiona efectivamente sobre el perfil de sus fortalezas y debilidades.	2.3 Implementación de programa de evaluación por competencias de Empresas Polar.
1.4 Desconocimiento de las fortalezas con las que cuenta el líder y su equipo para cumplir con los objetivos fijados por la organización.	
1.5 Inseguridad al momento de tomar decisiones en un entorno con alto grado de incertidumbre.	
1.6 Disminución de la confianza de los colaboradores con el líder por efecto de que el mismo no manifiesta apoyo en los momentos difíciles.	

Fuente: Propia

Tabla9: Matriz FA Análisis de Resultados del Instrumento.

AMENAZAS	FORTALEZAS
3.1 Entorno cambiante con alto grado de incertidumbre.	4.1 Apoyo de la alta gerencia en lo que respecta a la implementación de programas de desarrollo de competencias emocionales a fin de garantizar la formación de líderes catalizadores de cambios.
3.2 Clima organizacional afectado por temas sindicales que limitan las óptimas relaciones supervisor-supervisado.	4.2 Líderes íntegros alineados con los valores de la organización.
3.3 Entrada en vigencia frecuente de nuevas leyes y regulaciones por parte del estado y que afectan directamente a la Empresa.	4.3 Consciencia a nivel supervisorio de la importancia del capital humano en el éxito de los procesos, lo cual se evidencia por el nivel de desarrollo de las competencias relacionales.
	4.4 Alto nivel de creatividad, lo que representa un potenciador de la mejora continua en los procesos y en las

Fuente: Propia

Luego de hacer la valoración de los aspectos claves de los resultados arrojados por el instrumento, se continúa con las correspondientes estrategias conducentes a potencializar las fortalezas y las oportunidades, a neutralizar, evitar o minimizar las debilidades y planear detalladamente las contingencias necesarias para enfrentar la materialización de las amenazas.

Tabla 10: Matriz de Estrategias

DEBILIDADES - OPORTUNIDADES	DEBILIDADES - FORTALEZAS
<p>O1-D1 Realización de estudio posterior 360° a fin de considerar la percepción de los supervisados y los jefes respecto a las competencias emocionales de los supervisores y su estilo de liderazgo.</p> <p>O2-D4 Implementación de técnicas de mejora de desempeño y equipos multidisciplinarios de mejoramiento continuo que apuntan al cumplimiento de los objetivos fijados por la organización.</p> <p>O1-D1-D2 Desarrollo de plan de adiestramiento "La Super...Vision", dirigido a fortalecer conocimiento en manejo de emociones, trabajo en equipo, desarrollo de confianza, entre otros.</p> <p>O1-D1-D2 Replicar programas de capacitación aplicados en otra planta relacionados con habilidades de Coaching.</p> <p>O3-D3 Aplicar evaluación por competencias a los supervisores de operaciones de Pepsi-Cola Venezuela C.A.</p>	<p>F1-D5 Realización de sesiones de feed back trimestral para analisis de logro de objetivos duros y avances en la parte blanda incluyendo la toma de decisiones.</p>
OPORTUNIDADES - AMENAZAS	FORTALEZAS - AMENAZAS
<p>O1-A1-A2 Capacitar a los supervisores para fortalecer las habilidades de negociación, flexibilidad, adaptación al cambio, entre otros.</p> <p>O1-A3 Actualización constante en lo que respecta a nuevas normativas y leyes al equipo supervisorio.</p>	<p>F4-D4 Generación de equipos multidisciplinarios de mejora continua que faciliten la interaccion del supervisor con sus supervisados para mejorar los procesos.</p>

Fuente: Propia

Es importante resaltar que las estrategias aporte de este trabajo provienen del levantamiento de la matriz DOFA construida a partir de los datos arrojados mediante la aplicación y el análisis del instrumento; en consecuencia del anterior análisis estratégico se sugiere que la organización revise las estrategias anteriormente descritas producto de la evaluación del nivel de aplicación de competencias de inteligencia emocional a fin de elaborar planes de acción que contribuyan con el fortalecimiento de las capacidades de su personal supervisorio, lo cual se verá capitalizado en mejoras en el clima laboral y cumplimiento de los objetivos del negocio. La inteligencia emocional es el componente primordial y necesario del perfil del nuevo líder catalizador del cambio por medio del desarrollo de la inteligencia, control y responsabilidad de las personas sobre sus propias vidas y liberar de esta manera talentos y competencias en el equipo.

CONCLUSIONES

El entorno actual en que se desenvuelven las organizaciones está lleno de constantes cambios donde en la gran cantidad de las decisiones que toma el líder el elemento reinante es la incertidumbre, lo que ha obligado a llevar a cabo cambios de paradigmas en lo que respecta a la importancia que se da al capital humano dentro de los procesos, buscando la formación de equipos de alto desempeño alineados totalmente con las metas de la organización, con la flexibilidad requerida para adaptarse al los procesos de cambio y que fomenten un clima laboral satisfactorio en la empresa. Esto solo se logra mediante la influencia y el liderazgo del supervisor como catalizador fundamental de cambios, es por ello que el mismo debe contar con un perfil adecuado con competencias desarrolladas que involucren aquellas que van mas allá de los conocimientos técnicos, estas competencias son las conocidas como competencias emocionales y que han sido desarrolladas en el enfoque de inteligencia emocional utilizados en esta investigación.

Mediante el fortalecimiento de las dimensiones de la inteligencia emocional, el líder de cambio garantiza el logro de los siguientes objetivos: Mejoras en el clima organizacional por comunicación eficaz con los supervisados, escucha activa, empatía y demás competencias relacionales, toma de decisiones acertadas en ambientes de incertidumbre con el uso de la intuición, desarrollo del autoconocimiento del líder y utilización del mismo para mejorar constantemente las formas de tratar con los demás y las relaciones, fomento del mejoramiento continuo de los procesos lo que impacta en la productividad e involucramiento del personal en proyectos vitales para la organización, flexibilización de los mapas personales y control de las interpretaciones a través del autoconocimiento lo que favorece la autorregulación y el manejo de situaciones conflictivas, mayor sinergia en los equipos de trabajo apoyados en la empatía y habilidades sociales.

Aplicar instrumentos de medición de nivel de desarrollo de las competencias de la inteligencia emocional permite a las empresas evidenciar cuales son las brechas de sus líderes en la parte actitudinal y establecer así planes de acción efectivos para el cierre de las mismas.

En relación al caso específico de estudio se puede concluir que los supervisores de Pepsi-Cola Venezuela C.A. Planta Valencia poseen un nivel de fortaleza en desarrollo en las competencias emocionales siendo que sus puntos fuertes de mejora están orientados al desarrollo de la intuición como herramienta para la toma de decisiones y el desarrollo de la compasión para fortalecer la empatía y las relaciones con los supervisados. El plan de acciones propuesto va alineado principalmente con la implementación de plan de formación y evaluación de competencias para los supervisores tomando en cuenta principalmente las competencias emocionales sobre las técnicas, contando con el apoyo incondicional de la alta gerencia.

REFERENCIAS

Caruso y Salovey (2005). El directivo emocionalmente inteligente. Editorial Alga.

Covey, Stephen (2004) El Octavo Hábito. Editorial Frog. Ltda.

Cooper R. y Sawaf A. (2008). La inteligencia emocional aplicada al liderazgo de las organizaciones. Editorial Norma

Goleman, Daniel (1998). Por qué la inteligencia emocional es mas importante que el coeficiente intelectual. Editorial Norma.

Goleman, Daniel (1995). Que define a un líder. Publicación Hay Group.

Goleman, Daniel (1998) Inteligencia Emocional. Editorial Norma.

ENSEÑANZA DE LOS NEGOCIOS PARA ESTUDIANTES UNIVERSITARIOS, BAJO EL SISTEMA APRENDIZAJE BASADO EN PROBLEMAS (ABP) CON ENFOQUE COLABORATIVO

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RESUMEN

El mundo comercial en el que vivimos ha propiciado que se realicen negocios de diferentes formas, estilos y dimensiones, derivado de ello se han incluido la enseñanza de materias comerciales y de negocios en la mayoría de las curriculas universitarias en México, las experiencias vertidas en este artículo son las derivadas de la enseñanza de los negocios internacionales en la escuela de comercio exterior de la Universidad de Colima, México. Como un impulso a la innovación educativa universitaria, se aplica el sistema de Aprendizaje Basada en Problemas, con un enfoque colaborativo que permite a los estudiantes universitarios investigar, analizar, estructurar e interpretar información que se obtiene directamente de investigaciones de campo para transformarla en conocimiento mediante el trabajo colaborativo, que los estudiantes como integrantes de un grupo deben de estructurar. Los escenarios para la implementación de este modelo deben ser reales y no creados de manera imaginaria, la oportunidad de los estudiantes de estar en contacto directo con los entornos permite evidenciar el trabajo que realizan, además de abrir los esquemas de investigación a los cuales se están enfocando. Bajo la contextualización del sistema ABP se manifiesta la forma, en que al darse un proceso de aprendizaje el estudiante establece una relación activa del conocimiento y desarrolla la intuición de diagnostico en posibles negocios, desde un contexto científico, tecnológico, social, cultural pero sobre todo comercial, y esto, en conjunto le permita hacer significativo el aprendizaje y establecer de esta forma una relación entre lo que aprende y su realidad, analizándola y reconstruyéndola, el entorno colaborativo se manifiesta como un proceso vivo de relaciones e intercambios interpersonales dentro de un contexto real y cambiante donde el profesor debe demostrar capacidades de interpretación y conocimientos que le permita guiar a los estudiantes en los diversos entornos de negocios sujetos de estudio, para que estos a su vez diagnostiquen de manera apropiada la factibilidad del negocio o en su defecto las debilidades que no permiten el crecimiento del negocio en los mercados globales. La colaboración de cada uno de los integrantes del equipo en la investigación es determinante debido a que en conjunto deben de presentar y defender los hallazgos mediante una exposición abierta a otros estudiantes y al público en general en donde cada equipo presenta de manera creativa los trabajos finales.

Palabras clave: Enseñanza de los negocios, aprendizaje colaborativo, aprendizaje basada en problems

ABSTRACT

The commercial world in which everybody is living is the main cause that people do businesses on different forms, styles and dimensions, concerning on this, is very important to include the teaching of commercial matters and businesses in most of the universities in Mexico, the spilled experiences in this article are derived from the education of international businesses in the school of foreign trade at the University of Colima, Mexico. As an impulse to the university educative innovation, is applied the Problems Based Learning system, with a collaborative approach that allows the university students to investigate, analyze, structure and to process data that is obtained directly from investigations of field to

transform it into knowledge, with the background of the collaborative work, where the students as a group must structure. The scenes for the implementation of this model must be in the real world, not created of an imaginary way, this allow to the students the opportunity to be in direct bonding with the surroundings that let them allows to demonstrate the work that they did, besides it let them open the investigation schemes on which they are focusing. Under the contextualization of system PBL it's form is pronounced, in that when occurring a learning process where the student establishes an active relation of the knowledge and develops the intuition of a possible business, from scientific, technological, social, cultural but mainly commercial context, and this, altogether allow them to make the learning significant and to establish on this form a relation between their learns and their reality, analyzing and reconstructing it, the collaborative surroundings pronounce like an alive process of relations and interpersonal interchanges within a real and changing context where the professor must demonstrate the capacities of interpretation and knowledge that let them to guide the students in the diverse surroundings of subject businesses of study, and, on that way, they diagnose as well on an appropriate way the feasibility of the business or in it's defect the weaknesses that not let the growth of the business in the global markets. The collaboration of each one of the team's members in the investigation is determining, because all together must present and defend the findings by an open exhibition, to other students and the public in general in where each team presents by a creative way the final works at the end of the semester.

Key words: Business Education, Problem Based Learning (PBL), Colloborative Approach

PROBLEMA CIENTÍFICO

La enseñanza tradicional de los negocios en el nivel universitario limita a los estudiantes a realizar propuestas reales a micro y pequeñas empresas, limitando la enseñanza a una conceptualización teórica, dejando de lado la oportunidad de involucrarse en entornos de negocios que permita a las Micros y pequeñas empresas del estado de Colima, ser competitivas en mercados internacionales.

Objetivo general: Implementar estrategias y herramientas que permitan a las micro y pequeñas empresas en el estado de Colima incrementar la rentabilidad de sus negocios.

Objetivos específicos: Realizar un diagnóstico sobre las actividades de negocio que realizan las Micros y pequeñas empresas del estado de Colima.

Diseñar propuestas de solución de problemas que permitan optimizar las utilidades de los negocios.

Realizar un análisis de los beneficios en la implementación del Aprendizaje Basado en Problemas que permita incrementar la competitividad del negocio. Impulsar la cultura de los negocios competitivos en las micro y pequeñas empresas del estado de Colima, México. Orientar a los empresarios a participar en entornos competitivos.

Objeto del estudio: Teórico: La enseñanza de los negocios bajo modelo Aprendizaje Basado en Problemas, con enfoque colaborativo.

Práctico: Los negocios de las Micros y pequeñas empresas en el estado de Colima, México.

Hipótesis de la investigación: ¿Es posible y viable mediante la enseñanza de negocios a nivel universitario, bajo el modelo ABP mejorar los niveles de competitividad de las Micros y pequeñas empresas en el estado de Colima, México?

Métodos a utilizar en la investigación: En la investigación se utilizan los métodos documentales y de campo, dentro de ellos se realizará el análisis y la síntesis, la consulta y visitas a los propietarios de los negocios, la observación, así como la aplicación de instrumentos.

Técnicas a utilizar en la investigación: Reuniones con empresarios, aplicación de encuestas, tormenta de ideas, entrevistas, sistemas estadísticos en la concentración de información, herramientas matemáticas.

El marco conceptual de los negocios en un entorno global y su interrelación con los conceptos aplicados a las micros y pequeñas empresas, logrando su eficiencia y la calidad aplicable a entornos nacionales y estatales en particular a los negocios locales, estos tópicos fundamentarán el valor teórico de la investigación realizada.

Valor metodológico : Integra los marcos conceptuales y herramientas en las estrategias diseñadas, con posibilidad de aplicación de manera integral no solo en la aplicación de los negocios de las Micros y pequeñas empresas sino también, en la incursión de estas en otros mercados.

Valor Práctico : Está enfocado primordialmente en la factibilidad y pertinencia de aplicar las estrategias de negocios que permita obtener resultados satisfactorios y de perspectivas globales que permitan avances a las micros y pequeñas empresas del estado de Colima, México.

Valor Social: Radica en la investigación de cómo mejorar e incrementar las oportunidades de negocio de las micros y pequeñas empresas, lo cual se traduce en mejores ingresos, optimización de recursos, posicionamiento empresarial, satisfacción al cliente y por ende una mejora de imagen en la sociedad.

Desarrollo: Como estrategia para plantear las alternativas de factibilidad de negocio se realizó un estudio que permitiera la evaluación de micro y pequeñas empresas en el estado de Colima, con la firme finalidad de diagnosticar si el entorno es redituable, competitivo y mediante el análisis de los resultados elaborar estrategias que permitirán a los micros y pequeñas empresas del estado de Colima analizados mantener, o mejorar el negocio en el cual se encuentran operando.

La información que se presenta a continuación fue obtenida de una muestra representativa de solo el 10% ya que las 20 empresas de diferentes sectores comerciales pertenecen a una muestra total de 197 empresas en el estado, derivada de una población de 5,758 unidades económicas, esto con la finalidad de poder obtener un panorama real de la situación actual de los negocios y su posición en el mercado local, nacional e internacional.

Hallazgos : Derivado del análisis y la evaluación de los diferentes giros de cada una de las empresas de la muestra, es posible implementar estrategias que optimicen utilidades esto, a partir de las necesidades que cada una de ellas, una vez realizado el diagnóstico arrojó. Dicha comparación global permite a los estudiantes y micro y pequeños empresarios percatarse de sus fortalezas y debilidades y del mismo modo conocer la posición competitiva que tiene su producto o servicio en el mercado. Cabe mencionar que dicha evaluación fue realizada en conjunto con los gerentes o dueños de las empresas y que los resultados obtenidos permitió estructurar estrategias que ayuden o mejoren el posicionamiento del negocio en el mercado, las propuestas y mejoras muestran un esquema realista de las estrategias a seguir y mantener, si los micro y pequeños empresarios desean mejorar su nivel competitivo o el peor de los casos permanecer en el mercado.

Tabla 1 Resultados de los Micro y Pequeños Negocios con los Que se Trabajó en Conjunto

Nombre de la Empresa	Giro comercial	Diagnóstico	Acciones
1.- Integradora forestal de Colima S.A. de C.V. (Camotlán de Miraflores)	Producción de carbón vegetal	Falta de organización y capacitación de los campesinos	Se realizó un programa de capacitación. Se aproximó y se logró un crédito mediante la presentación de un proyecto con bases sustentables en el gobierno del Estado. Se está asesorando a la integradora en el área de exportación.
2.- Panadería la Guadalupana (Comala)	Producción de Pan	Falta de Imagen corporativa y Limitada área comercial	Se diseñaron marcas y empaques para diversos tipos de pan. Se les trabajó una imagen corporativa integral.
3.- Maximiel (San Marcos)	Producción de Miel de abeja.	Producto natural y poco conocido en la región.	Se realizó una campaña de promoción intensa que permitió colocar el producto en diferentes establecimientos y anaqueles para impulsar la venta.
4.- Tostadería Armeria (Armería)	Producción de tostada "Guisada" y "Raspada".	Empresa en trámite de registro y sin etiquetado en los productos, la mayoría de la venta es local y a granel.	Se oriento a los propietarios y se registro de manera legal la micro empresa. Se diseño empaque, envases, estrategias de comercialización se vende ahora en nuevos mercados del mismo estado. Por recomendación de los estudiantes se está trabajando en la certificación del distintivo H.
5.- Las Delicias de Colima (manzanillo)	Restaurant de Comida Típica Colimota.	Falta de promoción, menú no atractivo.	Se diseño con el apoyo de un cheff un menú tipo del estado de Colima. Se diseño un nuevo ambiente del entorno. Se promocionó con un esquema de comisiones en la venta de eventos. Se especializó el menú con cena tradicional los fines de semana.
6.- Taku- achi (Manzanillo)	Venta de tacos tipo burrito	No es conocido, es una empresa de nueva creación.	Promoción fuerte, se diseño una estrategia de visita a escuelas y empresas para ofertar el producto como de entrega a domicilio en un corto tiempo.
7.- Cajeta Lugo (Sayula Jalisco)	Elaboración y venta de Cajeta	Capacidad instalada de producción explotada al 45%	Se realizaron estudios y pruebas en laboratorio para producir cajeta con coco deshidratado rayado, con cacahuete y nuez para comercializar nuevos productos en otros mercados aledaños a la costa. Se consiguieron nuevos clientes en el sector restaurantero del estado para la cajeta. Se está trabajando en la certificación del distintivo H.
8.- Salsa picante "La Tía" (San Marcos)	Elaboración de salsa de Mesa	Salsa con muy buena aceptación en todo la región.	Se propuso se envasará las salsas en otras presentaciones como fueron de 1 y 4 litros. Se ofertó la salsa en los restaurantes de mariscos existentes en Manzanillo, Tecomán, y Costa Alegre obteniendo una magnifica aceptación. Se continúa trabajando para introducirla a la cadena de los "kioskos" (cadena de tiendas en el estado).
9.- Dulcería El Angelito (Manzanillo)	Elaboración de Piñatas y Dulceros	Gran Creatividad en la elaboración de piñatas y Dulceros.	Se elaboró Proyecto que se presentó a mujeres emprendedor del Municipio y se consiguió un crédito por \$50,000.00 pesos con lo que se inicio la Dulcería El Angelito y la renta de mueble infantil.
10.- Horta Nursery S.P.R de RL (Villa de Alvarez)	Producción de Ficus (planta de Hornato)	Excelente producción con capacidad de exportación.	Se realizo en conjunto con alumnos del ultimo semestre un plan de exportación para los Ficus a Italia debido a las características especiales y a los contactos que en la expo herbolaria en la ciudad de México lograron. Se logro un espacio promocional en la consejería comercial de la unión europea.
11.- Limones de Tecomán Colima S.A de C.V. (Tecomán)	Producción y comercialización del Limón.	Poca organización en la colecta y comercialización de la fruta.	Se integró una asociación de limoneros de Tecoman y sus alrededores. Se buscaron en conjunto nuevos mercados a nivel nacional e internacional para el limón persa que se produce en el estado, encontrando como mercado atractivo Japón en Asia, Mc. Callen Texas en estados Unidos y Vancouver en Canada.
12.- Servicios Turísticos de Manzanillo.	Servicios de transporte	Falta de organización Falta de una Estructura de ventas	Se organizo de calidad humana para los choferes y personal de la empresa. Se estructuraron formatos como resultado de una auditoria

		Falta capacitación a los choferes en la parte humana	administrativa que permita a la empresa una mejor organización. Se estructuró un portafolio de ventas a comisión de los servicios que la empresa oferta.
13.- Refaccionaria Conchis (Camotlan de Miraflores)	Venta y colocación de refacciones.	Deficiencia en el servicio al cliente Especialización solo en una rae determinada. No tiene control de inventarios.	Mediante una investigación de mercados identificar nuevos clientes Estructurar de manera ordenada la recepción de los vehículos para la colocación de partes. Se estructuro el curso “ el cliente es primero” que permitieron un mejor servicio a los usuarios. Se estandarizo e implemento un control de inventarios
14.- Tostadería la Brujita (Manzanillo)	Producción y comercialización de tostada guisada	Mala distribución del producto Falta de publicidad y empaque adecuado del producto.	Se implemento un proceso logístico donde establecen las rutas para comercializar y distribuir el producto. Se realizo un plan promocional de medios que ayude al incremento de las ventas. Se elaboró un empaque de cartón que cumpla con las características para conservar y transportar del producto en optimas condiciones.
15.- Productos industrializados de Tecmán (Tecmán)	Hojas de Maíz envasadas al alto vacío.	Falta de empaque apropiado, Carece de estudio de factibilidad para la exportación. No tiene plan de crecimiento comercial.	Se realizó un empaque apropiado con requerimientos de etiquetado. Se realizo un plan de mercadeo para la hoja de maíz envasada al alto vacío. Se realizo una proyección de ventas del producto considerando la capacidad instalada y la posibilidad de exportación.
16.- Chocolate Rey Amargo S.A. de C.V.	Producción de chocolate	Falta de un plan de mercadeo para exportar el producto	Se realizaron modificaciones al etiquetado bajo la normatividad de empaque y embalaje requeridos en los entornos internacionales. Se realizo el plan de mercadeo a nivel local para reposicionar el producto. Se realizó el plan de exportación hacia el mercado de Baviera en Alemania.
17.- Productos Orgánicos de Canoas. (Manzanillo.)	Producción de Café Orgánico	Falta de imagen corporativa. Falta de plan de mercadeo	Se realizó en conjunto con la empresa la imagen corporativa Se diseño y elaboró un empaque diferente al existente y apropiado a los productos orgánicos. Se elaboro un plan de mercadeo para comercializar el producto en la región
18.- Mami Cori (Tecmán)	Elaboración y comercialización de dulces.	Producto poco conocido en la región.	Se elaboró un plan de medios publicitarios y campaña de promoción que permitió a la empresa dar a conocer su producto de manera regional lo que se comienza a reflejar en las ventas. Se sugirió abrir una sucursal en Manzanillo, Colima que es el punto turístico más importante del estado.
19.- Salsas Caseras Doña Pina. (Manzanillo.)	Elaboración de salsas de mesa	Producto con muy buena aceptación en el puerto de Manzanillo.	Se sugirió abrir 2 nuevas sucursales 1 en Tecmán y la otra en la capital del estado Colima. El etiquetado se cambio de manera más llamativa. Se envaso en botellas de 500 gr. ya que solo se envasaba en vasos de 250 gr. Se sugirió hacer con otra receta que incluyera el chile habanero, esto derivado de la investigación de mercado realizado previamente
20.- Nutret, Comercializadora de Plátano (Cihuatlán, Jalisco)	Producción y venta de plátano Macho.	Oportunidad de venta del plátano macho	Por ser empresa de reciente creación se elaboró etiquetas, imagen corporativa, investigación de mercados, plan de marketing. Se opta por vender el plátano como fruta fresca, deshidratado y guisado con saborizantes artificiales como son el limón, la sal y el chile.

Esta tabla muestra los hallazgos en la empresa y las acciones aplicadas en las mismas

La aplicación de los conocimientos bajo el sistema ABP (Aprendizaje Basado en Problemas) con enfoque colaborativo permite a los alumnos vincularse y trabajar de manera directa con los micro y pequeños empresarios y de esta manera y con soporte de los conocimiento adquiridos en los diversos contenidos en la curricula del programa de comercio exterior y aduanas, los alumnos puedan implementar estrategias de manera colaborativa que ayuden a focalizar las acciones que pueden generar mayores dividendos a los propietarios o en su defecto crecer a otros mercados o diversificar el producto o servicio.

CONCLUSIONES

El mundo de los negocios por su propia naturaleza parece ser complicado por la cantidad de información que se maneja, la enseñanza de los mismos en el nivel superior es un reto para cualquier docente, por ello las herramientas y formas de enseñanza deben de utilizarse de manera creativa para interesar al alumno y orientarlo para que sea capaz de generar su propio conocimiento mediante la investigación, la implementación del modelo Aprendizaje Basado en Problemas con el enfoque colaborativo en la escuela de comercio exterior de la Universidad de Colima en México, brinda la posibilidad a sus estudiantes de vincularse con el mundo real, con empresarios que en conjunto buscan solución a problemas reales que existen en sus micro o pequeñas empresas y por diversas razones no son atendidos con propiedad. La opción y el apoyo que les brindan los estudiantes de negocios a los micro y pequeños empresarios, es mutuo debido a que cada uno de los involucrados se compromete de manera directa con lo que le corresponde hacer, otro factor que permite la adecuada implementación de acciones de mejora es el departamento de vinculación empresa-universidad que sirve como vínculo cuando el negocio requiere de algún otro soporte técnico o de conocimiento que la escuela o la naturaleza del programa no cubre, pero sí soluciona por medio de la vinculación universitaria apoyándose con otras facultades como es el caso de ciencias químicas en las certificaciones del distintivo H.

Cabe hacer mención que el trabajo en el aula es inmenso por la naturaleza y los giros del negocio, mas sin embargo se cuenta con los compañeros docentes que tiene conocimientos afines o complementarios en las asesorías de los estudiantes de negocios mientras están realizando este tipo de investigaciones y acciones. Una vez concluidos los trabajos en el sector empresarial los alumnos deben de montar los resultados para que alumnos 1ro y 2do. Año los puedan apreciar la presentación deben de hacerla con el enfoque colaborativo manifestando en él aportaciones de todos los integrantes y que logren un mismo fin, orientar de manera apropiada la permanencia del micro o mediano empresario en el mercado pero con mejores dividendos en su giro comercial, y que el alumno adquiera su propio conocimiento en un entorno real.

RECOMENDACIÓN

En el estado de Colima, México no existe un organismo gubernamental que asesore y oriente a los micro y pequeños empresarios para que optimicen sus utilidades, por ello es importante que las instituciones de educación superior nos involucremos de manera comprometida para orientar a que sigan en el mercado y avancen en el crecimiento empresarial.

BIBLIOGRAFIA

J. Dutch, Barbara, Groh Susan, E.Allen Deborah. (2006) “El poder del Aprendizaje Basado en Problemas,”. Una Guía práctica para la enseñanza universitaria. Editada en la Pontificia universidad católica del Perú.

Dnnelly, R., Fitzmaurice, M. (2005) “Collaborative Project-based learning and problem-based learning on higher education: a consideration of tutor and student roles in learner focused strategies,” Aisher Reading,

Dublin Institute of Technology.

Alarcao, I. (2007) “Changing to Project-based learning. The role of institutional leadership and faculty development. In management of change: implementation of problem-based and project-based learning,” Sense Publisher, Rotterdam.

Heller, P., Hollabaugh, M. (2002) Teaching problem-solving through cooperative grouping. NEW YORK publisher.

Mckeachie, W (1994) teaching tips: strategies, research, and theory for college and university teachers. Lexington Heath.

Buzzell, Robert D. (2004) Administración de la Mercadotecnia Multinacional: Lecturas y Casos U.S.A. ed. addison-wesley iberoamericana,
Pickle, Hal B Administración de Empresas Pequeñas y Medianas ed. Limusa, 2002. México

Harold Koontz, Heinz Weihrich; (2004) Traducción: Enrique Palos Báez, Francisco Javier Dávila Martínez Administración: una Perspectiva Global 7a. ed. Mc Graw-Hill Interamericana.

Hitt, Michael A. (2004) Administración Estratégica: Competitividad y Conceptos de Globalización Traducción: Pilar Mascaró Sacristán. 5a. ed. International Thomson.

Hill, W. Charles, (2007) Negocios Internacionales competencia en el Mercado global Ed. Mc. Graw Hill, México.

ANÁLISIS DEL NIVEL DE CONOCIMIENTO DEL PERSONAL QUE LABORA EN EL ÁREA DE RECURSOS HUMANOS DE UNA EMPRESA ENSAMBLADORA DE VEHÍCULOS GMV; SOBRE LOS PROCESOS DEL DEPARTAMENTO DE DESARROLLO ORGANIZACIONAL

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RESUMEN

La aparición y creciente importancia del conocimiento como un nuevo factor de producción hace que el desarrollo de tecnologías, metodologías y estrategias para su medición, creación y difusión se convierta en una de las principales prioridades de las organizaciones en la sociedad del conocimiento. Existen multitud de modelos para la creación y gestión del conocimiento, así como diversas y variadas perspectivas para su estudio, análisis y comprensión. Este artículo, está enfocado en realizar un análisis, donde la empresa invierte en adiestramiento en personas claves dentro de la organización y a su vez estas mantienen sus conocimientos implícitamente, viéndose afectado el resto de los integrantes del equipo, debido a la debilidad que carecen al no gestionar los conocimientos adquiridos de una manera explícita y con herramientas para el mejoramiento de los procesos y la calidad de servicios a sus clientes directos.

Palabras clave: gestión del conocimiento, desarrollo organizativo, recursos humanos.

INTRODUCCIÓN

Hasta hace poco las fuerzas que promovían los cambios dentro de las organizaciones se producían a ritmos relativamente lentos para diseñar estrategias de cambio que permitiera minimizar riesgos. Este ritmo permitía emplear estrategias en plazos que pudieran asimilar este cambio de forma razonable en el personal que conformaba la organización. Hoy en día la situación no se presenta igual. La competencia estaba delimitada territorialmente y contaba con características comunes, definidas y evaluables, hoy son cada día más cambiantes las condiciones del entorno y se realizan a un ritmo superior de tiempo.

Tal vez Thomas Stewart centró el problema del desarrollo actual de las organizaciones al afirmar que "la información y el conocimiento son las armas termonucleares competitivas de nuestra época". Cabe enfatizar entonces que conceptos tales como Capital Intelectual y Gestión del Conocimiento, dependen fundamentalmente del factor humano, tienen que ver con las personas, con la inteligencia, tanto racional como emocional, y los conocimientos. Por factor humano en la organización se entiende en este trabajo a los procesos desarrollados por el hombre en el plano individual y social (cognoscitivos, afectivos y volitivos), volcados al desarrollo del desempeño de sus funciones en las organizaciones para el logro de resultados medibles en interés de esta.

Llama la atención que cuando se analizan los temas relacionados con la Gestión del Conocimiento, fundamentalmente muchos especialistas se centran en la en un conjunto de conocimientos e información

propios de una actividad que pueden ser utilizados de forma sistemática para el diseño, desarrollo, fabricación y comercialización de productos, o la prestación de servicios.

Mora afirmaba que la gerencia del siglo XXI, hoy más que nunca debe estar atenta del rol que debe desempeñar el factor humano de la empresa. El estudio y determinación de la influencia del factor humano en la organización ha pasado a ser de importancia vital en el desarrollo competitivo de las organizaciones. El principal objetivo de un proceso de Gestión del Conocimiento centrado en el desarrollo del Capital Humano será aportarle valor a los productos o servicios de la organización.

Nunca como hoy, resultó tan importante que las conductas y objetivos de nuestros empleados, estén voluntariamente alineadas con los objetivos de nuestra organización. La Gestión de Conocimiento crea valor con los activos intangibles de la organización. La sabiduría individual se convierte en colectiva, se captura y se distribuye hacia las áreas de la organización donde se necesite, es decir, persigue trasladar el conocimiento con un emisor que lo posee a un receptor que lo requiere. Esta se proyecta al futuro mirando el pasado: los conocimientos que una vez se utilizaron en los diferentes procesos organizacionales pueden reutilizarse en el futuro, de manera que se minimice el consumo de recursos materiales y humanos en su realización. El cambio del significado del saber, que empezó hace doscientos años, ha transformado la sociedad y la economía, saber convencional se considera a la vez el recurso personal clave y el recurso económico clave. Como dice Peter Drucker, “el saber es hoy el único recurso significativo”. Los tradicionales factores de producción (suelo, recursos naturales, mano de obra, y capital) se han convertido en secundarios; pueden obtenerse, y con facilidad, siempre que haya saber. Proporcionar saber para averiguar en qué forma el saber existente puede aplicarse a producir resultados es, de hecho, lo que significa gestión. Este cambio en la dinámica del saber puede denominarse la Revolución de la Gestión, una Revolución que se ha extendida por todo la tierra.,a la Revolución Industrial le costó cien años llegar a extenderse por el mundo entero; la Revolución de la Productividad tardó setenta años; la Revolución de la Gestión ha empleado menos de cincuenta años, desde 1.945 a 1.990, en extenderse y dominar el mundo de acuerdo con Márquez (2005).En el umbral del tercer milenio, las organizaciones, una vez superada la fase de la tercera Revolución, la de la Gestión, hemos de afrontar los restos de la cuarta Revolución. Una Revolución nos conducirá, directamente, a las organizaciones inteligentes: la Revolución del Conocimiento.

Son muchas las objeciones que se plantean ante las teorías que abogan por el cambio del paradigma de organización empresarial. ¿Por que motivos el modelo tradicional no sirve para el nuevo siglo? La respuesta es sencilla: el entorno ha cambiado. El entorno actual se caracteriza, principalmente, por seis fenómenos. Velocidad a la que se producen los cambios, la palabra que más se escucha en las conversaciones, tertulias, conferencias, jornadas, etc., es cambio. Las cosas siempre han cambiado pero, hoy en día, esos cambios se caracterizan por la velocidad a la cual se producen.

Hoy en día tenemos acceso a tantas fuentes de información como jamás ningún ser humano, a lo largo de los tiempos, ha tenido. Es más, en algunos casos, experimentamos un exceso de información: recibimos mayor cantidad de información de la que somos capaces de digerir. No solo tenemos acceso a fuentes bibliográficas, prensa, televisión digital, el fenómeno de Internet nos ha permitido multiplicar por diez la cantidad de información a la cual accedíamos hace cinco años. Nos vemos condicionados por un entorno tan competitivo en el cual las empresas responden con una continua evolución de sus productos y servicios. El concepto evolución dirigida es un hecho en muchos sectores, en los cuáles, los responsables de marketing, no esperan a que sus estrategias y productos se vean condicionados por la curva de vida.

Actualmente en las empresas invierten en el adiestramiento a personas claves en sus organizaciones los cuales mantienen sus conocimientos implícitamente, viéndose afectado el resto de los integrantes del equipo, debido a la debilidad que carecen al no gestionar el conocimiento adquirido de una manera

explicita y metodológica a través de herramientas que permitan mejorar los procesos y la calidad de servicios a sus clientes directos.

En función de lo planteado anteriormente, la siguiente investigación se propone analizar el nivel de conocimiento del personal del Departamento de Desarrollo Organizacional del área de Recursos Humanos de una empresa ensambladora de vehículos, en relación a la capacidad de generar nuevos conocimientos, diseminarlos entre los miembros de la organización y materializarlos en productos, servicios y sistemas.

REVISION LITERARIA

Precedentes Investigativos en la Aplicabilidad de la Gestión del Conocimiento

Actualmente se han realizados numerosas investigaciones enfocadas a estudiar la importancia y aplicabilidad de herramientas empresariales como la gestión del conocimiento, esto conlleva a la necesidad de estar en vanguardia, hacer viable la gestión del conocimiento, a partir de las necesidades de aprendizaje, vigilando la disponibilidad del entorno, posicionando el saber en forma proactiva, dinámica, a partir de un diagnóstico estratégico sobre la preparación individual para enfrentar los retos, en una organización o corporación industrial como las ensambladoras de vehículos.

Adicionalmente, este estudio induce a la pertinencia en pro de crear conciencia en la manera de interactuar en los entornos de la organización, absorber información, y esta a su vez la convierten en conocimiento y llevan a cabo acciones sobre la base de la combinación de ese conocimiento y de sus experiencias, valores y normas internas, estimulando así por tanto la apreciación de comportamientos en el rol trabajadores para conocer, entender y aplicar la información recibida alcanzando una visión integral, con lo que se logra adaptarse y ser asertivos en cualquier escenario, contribuyendo asimismo el impulso del crecimiento de la organización.

Enfocar los sistemas de Gestión del Conocimiento preferencialmente hacia el interior de la empresa, sin cuidarse de elaborar conexiones con el entorno de la compañía no sólo afecta los procesos de apropiación y enriquecimiento de saberes de la organización, sino que distorsiona el sentido cabal de esta herramienta gerencial. Por lo que un análisis del conocimiento que tiene el personal de recursos humanos de las empresas ensambladoras de vehículo impactara positivamente en sus propios resultados de manera positiva

Con respecto a los trabajos de investigación realizados, se puede decir que CHAVEZ, CARLOS (2008) presentó, “Gestión del conocimiento: Un enfoque bajo la metodología integradora de procesos”. La investigación enmarcada en un diseño documental tuvo como propósito fundamental aproximarse a la construcción de explicaciones de que todas las empresas tratan de ser altamente competitiva, pero los agentes que intervienen en la Gestión Empresarial y que toman las decisiones generalmente tienen dificultades en tener acceso rápido y fácil a la información analítica que se requiere en el momento oportuno y lugar adecuado y se les hace difícil extraer el conocimiento táctico requerido, porque les falta integrar, recopilar, seleccionar, limpiar, transformar, evaluar, interpretar, y monitorear adecuadamente la Data de la empresa a nivel operacional, táctico y estratégico para la toma de decisiones. Concluyendo que esta presente la falta de gestión del conocimiento en el desarrollo de los Sistemas de Información, para desarrollar los modelos a nivel organizacional, a nivel de tareas, de agentes, de comunicación, a nivel del conocimiento contextual y conceptual y a su vez faltando dar un Soporte a la Toma de Decisiones en el área de aplicación de los sistemas de información dentro de un enfoque holístico de la Gestión del conocimiento. Esta investigación se considera pertinente porque destaca aspectos que están relacionados con las empresas que pueden minimizar sus costos de procesos al tener aplicaciones transaccionales integradas con las tomas de decisiones a nivel táctico y con los objetivos estratégicos relacionados, obteniendo mayor eficiencia y eficacia y por ende mayor utilidad gracias a la implementación de los

sistemas de Información bajo la metodología MIPE con la Gestión del Conocimiento a nivel Estratégico, Táctico y Operacional.

Es importante citar a Acevedo (2005) quien realizó una investigación titulada “Diseño de un modelo de gestión del conocimiento para la Unellez” El objetivo de esta investigación es diseñar un modelo de gestión del conocimiento para la Universidad Nacional Experimental de los Llanos Occidentales Ezequiel Zamora (UNELLEZ) que promueva el desarrollo de ventajas competitivas en el área de investigación. El estudio realizado se ubica dentro de la modalidad de proyecto factible y se apoya en un estudio de campo de carácter descriptivo y explicativo. Las etapas de la metodología aplicada en el desarrollo del modelo, parten del análisis de la situación de la investigación en la Unellez y culmina con el diseño del mismo. El análisis de la situación determinó que los procesos de creación, transferencia y aplicación del conocimiento están fuertemente estructurados e impulsados por mecanismos motivadores, arraigados principalmente en requerimientos personales de carrera académica; de otro lado, los procesos de difusión son altamente limitados tanto en metas como alcances, y finalmente, la infraestructura de ciencia y tecnología aun es escasa, por tanto, el esfuerzo de difusión es poco significativo. La aplicación de los resultados del estudio, permitirán el fortalecimiento de los servicios para el apoyo a la investigación, la promoción y consolidación de grupos de investigación interdisciplinarios, intra disciplinarios e interinstitucionales en los contextos: regional, nacional e internacional, la formación y capacitación del personal para la investigación y el fortalecimiento de la interacción investigación-docencia-extensión para consolidar la pertinencia y compromiso social de la Unellez, así como la generación de ventajas competitivas. Las recomendaciones también apuntan a la superación de ciertas trabas que limitan el desarrollo pleno de la actividad y las potencialidades de la investigación en la Unellez.

Tal como puede observarse, el aporte de la investigación de acuerdo a la dinámica del conocimiento y la transferencia de sus resultados, es que enfatiza la necesidad de un modelo de gestión del conocimiento que permita incrementar la eficacia del esfuerzo en el área de investigación para así aprovechar sus resultados en los procesos de innovación que tienen lugar en su entorno socioeconómico y la generación de ventajas competitivas

Sustentación Dialéctica (Teórico – Práctica) de la Gestión del Conocimiento a la Luz de su Aplicabilidad en las Organizaciones

La Gestión del Conocimiento ha sido definida en múltiples oportunidades. Cada acepción cuenta con elementos importantes que no pueden ser obviados. Tomando en consideración esto, se plantearán diversas definiciones a fin de cubrir cada uno de estos componentes:

La gestión del conocimiento es un tema que, aunque de reciente aparición y desarrollo, ocupa el interés de organizaciones, profesionales, estudiantes y comunidades en todo el mundo. Aquí se propone una aproximación integral, conectada a dos prácticas en pleno auge: el Aprendizaje Organizacional y el Capital Intelectual. La importancia de la Gestión del Conocimiento está dada por su estrecha relación con la creación de valor. Es evidente que el conocimiento resulta ser el activo fundamental en todo tipo de organizaciones y, al mismo tiempo, el factor que determina su viabilidad y su éxito, no sólo en términos económicos sino, lo que es prioritario, como instrumento de acción, como herramienta clave del desempeño. El proceso sistemático de búsqueda, selección, organización y presentación de información para mejorar la comprensión y el conocimiento de los empleados y miembros de una organización en un área específica

La Gestión del Conocimiento procura la incorporación e intercambio, clasificación y reconfiguración de saberes y experiencias aportados por los individuos y por el entorno, a fin de acrecentar el capital intelectual de la organización para que, a través del Aprendizaje Organizacional, impactar positivamente la creación de valor.

Por un lado, la Gestión del Conocimiento se nos presenta como un artículo de primera necesidad, un imperativo para la competitividad y, en definitiva, una obligación ineludible para la propia supervivencia de la organización. Pero, por otra parte, se nos habla de cambios profundos, no sólo de carácter organizativo, sino especialmente en lo relativo a la cultura de la empresa y a las pautas de comportamiento de los empleados. Además, se nos recalca la importancia de contar con todo el apoyo de las más altas esferas directivas, apoyo traducido en un esfuerzo inversor suficiente, tanto en estructura como tecnología.

El Control de Gestión

Para realizar un buen control de la gestión de una empresa, se deben tener en cuenta tres funciones principales:

- Cual será la finalidad y la misión de la organización definiendo claramente sus objetivos.
- Preparación del personal de la empresa para que trabaje con eficacia a través del reciclaje y de la formación permanente.
- Identificar - mejorando o corrigiendo - los impactos de los cambios sociales que puedan afectar a la organización, teniendo en cuenta sus efectos y adaptarlos convenientemente al objetivo y misión de la organización.

Aunque estas funciones principales se estudian con mayor detalle en temas posteriores, hemos de hacer hincapié aquí en que el trabajo de la gestión exige al director de la empresa cualidades excepcionales. El dirigente en las sociedades industriales actuales ocupa un puesto de responsabilidad y liderazgo, similar al que en épocas pasadas ocupaban militares y sacerdotes.

Para concebir el papel de la gestión en el mundo de la empresa es esencial comprender que las personas tienen una naturaleza orgánica en vez de mecánica. En definitiva, nos parecemos más a los sistemas del mundo natural que al de las máquinas.

Una empresa progresa a través de un complicado desarrollo de relaciones que afectan a toda su organización, en vez de un comportamiento, según unos principios simples de causa- efecto.

Pongamos un ejemplo, entre un cuerpo humano y un automóvil: si una pieza del coche falla, es posible que afecte al funcionamiento del mismo durante un determinado tiempo hasta que ésta se sustituye por otra, y el coche funcionará como antes de la avería. Pero si una parte del cuerpo humano falla, seguro que afectará a todo el organismo, incluso a sus partes intangibles, como son el humor, los sentimientos, el apetito, etc.

Tal vez se pueda reemplazar ese órgano, o quizás no, pero el mero hecho de sustituirlo alterará el ciclo vital de la persona. En muchos aspectos el organismo de la persona nunca podrá funcionar como antes de la operación. Habrá cambiado, incluso tal vez haya mejorado, pero nunca será igual.

Otro elemento comparativo, es el paso del tiempo y su efecto en toda la organización. En el ejemplo del coche, las partes mecánicas se desgastarán con el tiempo, pero al estar normalizadas, podrá ser sustituidas por otras según un programa de mantenimiento que permitirá al vehículo seguir funcionando.

En el caso de las personas, con el tiempo irán cambiando: la percepción, la experiencia, la motivación. El proceso de envejecimiento afectará su actitud y su comportamiento. Además, los grupos de personas dentro de la organización actúan de forma distinta según el estadio de la vida en que se encuentren. Todo cambio impuesto en el grupo, por ejemplo - cambio en el personal -alterará su naturaleza, incluso sus expectativas.

Este ejemplo determina la importancia que en la gestión general de la empresa tiene el desarrollo de los **Recursos Humanos**. Por tanto es básico que el responsable de esta función conozca los aspectos esenciales de la organización y no considere ésta como un mero sistema mecánico, si no, fracasará sin duda en sus objetivos. Este hecho es el que hace que la labor de los directivos, en este campo, sea un reto permanente.

La forma en que cambien, para bien o para mal, se deberá en gran parte a las habilidades "humanas" del gestor. La vinculación entre proyecto económico y cultura de la empresa son tan fuertes, que en algunas empresas se confunden ambos aspectos.

Podemos afirmar que, la gestión de los Recursos Humanos tiene un papel muy importante en la estrategia de la empresa, mucho más importante del que ha desempeñado tradicionalmente.

Empresa y Producción

Por un lado, la Gestión del Conocimiento se nos presenta como un artículo de primera necesidad, un imperativo para la competitividad y, en definitiva, una obligación ineludible para la propia supervivencia de la organización. Pero, por otra parte, se nos habla de cambios profundos, no sólo de carácter organizativo, sino especialmente en lo relativo a la cultura de la empresa y a las pautas de comportamiento de los empleados. Además, se nos recalca la importancia de contar con todo el apoyo de las más altas esferas directivas, apoyo traducido en un esfuerzo inversor suficiente, tanto en estructura como tecnología.

En estas condiciones, el riesgo de provocar un cierto desencanto en quienes se acercan a la Gestión del Conocimiento no es insustancial. No es de extrañar, por tanto, la unión de algunas voces de quienes, desde su propia parcela y no sin cierta desconfianza, vean en esta nueva disciplina sólo progresos menores frente a la gestión tradicional de los sistemas de información, consideren escasas y aisladas sus aportaciones conceptuales a las teorías de la organización y la gestión de recursos humanos, o simplemente piensen que, tras el efecto 2000, se trata del nuevo invento del sector para mantener sus cifras de negocio.

Desarrollo Organizacional

La evolución dentro de una organización se ve supeditada al conocimiento interno de su funcionamiento y la proyección hacia donde desean ir. Hoy en día el mundo esta sometido a constantes cambios que exigen mayores esquemas de desempeño en las organizaciones.

Para afrontar los cambios que inciden en la organización, ésta se vale del desarrollo organizacional. Para Robbins (2004:566) el desarrollo organizacional “son un conjunto de intervenciones de cambio, fundamentadas en valores humanistas y democráticos para mejorar la eficacia de la organización y el bienestar de los empleados”

El desarrollo organizacional es un paradigma, una herramienta, una estrategia lo cual permite manejar el cambio.

Según Robbins (2004) el desarrollo organizacional se fundamenta en: respeto por las personas, confianza y apoyo, distribución de poder, confrontación y participación.

Talento Humano

Muchos investigadores denominan a los desarrolladores del Capital Intelectual en la organización y gestores del desarrollo continuo de las competencias organizacionales como talentos. Si consideramos que actualmente se reconoce la necesidad de lograr que las personas acepten invertir todo su talento en la organización, con un nivel de participación e implicación mucho mayor, el estudio de los axiomas centrados en el desarrollo del talento, conjuntamente con el desarrollo de la creatividad y las competencias, imbrican el estudio y reconocimiento de la importancia del desarrollo individual en el desarrollo organizacional.

Se puede señalar que el talento, determinado como una aptitud (capacidad para el desempeño o ejercicio de una ocupación) como inteligencia, en otra acepción, persona inteligente o apta para determinada ocupación., está compuesto por elementos cognitivos y afectivos que se desarrollan sobre la base de determinadas condiciones biológicas y sociales. No es un rasgo estable para toda la vida, puede manifestarse en las primeras edades y dejar de expresarse después o viceversa o bien mantenerse siempre o no expresarse nunca. Ello depende de los recursos cognitivos, de las características de la personalidad o de las condiciones ambientales que rodean al sujeto.

Cultura Organizacional

Toda organización está conformada por personas, sin importar la actividad a la cual se dediquen. Las organizaciones se componen por sistemas y subsistemas complejos que conforman su estructura.

Stoner, Freeman y Gilbert (1995:344) definen que “la organización es un patrón de relaciones –muchas relaciones simultáneas, entrelazadas–, por medio de las cuales las personas, bajo el mando de los gerentes persiguen metas comunes”. Dependiendo de la variedad de relaciones que se suscitan en una organización se tiene que cada organización posee su propio diseño organizacional. Stoner, Freeman y Gilbert (1995), definen el diseño organizacional como un proceso, en el cual los gerentes toman decisiones para decidir la estructura que se adecua a la estrategia y entorno de la misma. Como resultado de las diversas decisiones, resulta un patrón de diversos estratos que se conoce como jerarquía. Actualmente la tendencia es crear jerarquías más planas para las organizaciones. Cada organización adapta la jerarquía y el diseño organizacional según sus estrategias, visión y cultura.

Chiavenato (2004) define la estrategia organizacional como el mecanismo que permite a la organización de interactuar con el contexto ambiental. La estrategia es la aquella que definirá el comportamiento de la organización, en un mundo cambiante, dinámico y competitivo.

Cada organización se rige por su misión, visión y cada uno de los elementos que la constituyen los cuales partirán de su propia cultura organizacional. Para Chiavenato (2004), la misión es la razón de ser de la empresa, el motivo que la origina o la finalidad que la motiva. Por otra parte siendo la visión la imagen a proyectar de la organización para sí misma y a futuro. La cultura según Chiavenato (2004) como término genérico tiene dos acepciones: uno es el conjunto de costumbres, civilización y realización de un pueblo. En el estudio de organizaciones la cultura es el modo de vida de la misma en todos sus aspectos: ideas creencias, costumbres, reglas, entre otros.

Davis y Newstrom (2001:111) definen que “la cultura organizacional es el conjunto de supuestos, convicciones, valores y normas que comparten los miembros de una organización”. La cultura organizacional se puede crear conscientemente por sus miembros o ir evolucionando con el tiempo.

Otra definición de cultura organizacional según Chiavenato (2004) haciendo referencia a Schein, la denota como un conjunto de temas básicos compartidos por un grupo, que resuelve sus problemas de adaptación externa e integración interna, y funciona hasta el punto de ser considerada como válida y

deseable para ser transmitida a nuevos miembros como la manera correcta de pensar, percibir y sentir frente a los problemas. Como cultura organizacional se puede inferir que son todas aquellas percepciones, valores, principios y elementos propios que constituyen a una organización.

Davis y Newstrom (2001:112) expresan que “como las huellas digitales o los copos de nieve, las organizaciones son únicas”. Sería conveniente destacar que cada organización al ser única su cultura organizacional también lo es. Por muy parecida que sea a otra organización cada una es distintiva. Ninguna cultura organizacional es mejor que otra. Dependiendo de las metas, objetivos, misión, visión y perspectiva de cada organización puede adoptar una cultura, la cual se verá afectada por el entorno donde se desenvuelve la organización. Las características de las culturas organizacional según Davis y Newstrom (2001) son: distintividad, estabilidad, índole implícita, simbolismo, ninguna es “mejor”, integración aceptación, reflejo de la alta dirección, subculturas y diversa intensidad.

La Enseñanza.

En todos sus niveles crece con la realidad histórica del ser humano y de la sociedad y se desarrolla como tal. La enseñanza no puede estar desvinculada de la realidad social, económica y política; la educación abarca todas las dimensiones del ser humano; como se señala más adelante, esas dimensiones son variadas y deben desarrollarse de un modo integral, porque el ser humano, de acuerdo con Palacios (1999;29) “no es simplemente un ser vivo, un ser sensible, un ser individual; es algo más que eso: es un ser libre, sociable, inteligente, creativo, que nace, crece y se perfecciona en sociedad y con la sociedad, es persona”. La formación social constituye una de las dimensiones principales del ser humano.

METODOLOGÍA

Vinculación Investigativa con el Caso Específico de la Ensambladora GM.

Se realizó una revisión de fuentes primarias, secundarias y mixtas, con la finalidad de recopilar información y definir las acciones a desarrollar, con ayuda del recurso humano. Se aplicó la técnica de encuesta al universo de la población de 16 miembros del Departamento de Desarrollo Organizacional en la Dirección de Recursos Humanos de una empresa ensambladora de vehículo, se procesó los datos bajo esquemas estadísticos computarizados y representativos según tabla y gráficos.

En este orden de ideas, se puede agregar que de acuerdo a los resultados obtenidos, se desprenden las conclusiones y recomendaciones del estudio que tuvo como objetivo general analizar el nivel de conocimiento del personal que labora en el área de Recursos Humanos de una empresa ensambladora de vehículos; sobre los procesos del Departamento de Desarrollo Organizacional.

RESULTADOS

Describiendo los procesos que maneja el departamento de Desarrollo Organizacional del área de Recursos Humanos podemos interpretar que el Departamento de Desarrollo Organizacional, tiene como propósito el desarrollo organizacional de las personas y las organizaciones, y de las personas en las organizaciones y de cómo funcionan; también del cambio planificado, es decir, de lograr que los individuos, los equipos y las organizaciones funcionen mejor. Este cambio planificado implica sentido común, un trabajo arduo aplicado con diligencia a lo largo del tiempo, un enfoque sistemático orientado a ciertas metas y un conocimiento válido acerca de la dinámica de la organización y de la forma de cambiarla. Formulando, promoviendo y evaluando las políticas de organización, los sistemas de clasificación y nomenclatura y administración de salarios por mérito, competencias y cumplimiento de objetivos, desarrollando planes de carrera alineados a las necesidades de la organización y al talento del personal.

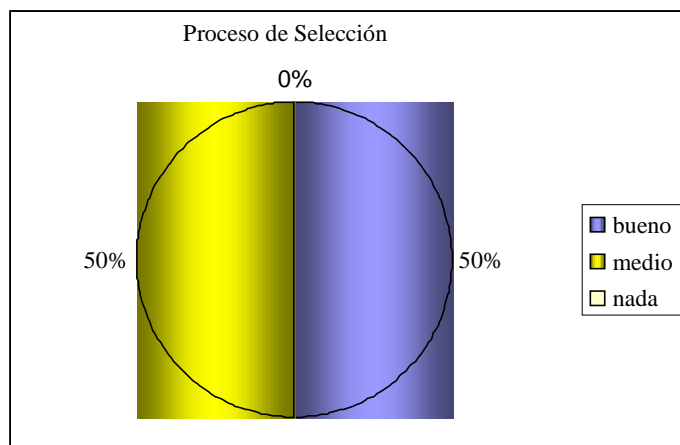
La relevancia del Departamento de Desarrollo Organizacional se enfoca hacia la utilización del potencial humano, en lo cual el entrenamiento desempeña un papel principal, la importancia de tal entrenamiento está en la creación del trabajo en equipo y en el mejoramiento de las relaciones entre los grupos más que en el entrenamiento individual. De aquí parten otros procesos importantes para garantizar que el desarrollo que se le pueda brindar al personal sea realmente provechoso, entre ellos podemos mencionar:

Proceso de Selección de Personal: La selección de personal no puede desarrollarse en abstracto, su punto de partida son las particularidades de la actividad, reflejadas a partir del análisis y descripción de los cargos u ocupaciones, lo que permite definir las principales características, exigencias y requerimientos de los mismos; posibilita evaluar las cualidades necesarias en los trabajadores de forma integrada en la valoración de las competencias como elemento esencial que caracteriza la relación hombre-trabajo, y también determinar los métodos, técnicas e instrumentos a emplear en el proceso de selección de personal. En el caso de la organización ensambladora de vehículos se selecciona al personal a través de las metodologías de evaluación de conductas y comportamientos, lo cual permite seleccionar al mejor de acuerdo a sus competencias y criterios conductuales.

Proceso de Entrenamiento: constituye un subsistema de gran importancia para la organización, a través de este proceso se puede lograr la misión y estrategias planteadas por la empresa y impactando positivamente en el personal, porque es un proceso continuo de enseñanza y aprendizaje que conduce a estar actualizados y prepararse para un futuro a corto, mediano y largo plazo permitiendo tener avances tecnológicos y crecimiento de la organización. La organización constantemente está estimulando al trabajador a incrementar sus conocimientos, habilidades y destrezas para aumentar la eficiencia en la ejecución de las tareas y así contribuir a su propio bienestar.

Proceso de Mejora Continua: Constituye una de las premisas fundamentales para la implementación de cualquier cambio o modelo dentro de la organización, se utiliza como herramienta estratégica para impulsar, implementar y reconocer las oportunidades de mejoras. Se enfatiza, además, en la importancia del factor humano. Tal como puede observarse a continuación uno de los aportes de la investigación de acuerdo a la investigación es el diagnóstico del nivel de conocimiento del personal sobre los procesos de Desarrollo Organizacional del área de Recursos Humanos. ¿Cuál es el nivel de conocimiento sobre los siguientes procesos que se manejan en el Departamento de Desarrollo Organizacional?

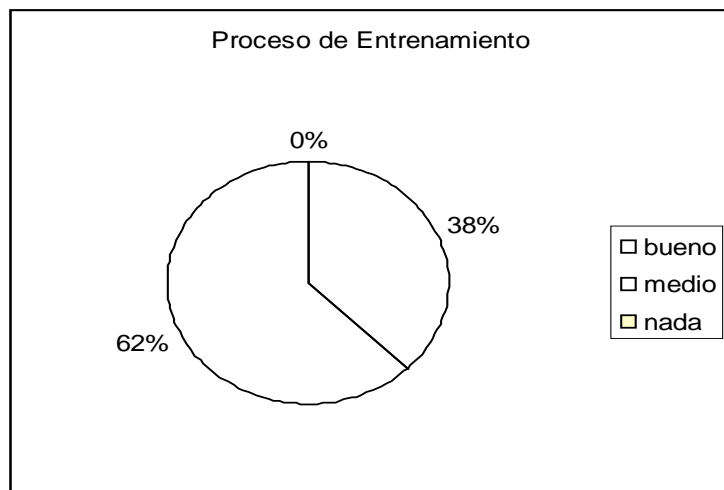
Figura 1 Proceso de Selección.



Fuente: Propia 2008

Se determinó que el 50% de la población encuestada el nivel de conocimiento es bueno en los procesos de Selección así como el resto 50% los conocimientos son medio, teniendo un 0% de la población que desconocen dicho proceso

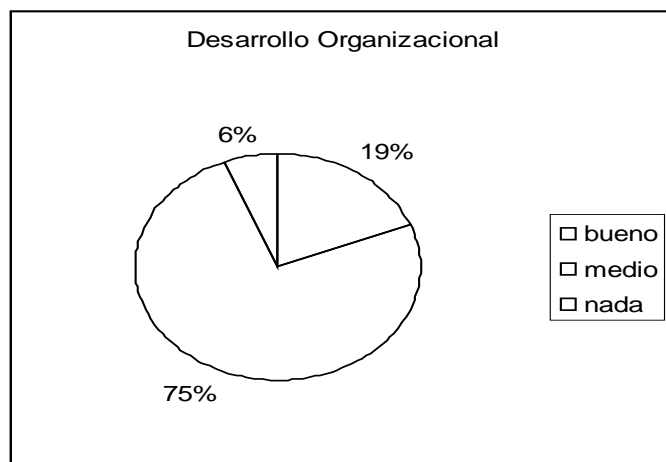
Figura 2 Proceso de Entrenamiento



Fuente: Propia

Se determinó que el 38% de la población encuestada el nivel de conocimiento es bueno en los procesos de Entrenamiento así como el resto 62% los conocimientos son medio, teniendo un 0% de la población que desconocen dicho proceso.

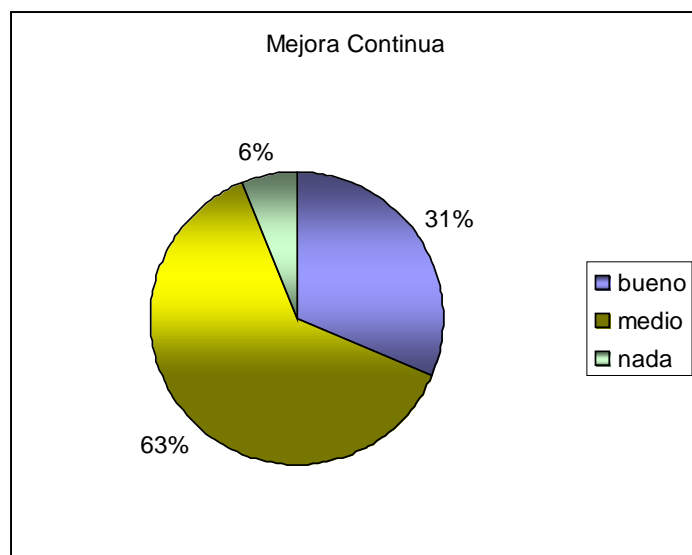
Figura 3 Proceso de Desarrollo Organizacional.



Fuente: Propia

Se determinó que el 19% de la población encuestada el nivel de conocimiento es bueno en los procesos de Desarrollo Organizacional así como el resto 75% los conocimientos son medio, teniendo un 6% de la población que desconocen dicho proceso.

Figura 4 Proceso de Mejora Continua



Fuente: Propia

Se determinó que el 31% de la población encuestada el nivel de conocimiento es bueno en los procesos de Desarrollo Organizacional así como el resto 63% los conocimientos son medio, teniendo un 6% de la población que desconocen dicho proceso.

CONCLUSIONES

La Gestión del Conocimiento es el proceso sistemático de búsqueda, selección, organización y presentación de información para mejorar la comprensión y el conocimiento de los empleados y miembros de una organización en un área específica. La importancia de la Gestión del Conocimiento está dada por su estrecha relación con la creación de valor. Es evidente que el conocimiento resulta ser el activo fundamental en todo tipo de organizaciones y, al mismo tiempo, el factor que determina su viabilidad y su éxito, no sólo en términos económicos sino, lo que es prioritario, como instrumento de acción, como herramienta clave del desempeño.

No es suficiente contar con una buena base de personal ni de clientes. Recordemos que tanto unos como otros están insertados en un entorno laboral y en un entorno competitivo, respectivamente. Es fundamental que la inteligencia organizacional vincule los saberes y experiencias del personal a las estrategias corporativas y que la inteligencia competitiva alimente el conocimiento del entorno social a partir del conocimiento que poseemos en nuestras propias bases de clientes.

Sin embargo, las estructuras y la cultura organizacional parecieran estar dispuestas para impedir que esos conocimientos fluyan hacia la organización y la impulsen a crear valor. El obstáculo principal radica en la debilidad teórica y conceptual en que se basa la gran mayoría de las políticas, programas e instrumentos de personal y de servicio al cliente. Así como en la mentalidad predominante prevalece, de modo absurdo, la idea de la organización como estructura piramidal rígida e inamovible, en la mentalidad de la mayoría de los gerentes de personal prevalece esquemas anacrónicos que no permiten incorporar el conocimiento como recurso fundamental.

En Venezuela y en general en América Latina esta forma de pensar ha dificultado la implementación y el manejo de la Gestión del Conocimiento, esto también aunado al hecho de que la administración bajo este

tipo de enfoque es costosa y la mayoría de las empresas que conforman el parque industrial venezolano son pequeñas y medianas industrias las cuales no cuentan con mecanismos eficientes para financiarse.

De acuerdo al desarrollo de los objetivos de investigación, podríamos concluir que, la Gestión del Conocimiento es considerada como un proceso organizacional basado en la combinación sinérgica de: los Recursos Humanos, las tecnologías de la Información y las Comunicaciones y la Cultura Organizacional. Es un fenómeno que depende de la formación y conocimiento del individuo que se hace imprescindible en el proceso de creación de conocimiento, y que permite su generación, distribución, acceso y uso con el objetivo de formar organizaciones inteligentes, adaptables y, por tanto, competentes.

En Relación a los resultados de las encuestas aplicadas el 35% de las personas si tienen un nivel bueno de conocimiento de los procesos del Departamento de Desarrollo Organizacional, sin embargo, sus conocimientos son implícitos y no son divulgados, el 60% de la población encuestada arroja que el nivel de conocimiento de la Gestión de Desarrollo Organizacional es medio, y el 5% de la población encuestada no tiene ningún nivel de conocimiento, por lo tanto, lo que indica que existe gran debilidad en la ejecución de los conocimientos explícitos y esto no permite el mejoramiento de la calidad de servicios prestado a la organización, a través de los diversos procesos mencionados.

La necesidad organizacional es fundamental y de importancia para la integración del personal en el trabajo en equipo, con el fin de mejorar las relaciones interpersonales del colaborador, los flujos comunicativos, afectivos y motivacionales para lograr constantemente el desarrollo organizacional.

REFERENCIAS

ACEVEDO, J. (2005) La globalización y educación. Editorial Fama. Argentina.

CHIAVENATO, I. (2004) Comportamiento Organizacional, Editorial Thomson Metodología Integradora de Procesos Empresariales a Nivel Estratégico, Táctico y Operacional (MIPE) Basado en la Gestión del Conocimiento.

DEL MORAL, A. Gestión del Conocimiento. Editorial Thomson.

DRUKER, P. (1998) La Organización del futuro, Editorial Granica.

HARVARD, Business Review. Gestión del Conocimiento. Ediciones Deusto S.A. 1998.

MANTILLA, B. Samuel. A. (1999) Capital intelectual Vs contabilidad del conocimiento. ECOE.

MORA, C Extraído de: <http://www.gestiopolis.com/canales2/gerencia/1/socconmv.htm>, Mayo 2006

NEWSTROM, J.W y DAVID K. (1991). El comportamiento humano en el trabajo. Madrid: McGraw-Hill Internacional

OCDE. La Administración del Conocimiento en la Sociedad del Aprendizaje. Mayol Ediciones S.A.

RODRÍGUEZ, D. (2001) La gestión del conocimiento, una poderosa fuente de ventaja competitiva en los estudiantes. Trabajo de Investigación. Universidad de Cienfuegos Carlos Rafael Rodríguez. Cuba.

ROBBINS, S. (2004) Administración, Thomson Editores.

ROGERS, J. (1977). El proceso de convertirse en persona. Buenos Aires: Editorial Paidós.

STONER, J. y FREEMAN, R. (1995) Administración. Prentice-Hall Hispanoamericana, S.A. quinta edición.

VARGAS Hernández, J. G. (2000). La problemática del cambio de los valores en la formación de administradores en programas de educación abierta y a distancia para la posmodernidad organizacional. Contexto Educativo. Revista Digital de Educación y Nuevas Tecnologías. No. 12. Disponible en <http://contexto-educativo.com.ar>

VALHONDO, D. (2004) Gestión del Conocimiento. Editorial Días de Santos.

EL ANÁLISIS TÉCNICO COMO ALTERNATIVA PARA LOGRAR RENDIMIENTOS SUPERIORES EN EL MERCADO DE DIVISAS: UN CASO REVISADO

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Lorena Zalthén Hernández, Universidad Autónoma del Carmen

RESUMEN

La hipótesis de la eficiencia del mercado en su forma débil implica que el análisis técnico no puede producir rendimientos anormales, es decir, no puede generar una estrategia para ganarle sistemáticamente al mercado. En este artículo se estudia un caso que contradice la hipótesis introducida por Eugene Fama en 1970 y que demuestra que el análisis técnico no está subordinado al análisis fundamental. Utilizando datos del mercado de divisas se contrasta el efecto de una noticia con la reacción del tipo de cambio USD/CHF y se observa que los indicadores técnicos pesaron más sobre la decisión del mercado que el análisis fundamental. Se concluye que el análisis técnico predispuso al mercado para la reacción observada y por lo tanto la hipótesis de la eficiencia del mercado en su forma débil debe ser rechazada.

INTRODUCCIÓN

En los mercados financieros, los precios de las acciones reflejan la totalidad de la información disponible, esta premisa es conocida como la hipótesis de eficiencia de los mercados (EMH, por sus siglas en inglés), desarrollada por Eugene F. Fama en 1970 (Fama, 1970). Esta hipótesis se representa en tres formas distintas, atendiendo a la eficiencia de mercado, por su forma débil, semi-fuerte y fuerte. La hipótesis de eficiencia de mercado en su forma débil implica que el análisis técnico es incapaz de predecir precios futuros en los mercados financieros, esto implica que ninguna estrategia basada en el análisis de datos históricos podrá generar un rendimiento superior al del mercado. Se probó la hipótesis de la eficiencia del mercado en su forma débil desde el punto de vista de la autocorrelación de los rendimientos (Fama, 1990). La ausencia de autocorrelación confirmó la hipótesis de la eficiencia del mercado y confinó al análisis técnico a la desaprobación. Incluso se hicieron pruebas de corrida utilizando los signos de los movimientos de los precios, las cuales confirmaron la independencia de estos y por tanto la hipótesis de la eficiencia del mercado en su forma débil (Hagerman y Richmond, 1973).

Aunque la hipótesis de la eficiencia del mercado nació en el ambiente del mercado de capitales, algunos estudios han aplicado esta al mercado de divisas concluyendo que el mercado de divisas también es eficiente en su forma débil (Baillie y Bollerslev, 1991).

El análisis técnico se le atribuye a Charles Dow a finales del siglo XIX, en la actualidad los principios de confirmación, tendencia, soporte y resistencia siguen siendo utilizados en muchos de los mercados financieros del mundo (Brock et al, 1992). La teoría de Dow se basa en tres simples postulados: a) no se necesita conocer la causa subyacente para entender los movimientos de los precios, b) el comportamiento humano en grupos es predecible, y c) el gráfico de los precios es un reflejo de todos los factores que operan en el mercado.

El análisis fundamental es aquel que estudia el impacto que tienen los fundamentales de la economía en los mercados financieros. De acuerdo a la hipótesis de la eficiencia del mercado en su forma semi fuerte, todas las noticias importantes que se generan sobre la marcha de la economía son reflejadas en los precios inmediatamente después que se hacen públicas.

La predicción de los precios en el mercado se ha estudiado con anterioridad como en el caso de Rozeff (1974) y Balvers y Cosimano (1993) llegando todos ellos a la conclusión de que el mercado es eficiente y no pueden predecirse los precios de corto plazo de antemano mas que los de largo plazo. Esto generó la preferencia en el uso del análisis fundamental sobre el análisis técnico. Pero recientemente se ha puesto en duda la imposibilidad de predecir los precios en el corto plazo (Schmilovici et. al., 2009), por medio de algoritmos han logrado predecir los precios en el corto plazo y las predicciones han resultado estadísticamente significativas. Pero sus predicciones no han resultado suficientes para generar una estrategia que produzca rendimientos superiores.

En este artículo se presenta un caso que podría rechazar la hipótesis de la eficiencia del mercado en su forma débil y demuestra que el análisis técnico no debería estar subordinado al análisis fundamental de la economía. Algunos aspectos a considerar son 1) que el caso se analiza en un solo mercado (USD/CHF), 2) que la realidad en la que el mundo vive actualmente es diferente a la que había cuando se propuso la hipótesis de la eficiencia del mercado y 3) que el caso es producto del mercado de divisas y no del mercado de capitales donde originalmente surgió la hipótesis de la eficiencia del mercado.

NATURALEZA DE LOS DATOS

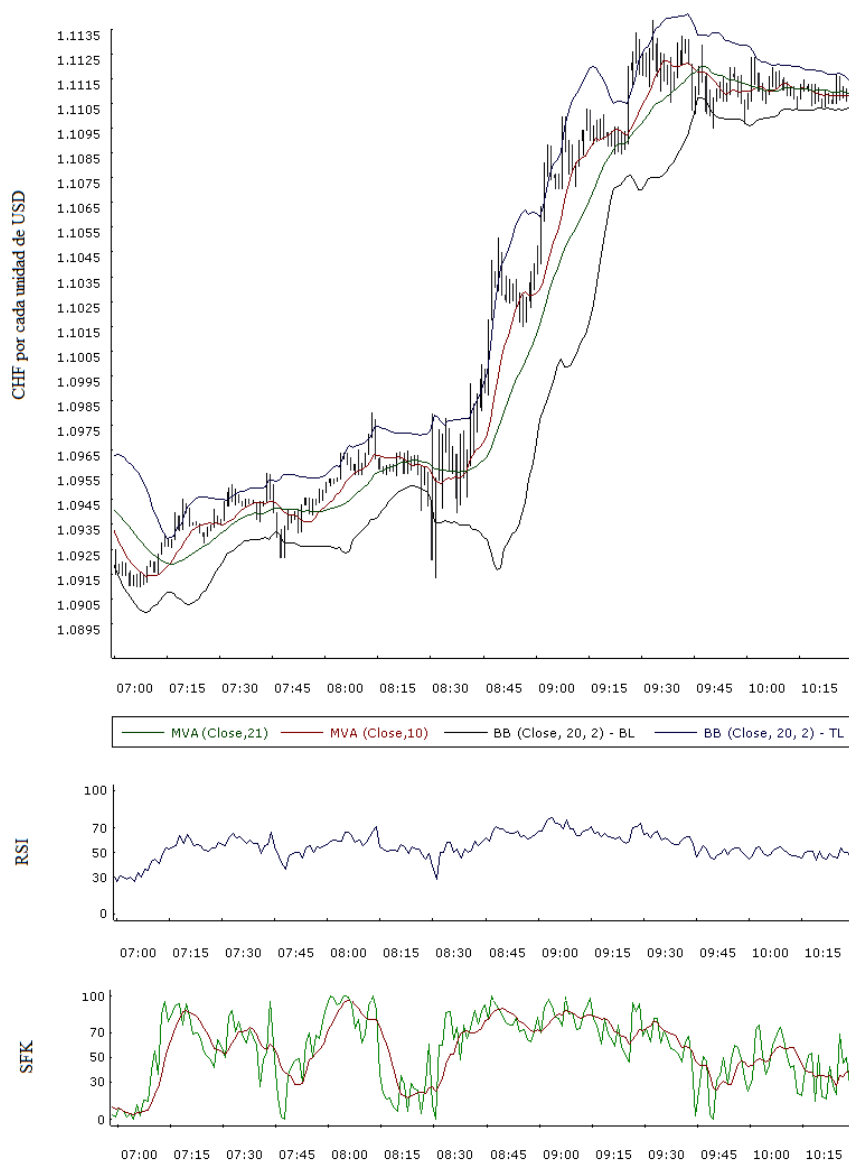
La fuente de los datos utilizados en este artículo es el sistema que tiene por nombre “Forex Trading Station II”, operado por la empresa Forex Capital Markets. Los precios de las divisas son “firmes” y no “indicativos”, donde los precios firmes son precios reales a los que en efecto se llevan a cabo operaciones en el mercado de divisas, mientras que los precios indicativos son precios de referencia y tienen un retraso de 3 minutos con respecto a los precios firmes (Danielsson y Payne, 2002).

El par de monedas seleccionado para este caso es el USD/CHF pues aunque el Franco Suizo no es una moneda importante en volumen negociado, si lo es en su reputación como moneda estable. Los precios que se presentan para el caso que aquí se muestra, son basados en cotizaciones de un minuto que van desde las 07:00 a.m. hasta las 10:30 a.m. hora del este en Estados Unidos el 9 de enero de 2009. La Figura 1 muestra la cotización del dólar estadounidense en términos de francos suizos y permite observar el efecto que la noticia tuvo en el mercado cuando esta se anunció.

La noticia a la que se hace referencia en este caso fue anunciada a las 13:33 GMT. La noticia menciona que se perdieron 524,000 empleos en el mes de diciembre de 2008 en la economía estadounidense, cifra menor a los 550,000 empleos que estimaban los analistas. Pero no solo esto, sino que el total de empleos perdidos durante todo el año 2008 asciende a 2,589,000; cifra muy superior al 1,100,000 millones de empleos creados en el 2007. De manera que no solo se perdieron empleos en el 2008, sino que también se perdieron los empleos creados en 2007. La noticia también indica que la tasa de desempleo fue de 7.2% para el 2008, cifra mayor al 7.0% pronosticado por los analistas y la mas alta desde 1993.

Como se puede observar en la Figura 1, es precisamente a las 8:30 a.m. que el precio rebota. En los cinco minutos que van de las 8:30 a.m. a las 8:35 a.m., se observa una fuerte volatilidad y termina por resultar en el comienzo de un rebote a la alza a partir de CHF1.09120/USD. Una hora después el precio había alcanzado su precio máximo del día para no volver a bajar. De manera que es sorprendente, en el caso que se presenta en este artículo, la forma en que el precio del USD en términos de CHF contraría a la idea de que los fundamentales de la economía determinan los tipos de cambio. Aunque la apreciación del USD pudo deberse a un dato menos perjudicial para la economía en cuanto a número de empleos perdidos, es indiscutible la tónica pesimista de la noticia en general. Y cuando los fundamentales fracasaron en dirigir el movimiento del precio, los indicadores técnicos desempeñaron un rol determinante en llevar al mercado en la predicción del movimiento.

Figura 1: USD/CHF, Gráfica de 1 Minuto - 9 de Ene 2009



La cotización se presenta en Francos Suizos por un Dólar Estadounidense en gráfica de velas, cuya frecuencia representa un minuto, es decir, del precio de apertura al precio de cierre hay un minuto de duración, con los extremos indicando el precio mínimo y el precio máximo en ese minuto. Se agregan en la misma gráfica los indicadores técnicos Bollinger Band (BB), y Moving Average (MVA) de 10 y 21 minutos. Se agrega una gráfica para el indicador técnico Relative Strength Index (RSI) y otra para el indicador técnico Stochastic Fast (SFK).

DISCUSIÓN

En los últimos años el análisis técnico a cobrado mucha relevancia, hasta el punto en que muchos operadores se basan en él para tomar decisiones. Los indicadores técnicos arrojan señales de compra o de venta y son estas señales las que se han convertido en las directrices para muchos especuladores y operadores (Parvaez et. al., 2005). De manera que la idea de que el análisis técnico está subordinado al análisis fundamental es incorrecta. Podríamos decir en cambio, que el análisis técnico complementa al

análisis fundamental. Pero, de acuerdo al caso presentado en este artículo, podemos arriesgarnos a proponer que incluso el análisis técnico es superior al análisis fundamental, al menos en el corto plazo, lo que va de acuerdo con Taylor y Allen (1992). Los indicadores técnicos dieron una señal de compra cuando los fundamentales de la economía dieron una señal de venta el día 9 de enero de 2009 a las 13:30 hrs GMT. De manera que los fundamentales de la economía norteamericana deberían haber actuado en contra del dólar estadounidense y no en su favor. Y el resultado fue que el mercado se apoyó más en la señal del análisis técnico que en la del análisis fundamental. Los indicadores técnicos que apoyan la señal de compra son cuatro: Estocástico, Índice de Fuerza Relativa, Bandas de Bollinger y Media Móvil.

El primer indicador técnico que discutimos es el Estocástico en su forma rápida y lenta. El Estocástico Rápido maneja dos líneas, una llamada %K que es la línea agresiva y otra llamada %D que es la línea suave. Cuando %K rompe %D hacia arriba, se genera una señal de compra. De acuerdo con este indicador, la señal de compra se había presentado entre las 6:00 y las 7:00 de la mañana del día 9 de enero de 2009. De manera que ya para las 8:30 EST (13:30 GMT) la noticia no tuvo el efecto que la hipótesis de la eficiencia del mercado en su forma débil supone, sino que el Análisis Técnico pesó más en la decisión del mercado. Además, la línea suave, %D, que es conocida como Estocástico Lento, mostraba el comienzo de un patrón ascendente, confirmando la señal de compra.

El segundo indicador, el Índice de Fuerza Relativa (RSI), dice si la fuerza relativa de un movimiento se ha agotado o tiene todavía terreno por recorrer. Cuando el RSI marca 30 en su índice, y comienza a subir, entonces estamos en el principio de una tendencia a la alza. Este indicador técnico proyecta la misma señal de compra desde las 5:00 a.m. del 9 de enero 2009 y una vez más a las 7:00 a.m. de ese mismo día.

El tercer indicador es conocido como Bandas de Bollinger. La banda alta y la banda baja representan la distancia de dos desviaciones estándar con respecto a la media, en relación a la campana de Gauss. Los analistas técnicos normalmente interpretan a las bandas como líneas de rebote hacia la media o, cuando las bandas se rompen, una nueva tendencia en esa dirección. En esta ocasión, la banda baja de Bollinger se rompe, indicando una tendencia a la baja, pero tan pronto se rompe, el precio regresa para ponerse en posición ascendente. Esto nos indica que el rompimiento de la banda baja fue una señal falsa. En la gráfica de 60 minutos esto sucede a las 5:00 a.m. y no a las 8:30 a.m. cuando la noticia se publicó. De manera que la falsa violación de la banda baja de Bollinger y su repentino rebote es una señal técnica de ascensión que pesa más en el mercado que la noticia de las 8:30 a.m.

Por último, la Media Móvil Simple, que dicta el sentido de una tendencia, se rompe a la alza a las 6:00 a.m. en la gráfica de 60 minutos confirmando el movimiento hacia arriba, y debido a que la distancia entre la banda baja y la banda alta de Bollinger es muy corta, el precio pronto dio la señal de compra de acuerdo a la media móvil. Incluso, la media móvil de 10 horas rompió la media móvil de 21 horas desde la 1:00 a.m. a la alza y se apoyó en la última para rebotar a las 8:30 a.m. como se observa en la gráfica de 1 minuto.

CONCLUSIÓN Y REFLEXIONES

A pesar de que las investigaciones del pasado hacen suponer que el análisis técnico es infructuoso debido a la eficiencia del mercado en su forma débil, la realidad nos presenta una contradicción. El dólar estadounidense en términos de francos suizos se fortaleció aún y cuando la noticia del 9 de enero de 2008 fue negativa para la economía de los Estados Unidos. Considerando los indicadores técnicos nos damos cuenta que éstos marcaban una señal de compra con al menos 1 hora de anticipación a la publicación de la noticia. De manera que el caso que se presenta es una contradicción a la hipótesis de la eficiencia del mercado en su forma débil. Y a la luz de este caso, el análisis técnico no debe subordinarse al análisis fundamental en el mercado de divisas. Resulta evidente que el mercado consideró únicamente el análisis técnico y desechó el análisis fundamental, poniendo en duda la hipótesis de la eficiencia del mercado.

REFERENCIAS

Baillie, R. T., & Bollerslev, T. (1991). Intra-Day and Inter-Market Volatility in Foreign Exchange Rates. *The Review of Economic Studies*, 58(3), 565-585.

Balvers, R. J., & Cosimano, T. F. (1993). Periodic learning about a hidden state variable. *Journal of Economic Dynamics and Control*, 17(5/6), 805.

Brock, W., Lakonishok, J., Lebaron, B. (1992). Simple technical trading rules and the stochastic properties of stock returns. *The Journal of Finance*, 47, 1731-1764.

Danielsson, J., & Payne, R. (2002). Real trading patterns and prices in spot foreign exchange markets. *Journal of International Money and Finance*, 21(2), 203.

Fama, E. F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *The Journal of Finance*, 25(2), 383-417.

Fama, E. F. (1990). Efficient capital markets, II. Chicago: Center for Research in Security Prices, Graduate School of Business, University of Chicago.

Hagerman, R. L. (1973). Random Walks, Martingales and the OTC. *The Journal of Finance*, 28(4), 897.

Parvez, A., Kristine, B., & Elizabeth, G. (Writer) (2005). Moving Average Technical Trading Strategies for Currencies of Emerging Economies.

Rozeff, M. S. (1974). Money and stock prices: market efficiency and the lag in effect of monetary policy. *Journal of Financial Economics*, 1(3), 245-302.

Shmilovici, A., Kahiri, Y., Ben-Gal, I., & Hauser, S. (2009). Measuring the efficiency of the intraday forex market with a universal data compression algorithm. *Comput. Econ. Computational Economics*, 33(2), 131-154.

Taylor, M. P., & Allen, H. (1992). The Use of Technical Analysis in the Foreign Exchange Market. *Journal of International Money and Finance*, 11, 304-314.

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BIOGRAFÍAS

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LA PARTICIPACION DE LA BANCA COMERCIAL EN LAS MICROFINANZAS. EL CASO DE AMERICA LATINA

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El crecimiento de las microfinanzas en el mundo durante las últimas décadas ha revolucionado los esquemas financieros tradicionales al contribuir exitosamente al impulso de micronegocios y, de manera más amplia, al combate de la pobreza. El éxito de Instituciones Microfinancieras sustentables, y en muchos casos con altas tasas de rentabilidad, está atrayendo a intermediarios financieros convencionales que ven una oportunidad de inversión en este sector. Existe una gran preocupación de que se privilegie la visión comercial, y se pierda el enfoque social de las microfinanzas. El objetivo del trabajo es profundizar en el conocimiento del modelo comercial en América Latina, a través del estudio de los principales bancos comerciales de la región enfocados en microfinanzas. En el trabajo se realiza un análisis comparativo, utilizando variables financieras y operativas, para identificar las tendencias de la banca comercial en la región, y de esta manera contribuir con elementos objetivos en la discusión sobre si el modelo comercial implica abandonar la función social de las microfinanzas, o si es posible que instituciones con fines de lucro, además de ser rentables, puedan coadyuvar en la lucha contra la pobreza.

MÉXICO: DETERMINANTES DEL TIPO DE CAMBIO, 1986-2000.

Arturo Morales Castro, Universidad Nacional Autónoma de México

RESUMEN

Las constantes fluctuaciones en el tipo de cambio peso-dólar han provocado una gran preocupación en los tomadores de decisiones financieras acerca de la sensibilidad que tiene el tipo de cambio a la volatilidad de sus determinantes; por lo cual se consideró trascendente estudiar dicha relación con el propósito de analizar la sensibilidad que presenta el tipo de cambio a la volatilidad de sus determinantes económico-financieros; en este sentido en este trabajo de investigación se comprobó que el tipo de cambio está determinado no sólo por la vinculación tan estrecha que existe con la inflación, sino también por otros indicadores económico-financieros como la tasa de interés interna y externa, las reservas internacionales, el circulante monetario y la actividad industrial. Para comprobar dicha asociación y sensibilidad del tipo de cambio a sus determinantes se realizó un análisis de regresión múltiple; concluyendo que hay una relación significativa entre el tipo de cambio y las variables económico-financieras que son: la inflación en México, la tasa de interés en México y las reservas internacionales. La variable que mayormente influyó en el tipo de cambio fue la inflación.

BIOGRAFIA

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INFLUENCIA DE LA COMUNICACIÓN, EN LOS PROCESOS DE APRENDIZAJE

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RESUMEN

Esta investigación aborda el comportamiento de las variables comunicación y procesos de aprendizaje, en (44) empresas de los sectores comercio y servicios, en el Edo. de Aguascalientes, México. En ella participaron Directivos, Administradores del capital humano y empleados administrativos y operativos. La muestra fue no probabilística, integrada por (145) sujetos. El instrumento de recolección de datos fue una escala Likert de 5 puntos, con nivel de medición ordinal y nominal, integrado por (46) preguntas; (18) para medir la variable independiente, (20) para la variable dependiente y (8) para la demografía de la muestra, (Lozano, 2006); (Lozano, 2008). Los resultados de las pruebas señalan que para el puesto Directivo, la comunicación influye los procesos de aprendizaje, por medio de la definición de objetivos, estándares de desempeño, vinculación a las metas empresariales, inducción y actualización en el puesto de trabajo. Para los administradores del capital humano, la comunicación influye los procesos de aprendizaje promoviendo el conocimiento de los objetivos, la inducción y actualización en el puesto de trabajo y para empleados administrativos y operativos, la comunicación propicia la difusión de los procesos de aprendizaje, la definición de objetivos y su vinculación con las metas empresariales.

Palabras clave. *Capacitación y adiestramiento, Comunicación, Procesos de aprendizaje.*

INTRODUCCIÓN.

Para las organizaciones es de suma importancia que los procesos de aprendizaje (*Capacitación y adiestramiento*), que implementan satisfagan las necesidades que los originaron. Con frecuencia las inversiones realizadas derivan en gastos ociosos, rara vez justificados por quienes los administran y no existe una comunicación formal que explique el porqué no fueron cubiertas las necesidades. Esto propicia una errónea percepción, por parte de (*Directivos*) y capital humano (*administrativos - operativos*), porque se gesta una comunicación informal que muestra el bajo nivel de satisfacción o inconformidad por los contenidos, los horarios, el instructor, las instalaciones o las circunstancias bajo las cuales concurren al evento. Es probable que quienes coordinan los procesos no los evalúen, o no consideren necesario difundirlos, favoreciendo la predisposición en futuros procesos.

Las organizaciones necesitan establecer porque los aprendizajes (*Capacitación y adiestramiento*) que implementan, no corrigen las deficiencias de los puestos de trabajo, porqué la comunicación interna, no impulsa las actividades o porqué no se difunden previamente los objetivos y logística de operación. Explicar la ausencia de resultados no siempre es sencillo, baste decir que los principales inversores (*Directivos*), esperan la solución a los problemas en un tiempo inmediato. Así, detectar que el problema se origina por una ausencia de comunicación en los procesos de aprendizaje, (*Capacitación y adiestramiento*), y que esto propicia objetivos incompatibles a las necesidades organizacionales, bajo nivel de satisfacción, aunado a una administración deficiente, es sumamente complicado y poco justificable. (Fernández, 1997), destaca que la comunicación está representada por técnicas y actividades que agilizan la comunicación entre los miembros de una organización. De acuerdo a (Gámez, 2007), *la comunicación se ha convertido en uno de los ejes centrales de la empresa, ya que por medio de ella existe una mejor relación comunicativa entre actores internos y esto se refleja hacia los públicos externos; creando una imagen e identidad propia*. En este sentido, es probable que la comunicación interna no sea efectiva en términos de lo que los directivos desean alcanzar o que la forma en que son comunicadas las actividades de aprendizaje no sea motivadora. Sucede que en ocasiones el factor humano, se entera de los

procesos externamente, lo cual define su identidad hacia la organización y su comportamiento congruente. Por ello, es necesario considerar las implicaciones de las interrelaciones que se gestan y plantear opciones de mejorar en procesos de aprendizaje posteriores.

El objetivo de esta investigación, fue identificar la influencia de la comunicación en los *procesos de aprendizaje (Capacitación y adiestramiento)*, que implementan las organizaciones. Para esto, se cuestionó al capital humano que desempeña los puestos de *Director, Administrador del capital humano y Empleados (administrativos y operativos)*, de Empresas *Pequeñas y Medianas* de los sectores *Comercio y Servicios*, en el Estado de Aguascalientes, Méx. El valor teórico, estriba en el abordaje de las variables *comunicación organizacional y procesos de aprendizaje*, para evaluar las fases del *Sistema general de capacitación*, (Lozano, 2006); (Lozano, 2008). La Utilidad metodológica es el instrumento de medición con (46) preguntas, las cuales monitorean las variables objeto de estudio, mismas que pueden emplearse con unidades de análisis similares, (Lozano, 2006).

REVISIÓN LITERARIA.

(Fernández, 2002), señala que la comunicación organizacional puede comprenderse como un *conjunto de técnicas y actividades encaminadas a facilitar y agilizar el flujo de mensajes que se dan entre los miembros de una organización, o entre la organización y su medio*. Para (Rodríguez, 2005), es un *sistema o conjunto de procesos de construcción de símbolos, significados compartidos e intercambios de información, establecidos entre los integrantes de una organización*. así, Martín, M. F. (1995), (Citado por Rodríguez, 2005); destaca el concepto como la *coordinación de tareas para dirigir la estrategia de comunicación y gestionar acciones encaminadas a mejorar la imagen pública; potenciar, desarrollar y difundir la actividad de comunicación; conseguir que esta sea clara, veraz, transparente; mantener estrecha relación de colaboración con los medios y verificar y controlar la calidad e incidencias informativas y publicitarias de todas las acciones de comunicación*. Desde esta perspectiva, la comunicación en relación a los *procesos de aprendizaje*, implicaría el desarrollo de actividades y técnicas, tendientes a facilitar la comunicación, intercambiar información y gestionar acciones para conocer el comportamiento de los aprendizajes y su influencia en el puesto de trabajo. De hecho, la manera en que se comunican las acciones, define la actitud del factor humano respecto a su participación. Por otro lado, las líneas de comunicación, muestran jerarquías más amplias y complejas. Por ejemplo, en la pequeña empresa, las jerarquías son sencillas y el acceso al empresario es directo, lo que permite detectar la percepción del factor humano respecto a las tareas y explicarlas cuando proceda, (Enciclopedia Práctica de la Pequeña y Mediana Empresa, 2009). Existen, sin embargo algunos principios para desarrollar canales de comunicación en función del tipo de empresa como: *saber escuchar, informar permanentemente al personal, estimular la comunicación recíproca, promover la participación de los subordinados en la toma de decisiones y crear un clima de confianza y buena voluntad*. Así, (Cedeño, 2003), detalla algunos obstáculos a los *procesos de aprendizaje (Capacitación y entrenamiento)*, a partir de la *competencia*, las *comunicaciones* o los *cambios mundiales*. Entre ellos tenemos el *temor a exhibir lo que no se sabe, cortoplacismo, arrogancia, sobrevaloración de la experiencia y de los faltantes, resistencia al cambio, predicción de inutilidad, el punto ciego y predisposición a los costos financieros*. Así, la capacitación es un proceso de aprendizaje que proporciona conocimientos, habilidades y técnicas para el óptimo desarrollo del puesto de trabajo, (Lozano, 2008). En un estudio realizado por (Hinkin, T. T., & Mathieu, J.E., Tannenbaum, S., Tracey, B.J., 2001); señalan que el ambiente de trabajo podrían influir el aprendizaje del factor humano y el desempeño posterior al entrenamiento y definen 3 dimensiones relacionadas con el ambiente de trabajo: *apoyo gerencial, apoyo al trabajo y soporte organizacional*.

METODOLOGÍA

La investigación fue cuantitativa y el estudio descriptivo-correlacional, la hipótesis fue Descriptiva – correlacional y muestra la influencia de la comunicación en torno a los procesos de aprendizaje. La muestra fue no probabilística, las unidades de Análisis, fueron (44) empresas y los sujetos de estudio, el capital humano que desempeña los puestos de *Director*, *Administrador del capital humano* y Empleados de nivel (*administrativo y operativo*). El instrumento de recolección de datos fue una escala Likert de 5 puntos, con nivel de medición ordinal y nominal, integrado por (46) preguntas; (18) para medir la variable independiente, (20) para la variable dependiente y (8) correspondiente a la demografía, (Lozano, 2006); (Lozano, 2008). El coeficiente *Alpha de cronbach*, muestra valores de (.771), (.892), (.725), para la variable independiente *Comunicación organizacional de los procesos de aprendizaje* y para la variable dependiente, *Resultados de los procesos de aprendizaje*, los coeficientes son (.850), (.845), (.511). En ambos casos, se interpretan como aceptables. Para identificar la relación entre las variables, se aplicó una prueba de asociación denominada *chi-cuadrado*, que es una prueba no paramétrica, que parte del supuesto de *no relación entre variables* y se efectúa analizando si las frecuencias observadas son diferentes de lo que pudiera esperarse en caso de ausencia de correlación.

RESULTADOS.

Los resultados de las pruebas efectuadas comprueban la hipótesis y responden al objetivo y pregunta de investigación evidenciando que la comunicación influye los procesos de aprendizaje para los 3 puestos analizados, de acuerdo a lo siguiente:

- Para los Directivos, la comunicación de los procesos, promueve la definición de objetivos, estándares de desempeño, metas empresariales, necesidades de inducción y actualización al puesto de trabajo. Los *resultados de los procesos de aprendizaje*, muestran que la emisión de informes, promueve el desarrollo de indicadores de su impacto, la transferencia de conocimientos al puesto y el cambio de actitudes del capital humano.
- Para los Administradores del capital humano, la comunicación de los procesos de aprendizaje, favorece el conocimiento de los objetivos que deben cubrir en su puesto de trabajo y permite la inclusión de necesidades de inducción y actualización al puesto de trabajo.
- Para Empleados (*administrativos y operativos*), la difusión de los procesos, apoya la definición de objetivos en los puestos de trabajo y de éstos, con los procesos de aprendizaje, vinculando las metas organizacionales. Los resultados, reflejan que el desarrollo de informes permite conocer los costos por curso y departamento, diseñar indicadores de su impacto en ventas, satisfacción de necesidades y el logro de los objetivos.

CONCLUSIONES.

La comunicación tiene un papel trascendental en los procesos de aprendizaje que implementan las organizaciones, principalmente porque afectan directamente al puesto de trabajo. A su vez, el puesto integra todas las actividades concernientes a la operación de la organización, si el capital humano muestra deficiencias en el desempeño, impacta el desarrollo de las operaciones empresariales.

REFERENCIAS.

Enciclopedia Práctica de la Pequeña y Mediana Empresa. (2009). *Canales de comunicación en la pequeña empresa. Bases para crear los canales de comunicación*. (2009). Recuperado Febrero 12 2009. Editorial Océano, Código de documento: 41963.

Cedeño, A. (2003). *Obstáculos a la capacitación*. Recuperado Febrero 12 2009. Actualidad económica, No. 278, 4/2003. Costa Rica. Código de Documento 1195441

Fernández, C.C. (1997). *La Comunicación en las Organizaciones*. Editorial Trillas. México.

Fernández, C.C. (2002). *La comunicación en las organizaciones*. México. Editorial Trillas, S.A. de C.V. ISBN: 968-24-6586-9.

Gámez G. R. (2007). *Comunicación y cultura organizacional en empresas chinas y japonesas*. Edición electrónica gratuita. Recuperado Diciembre 23 2008, en www.eumed.net/libros/2007a/221/.

Hinkin, T. T., & Mathieu, J.E., Tannenbaum, S., Tracey, B.J., (2001). *The influence of individual characteristics and the work environment on varying levels of training outcomes*. *Human Resource Development Quarterly* vol 12, No. 1.

Lozano R. M. C. (2006), *Impacto de la función directiva en la implementación de procesos de capacitación en empresas de los sectores comercio y servicios en el Estado de Aguascalientes, México*. Tesis Doctoral.

Lozano R.M.C., (2008). *Impacto de la función Directiva en los procesos de aprendizaje. ¿Por qué los Directivos no creen en la Capacitación?*. 1ª Edición, México. Universidad Autónoma de Aguascalientes – Universidad Del Valle de México, Campus Aguascalientes. ISBN: 978 970 728 104 9. 92 páginas.

Rodríguez, G. I. (2005). *Comunicación organizacional: teorías y puntos de vista*. *Comunicación organizacional*. Recuperado Febrero 17 2009. www.gestiopolis.com/Canales4/ger/comuor.htm

BIOGRAFÍA.

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DESARROLLO DE HABILIDADES DE INTELIGENCIA EMOCIONAL CON TÉCNICAS ERICKSONIANAS

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ABSTRACT

Este estudio es una aproximación exploratoria utilizando técnicas Ericksonianas al aprovechamiento y la inteligencia emocional en estudiantes de Ingeniería Industrial en institutos tecnológicos en México. Una muestra de 24 estudiantes fue requerida para participar voluntariamente en la investigación. Se analizó el efecto de la participación del grupo experimental (GE) y el grupo control (GC) sobre el aprovechamiento y la inteligencia emocional (IE) en relación a las calificaciones parciales semestrales, el promedio final de cada alumno y el promedio final de cada grupo. Considerando el propósito del estudio, el enfoque de la investigación fue un estudio mixto dado que la utilización de un solo tipo no fue suficiente para responder al problema de investigación. Los investigadores utilizaron procedimientos detallados para el análisis de los datos consistiendo en tres fases de codificación, abierta, axial y selectiva. La recolección de la información consistió en una profunda investigación cualitativa utilizando técnicas Ericksonianas y cuantitativa respecto a la información obtenida con el test de Inteligencia Emocional de Cooper. Los resultados indican una relación estadísticamente significativa entre el crecimiento ericksoniano y el promedio final de las calificaciones de los participantes encuestados. Considerando lo reducido de la muestra, los resultados de este estudio no pueden ser generalizados.

INTRODUCCIÓN

El desempeño académico de todos los estudiantes es una preocupación nacional tanto para académicos como investigadores. El desempeño académico se refiere a lo extenso en adquirir conocimiento, habilidades y aprovechamiento que el instructor busca enseñar o asignar (Salvia y Ysseldyke, 2000). El panorama de la deserción y reprobación en el Sistema Nacional de Educación Superior Tecnológica (SNEST) es desolador e involucra a más del 40% de los alumnos en los primeros semestres, de acuerdo con lo expresado por el ex director general de los Institutos Tecnológicos, Fuentes (2005). Ante dicha problemática, la presente investigación aborda la inteligencia emocional (IE) y el mejoramiento del aprendizaje en un grupo de estudiantes de la Carrera de Ingeniería Industrial. Dicho mejoramiento es abordado utilizando el método reconocido como Técnicas Ericksonianas, de acuerdo a los preceptos propuestos por Robles (2003).

De esta manera, la presente investigación plantea la utilización de las técnicas Ericksonianas aplicadas en un grupo de crecimiento, en el que los estudiantes realizan ejercicios de amplificación de conciencia que les hacen reflexionar sobre temas universales tales como: las barreras, heridas, motivación, relación maestro-alumno, y compañeros; mejorando su aprovechamiento y sus relaciones no solamente con ellos mismos sino también con los demás, aprovechando todos sus recursos internos y externos ya que es más efectivo buscar soluciones que enfocarse en los problemas. El valor práctico de trabajar con la IE trata de articular la también novedosa intervención de las técnicas Ericksonianas. Este planteamiento se apoya en el crecimiento saludable y en la normalización de las situaciones que aparecen de manera natural y que serían de gran ayuda a los estudiantes. De la misma manera, abordar el estudio de “esa parte del cerebro, que según nos dice la neurociencia aprende diferente al cerebro Pensante”. Robles, (2005).

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EL RAMO 33 Y SU INEFICIENCIA EN EL COMBATE A LA POBREZA: CASO CHIHUAHUA

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RESUMEN

Uno de los objetivos del milenio es la reducción de la pobreza, y esto no es la excepción para el caso mexicano. El gobierno federal a través del Ramo 33 se ha enfocado a la disminución de la misma, pero cuando se consideran los indicadores del PNUD, tanto el Índice de Desarrollo Humano como el Índice Refinado de Desarrollo, para determinar el nivel óptimo de asignación de recursos monetarios, esta optimización tiende a ser ineficiente y termina por redistribuir éstos de forma que en algunos casos los sobreemplea y en otros los subemplea. El documento se centra en demostrar con datos estadísticos la ineficiencia del Ramo 33 en el combate a la pobreza, dentro del periodo 2005 para los municipios del estado de Chihuahua para lo cual se ocupa el Índice de Desarrollo Humano y el Índice Refinado de Desarrollo.

Palabras clave: Índice de Desarrollo Humano, Índice Refinado de Desarrollo, Ramo 33.

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INDICADORES DE GESTIÓN PARA TOMA DE DECISIONES FINANCIERAS

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RESUMEN

This system shows how to facilitate decision-making in Portfolio, based on initial parameters from each investor. To start the system is necessary to define the status of the Portfolio, projections and expectations, as well as factors that help to identify the type of investor. This information is analyzed by comparing the investor's data with market data, obtaining the results of management, which aims to develop indicators and calculate rates, to facilitate decision-making.

INTRODUCCIÓN

Para optimizar el Portafolio se requiere desarrollar: Indicadores que muestren al inversionista la situación inicial de su Portafolio e Índices que muestren sobre escenarios pesimistas, esperados y optimistas. Según los parámetros, Indicadores e Índices, se desarrolla un sistema que ayude a la toma de decisiones.

MARCO TEORICO

Financieros: Portafolio, Horizonte, Diversificación, Rentabilidad, Riesgo, Portafolio, Activos libres de riesgo, Acciones, Divisas, Renta Fija, Derivados

Criterios: Utilidad, Valor Presente Neto (VPN), Tasa Interna de Retorno (TIR), Valor en Riesgo (VaR).

Administrativos: Sistema, Indicadores, Índices, Método iybersyn, Optimización, Probabilidad.

APLICACIÓN (CASO DE ESTUDIO)

Un Inversionista tiene un Portafolio con una cantidad de dinero invertida en activos, cada Inversionista tiene expectativas representadas en una rentabilidad esperada, un riesgo de invertir en el activo y una probabilidad de éxito sobre la rentabilidad esperada. Se define entonces un Portafolio, el cual será valorado mediante un Sistema de Indicadores de Gestión y toman tres (3) posibles tipos de decisión: dejar el Portafolio sin modificación alguna, Invertir más dinero en algún activo o Recomponer el Portafolio. Estas decisiones están basadas en Indicadores de Gestión los cuales son: Utilidad, VPN, TIR y VaR, como los usados para la toma de decisiones.

Criterios para la Toma de decisión:

Utilidad: Para éste Sistema de Indicadores la utilidad se define bajo la fórmula (Tabla 1).

Tabla 1: Cálculo Utilidad

UTILIDAD=	19.3083%
$E(r_p)=$	19.34%
A=	3
$\sigma_p^2=$	1.78%

$$U = E(r) - (0.005) \times A \times \sigma^2 \quad (1)$$

Donde U representa la utilidad, $E(r)$ es la esperanza de la rentabilidad, A es la aversión al riesgo del Inversionista medida en una escala del 1 al 5 donde 1 representa menor aversión al riesgo y 5 la mayor aversión al riesgo, y σ^2 es la varianza de la rentabilidad.

VPN: El Valor Presente Neto (VPN) para el Sistema de Indicadores de Gestión se mide (Tabla 2):

$$VPN = \sum_j \frac{I_j}{(1+i)^j} - \sum_j \frac{E_j}{(1+i)^j} \quad (2)$$

“Donde I_j son los flujos positivos en el periodo j , E_j son los flujos negativos en el periodo j , i es la tasa de descuento y j son los periodos.” (VÉLEZ, I. 2006 pág. 148)

$$VPN(normalizado) = \frac{VPN}{I_{0(total)}} \quad (3)$$

Para normalizar el valor del VPN utilizamos la siguiente fórmula:

Donde VPN corresponde al valor calculado de la formula anterior e $I_{0(total)}$ corresponde al valor inicial total invertido en el Portafolio.

Tabla 2: Cálculo VPN

Inversión Inicial=	10.000.000.00
$VPN_{Libre\ riesgo}=$	534.300.00
$VPN_{Acciones}=$	2.910.230.00
$VPN_{Divisas}=$	1.181.250.00
$VPN_{Renta\ Fija}=$	5.969.343.92
$VPN_{Derivados}=$	1.093.000.00
$VPN_{Total}=$	11.688.123.92
$VPN\ Normalizado=$	1.1688

TIR: La Tasa Interna de Retorno (TIR) para el Sistema de Indicadores de Gestión es:

$$\sum_j \frac{I_j}{(1+i)^j} - \sum_j \frac{E_j}{(1+i)^j} = 0 \quad (4)$$

“Donde I_j son los flujos positivos en el periodo j , E_j son los flujos negativos en el periodo j , i es la tasa de descuento y j son los periodos.” (VÉLEZ, I. 2006 pág. 158)

El cálculo de este valor i que hace que se cumpla la igualdad, se realiza por tanteo, para efectos prácticos en el Sistema de Indicadores de Gestión se utilizan las herramientas financieras de MS Excel formula: =TIR (rango; i semilla), el rango debe contener todos los flujos de caja (incluido el del instante cero (0)). (TIR (Promedio Ponderada)=16.88%) (Tabla 3).

Tabla 3: Cálculo TIR

$TIR_{Libre\ riesgo} =$	$TIR_{Acciones} =$	$TIR_{Divisas} =$	$TIR_{Renta\ Fija} =$	$TIR_{Derivados} =$
6.86%	16.41%	18.12%	19.39%	9.30%
Flujo de caja	Flujo de caja	Flujo de caja	Flujo de caja	Flujo de caja
-500.000.00	-2.500.000.00	-1.000.000.00	- 5.000.000.00	-1.000.000.00
534.300.00	2.910.230.00	1.181.250.00	5.969.343.92	1.093.000.00

VaR: El Valor en Riesgo (Value at Risk) VaR, dentro del Sistema de Indicadores de Gestión se calcula con la formula siguiente (Tabla 4) :

$VaR = F \times S \times \sigma_p \times \sqrt{t}$ (5) Donde F es el factor que define el nivel de confianza, S es el valor del Portafolio, σ_p es la volatilidad del Portafolio y t son los días de cálculo del VaR. (Johnson, C. 2001 pág. 234). Se definen tres valores: Actualidad, Capability y Potencialidad. Permiten calcular los Índices de Latencia, Logro y Desempeño.

Tabla 4: Cálculo VaR

Horizonte de cálculo VaR	70 Días
Nivel de confianza	99%
F	2.33
$VaR_{Libre\ riesgo} =$	-
$VaR_{Acciones} =$	213.043.52
$VaR_{Divisas} =$	40.102.31
$VaR_{Renta\ Fija} =$	80.761.60
$VaR_{Derivados} =$	35.646.50
VaR_{Total}	369.553.93
VaR_{Portafolio}	237.457.13
VaR_{Total} / VaR_{Portafolio}	3.2961%

Valores-Actualidad--Esta relacionado con el valor de cada día del sistema-en-foco. Se puede definir también como un valor observado. **Capability** Es el máximo (mínimo) valor del Indicador

según las restricciones actuales del sistema-en-foco o en el caso restricciones del Inversionista. Potencialidad, Es el máximo (mínimo) valor del indicador tomaría si el administrador del sistema-en-foco trata de reducir r las restricciones actuales. (Reyes, A. 2003. pág. 28)

Índices:

Latencia--Es el valor calculado así (rango entre cero (0) y uno (1):

$$Latencia = \frac{Capability}{Potencialidad} \quad (6)$$

Y se interpreta como: si esta en valores bajos es un bajo nivel de inversión (interés) del Inversionista. *Gestiona el futuro*. (Reyes, A. 2003. pág. 30)

Logro: Es el valor calculado (rango entre cero (0) y uno (1):

$$Logro = \frac{Actualidad}{Capability} \quad (7)$$

Se interpreta como: a niveles bajos de logro existen problemas de gestión de recursos (dinero) por parte del Inversionista. *Gestiona el presente*. (Reyes, A. 2003. pág. 29)

Desempeño: Mide el balance entre la gestión del presente y la gestión (inversión) del futuro, se calcula como:

$$Desempeño = Logro \times Latencia : \quad (8)$$

Esto define posible políticas o medidas a tomar en la Administración del Portafolio de Inversión según cómo se esté gestionando (midiendo resultados) el Portafolio.

EJEMPLO RESULTADOS Y CONCLUSIONES

Un ejemplo en la Tabla 5, un Inversionista tiene invertido \$10.000.000 (COP) y según las condiciones estipuladas (criterios de decisión del inversionista (Ver Tabla 6)).

Observaciones Derivadas del Modelo

Se pueden desarrollar varios Indicadores que ayuden al Inversionista a medir la situación de su Portafolio de Inversión los que más se destacan para medir el Portafolio son: Utilidad, Valor VPN, TIR y VaR; también se pueden crear otros Indicadores los cuales retroalimenten el Sistema de Indicadores de Gestión. Existen Índices auxiliares externos (Ver anexo 2) los cuales se clasifican en financieros y administrativos (del mercado de valores), datos necesarios para generar los Indicadores de Actualidad, Capability y Potencialidad.

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Tabla 5: Ejemplo de Resultados

Sistema De Indicadores De Gestión Para Administración De Portafolios				
Inversión Inicial		10.000.000.00		
Composición				
TASA LIBRE DE RIESGO		5%		
ACCIONES		25%		
DIVISAS		10%		
RENTA FIJA		50%		
DERIVADOS		10%		
Indicadores				
	ACTUALIDAD	DESEMPEÑO	LOGRO	LATENCIA
UTILIDAD	19.31%	38,62%	157.73%	24.48%
VPN	116.88%	92,09%	93.54%	98.45%
TIR	14.02%	52,05%	56.16%	92.68%
VaR	64.26%	50,86%	58.64%	86.73%

- TASA LIBRE DE RIESGO
- ACCIONES
- DIVISAS
- RENTA FIJA
- DERIVADOS

Tabla 6: Criterio del Inversionista para la Toma de Decisiones

UTILIDAD		VPN	
Alta	25.00%	Alta	125.00%
Media	10.00%	Media	115.00%
Baja	5.00%	Baja	105.00%
TIR		VaR	
Alta	25.00%	Riesgo Bajo	12.25%
Media	15.00%	Riesgo Medio	25.00%
Baja	5.00%	Riesgo Alto	32.25%
DESEMPEÑO			
	Bueno	Regular	Malo
UTILIDAD	100.00%	90.00%	89.00%
VPN	100.00%	90.00%	89.00%
TIR	100.00%	90.00%	89.00%
VaR	100.00%	90.00%	89.00%

BIBLIOGRAFÍA

- Bennigna, Simon. 2005 *"Principles of Finance with Excel"*. Oxford University Press.
- Espejo, Raúl; & Otros. 1996 *"Organizational transformation and learning: A Cybernetic approach to management"*. Tercera edición. Wiley.
- Gutiérrez, Luis Carlos & Otros. 2001 *"Serie Documentos Administración Bancaria"*. Primera edición. Politécnico Grancolombiano.
- Hull, John C. 2002 *"Introducción a los Mercados de Futuros y Opciones"*. Cuarta edición. Pearson Educación S.A.
- Johnson, Christian. 2001 *"Value at Risk: Teoría y Aplicaciones"*. Estudios de Economía Vol. 28 - N° 2, Pág. 217-247.

Mascareñas, Juan. 2007 “La valoración de activos de Renta Fija”. Universidad Complutense de Madrid [En línea]. <http://www.ucm.es/info/jmas/rfija/04valor.pdf> [Visitado 25 de marzo de 2007]

Reyes, Alfonso. 2003 “CYBERSYN Un método para el diseño de un sistema de control de control de gestión mediante indicadores”. Universidad de los Andes.

Rojas, Miguel D. “Método Cybersyn”. 5ta. Conferencia iberoamericana en sistemas, cibernética e informática. Memorias vol. 1. CISCI 2006 Orlando, Florida – EE. UU.

Vélez, Ignacio. 2006 “Decisiones de inversión para la valoración financiera de proyectos y empresas”. Quinta edición. Editorial Pontificia Universidad Javeriana.

MARCO GENERAL DIFUSO PARA EL ANÁLISIS DE LA COMPETITIVIDAD EMPRESARIAL

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RESUMEN

Este trabajo propone un Mapa Estructural-Dinámico (MED) como marco de análisis de la competitividad empresarial aplicando Mapas Cognitivos Difusos Basados en Reglas (MCDBR). El formalismo que se introduce pretende lograr una comprensión clara de la competencia empresarial, de los agentes que la componen, de las relaciones causales y de las consecuencias dinámicas de sus interacciones y comportamientos. También exhibe en un modelo gráfico, las variables tanto cuantitativas como cualitativas, sus interrelaciones y su evolución dinámica de manera clara y útil para la toma de decisiones, establecimiento de políticas y estrategias por parte de la empresa.

Los métodos de razonamientos cualitativos con base en el análisis de las cadenas causales han demostrado ser muy útiles en situaciones complejas donde existe la necesidad de estructuración del problema y donde la empresa está interesada en entender el impacto de sus decisiones con la mayor precisión posible.

INTRODUCCIÓN

La competitividad es un vertiginoso universo en expansión: Para darse una idea de la gran variedad de conceptos y afirmaciones que se han incluido bajo el término de “competitividad”, basta con recurrir a Krugman (2004). Se puede afirmar que hasta hoy nunca se ha contado con un criterio único y reconocido para definirla y medirla.

En la búsqueda de soluciones para su consenso y análisis, se ha ampliado su contenido temático e incorporado asimismo a nuevos participantes al debate, lo que inevitablemente ha traído aparejado cierto grado de desorganización intelectual pues los distintos grupos profesionales se expresan en distintos lenguajes.

El curso del debate también se ha visto sujeto a la influencia de sus promotores institucionales. Entre ellos los más destacados han sido los órganos asesores denominados Consejos de Competitividad, la finalidad de estos consejos es convocar reuniones de líderes políticos, empresariales y académicos para analizar los aspectos y soluciones de la competitividad.

Es inevitable que la presión por lograr el consenso en ocasiones lleve a estos órganos a elaborar documentos donde la competitividad se define en forma satisfactoria para todas las partes, conteniendo algún incentivo para cada grupo que participa en su conceptualización pero ninguna coherencia interna (Warner).

A pesar de toda esta variedad conceptual, observamos, desde una perspectiva sistémica que la competitividad empresarial, en su concepto más básico, presenta una regularidad: *es un fenómeno que independientemente de la definición que se le de y perspectiva con que se le considere tiene que ver con 3 ejes de análisis:*

Primero.- Las interacciones de la empresa tanto al interior de ella como con los elementos del contexto donde esta inmersa.

Segundo.- Su desempeño y comportamiento.

Tercero.- Su preparación y capacidad para esa competencia.

La combinación de ellos finalmente se verá reflejada en sus resultados.

Definiciones

En este trabajo para mayor claridad utilizaremos las siguientes definiciones de uso común al respecto:

Competir.- Estar dentro del juego con otros participantes.

Competencia.- El juego en su conjunto, es decir, los elementos, el tejido de interrelaciones, la dinámica de ellas y sus consecuencias, y las estrategias seguidas por los jugadores.

Competitividad.- Capacidad para lograr metas y objetivos predeterminados y permanecer en el juego.

Análisis de la competitividad.- Estudio de los jugadores, de sus resultados, de las estrategias seguidas por ellos, de la estructura y dinámica de la competencia y del grado de competitividad.

Índices de Competitividad.- Indicadores (variables) que reflejan la competitividad de la empresa en un determinado periodo.

Foco del Análisis

Considerando la regularidad y definiciones anteriores, resulta así entonces, que el análisis de la competitividad empresarial es un proceso que depende tanto de la comprensión clara de:

5. *Los agentes que componen la competencia*
6. *El tejido de interrelaciones entre esos agentes*
7. *Las consecuencias dinámicas de sus interacciones y comportamientos*

Como de

8. *El modelo que se cree para representar la dinámica del mercado es fundamental para todo lo anterior.*

Foco de Aplicación

El análisis de la competitividad, tiene su principal punto de aplicación en la toma de decisiones y establecimiento de políticas y estrategias, de la empresa.

Y deberá responder además, entre otras, a un conjunto de preguntas estratégicas independientemente del sector y tamaño de la empresa, como por ejemplo:

- ¿Porque se han obtenido estos resultados?
- ¿Cual ha sido el comportamiento de la empresa y del mercado en el tiempo?
- ¿Por qué se han comportado así?

- ¿Adónde llevará el patrón de comportamiento si se sigue de esta manera?
- ¿Cómo se puede intervenir para modificar y cambiar ese futuro?
- ¿Que se debe hacer para incrementar la posición competitiva?

DEFINICIÓN DEL PROBLEMA

Considerando una perspectiva sistémica, se tiene que en la competencia empresarial están involucrados actores, factores, leyes, costumbres, tecnología, lenguaje, cultura, hábitos en los negocios y otras peculiaridades culturales y nacionales que desempeñan un papel importante en su determinación, todos estos elementos se integran en cuatro niveles Micro, Macro, Meso y Meta (Klaus Esser / Wolfgang Hillebrand / Dirk Messner / Jörg Meyer-Stamer (1996))

Todos ellos conforman un sistema dinámico de elevada complejidad, que involucra a un gran número de variables cuantitativas y cualitativas, todas interrelacionadas e influyendo unas sobre otras (*relaciones de causalidad*).

Por otro lado los modeladores y analistas que llevan a cabo el estudio, generalmente ignoran las variables cualitativas al no poderlas tratar ni medir con los métodos tradicionales, elaborando por lo general tablas de datos estadísticos únicamente, lo cual reduce sustancialmente la confiabilidad y validez del modelo obtenido y por ende de los análisis que se deriven de el.

Esto presenta serios problemas a un consejo directivo que requiere entender claramente las fuerzas interactivas que operan dentro y fuera del mercado y como afectan estas fuerzas a las elecciones estratégicas de la empresa y a sus resultados Oster S (2000).

Si la empresa tuviera esa información, podría entonces buscar tener una idea lo más exacta posible del impacto de sus decisiones.

Sumado al problema validez y confiabilidad en la información, estudios y reportes, que se tiene con la eliminación de las variables cualitativas, se presenta otro que agrava más la situación para la empresa: Las Tablas de datos Estadísticas.

Gráficamente hablando, una tabla que únicamente agrupa los valores de determinadas variables en diferentes periodos, es una “fotografía” estática que por lo general no exhibe gráficamente, al menos 5 aspectos importantes para la comprensión clara de un fenómeno económico como la competencia empresarial, ¡que es a todas luces un fenómeno totalmente dinámico!.

Aspectos Ausentes Gráficamente Hablando En Una Tabla De Datos

1. Como están articuladas estas variables
2. Las causas de los cambios de sus valores
3. Las consecuencias dinámicas de sus cambios
4. Las variables cualitativas
5. Los actores, factores y eventos significativos, tanto cualitativos como cuantitativos, involucrados en el fenómeno

El Problema: Así por todo lo anterior la empresa se ve obligada a tomar sus decisiones dentro de una compleja actividad dinámica de mercado, en el contexto de una información peligrosamente limitada por la eliminación de datos e información cualitativa relevantes. Se dejan de lado las influencias, nexos causales e impactos y consecuencias de estas variables.

Motivaciones Para El Uso Del Mapa Estructural-Dinámico (MED) En El Análisis De La Competitividad Empresarial

Desde finales de los 40s y hasta la fecha, se han estado, desarrollando y aplicando con el apoyo de las tecnologías de la información, métodos de razonamientos cualitativos con base en el análisis de las cadenas causales, los cuales han demostrado ser muy útiles en situaciones complejas donde existe la necesidad de estructuración del problema y donde los responsables de tomar decisiones están interesados en entender el impacto de sus decisiones con la mayor precisión posible, Kuiper (1993,2001).

Por otro lado son bien conocidas las ventajas cognitivas y de comprensión que tienen los instrumentos gráficos en el análisis empresarial. Como por ejemplo las matrices de 5 fuerzas, o de Sectores Industriales de Porter, la Red de Valor de Nalebuff-Brandenburger, la BCG o la de A.D. Little, entre otras.

METODOLOGÍA PARA EL ANÁLISIS DE LA COMPETITIVIDAD

Considerando lo anterior y tratando de colaborar en la solución al problema mencionado antes y dar un mayor énfasis visual a un análisis de la competitividad empresarial que incluya las variables cualitativas, se propone el “*Mapa Estructural-Dinámico*” (MED), (figura 1).

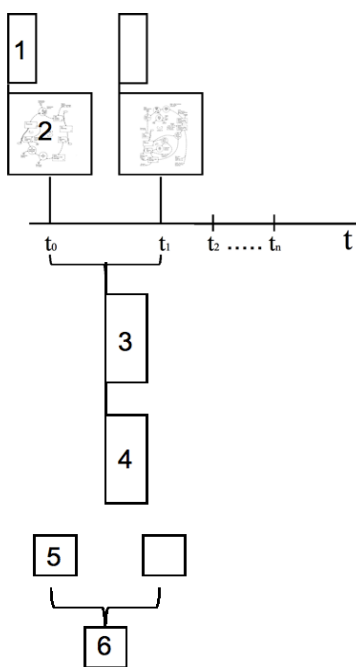


Figura 1 MED, fuente: elaboración propia.

Este es un instrumento gráfico que se pretende provea un lenguaje para articular el entendimiento de la naturaleza dinámica de la competitividad empresarial, capturar su esencia causal y facilitar la comunicación entre equipos multidisciplinarios y un consejo de decisión.

El MED utiliza los Mapas Cognitivos Difusos Basados en Reglas (MCDBR) como herramienta de análisis causal y simulación y permite, entre otros aspectos, por simple inspección de los mapas identificar su estructura, predecir comportamientos cualitativos, hacer inferencias y observar consecuencias dinámicas.

Los MCDBR (Carvalho, J.P., Tomé, J.A. 1999-2004) son técnicas que se utilizan para modelar y simular las interrelaciones causales y la dinámica de sistemas cualitativos, como por ejemplo, sistemas sociales, económicos o políticos, y han sido desarrollados de manera muy completa definiendo reglas, considerando aspectos de estabilidad, mecanismos causales, aplicando en ejemplos de fenómenos económicos y comparando con otros mapas cognitivos.

Tienen su base en los trabajos de Axelrod (1976), Kosko (1986) y Laukkanen (1992) entre otros y han sido desarrollados como instrumentos que pueden ser usados sin la necesidad de un conocimiento complejo de matemáticas al modelar sistemas dinámicos cualitativos permitiendo el análisis de la dinámica del sistema, ahí donde las técnicas numéricas estándar no son prácticas o es imposible que lo hagan.

Arquitectura del MED

El MED esta formado por un eje temporal horizontal en el cual se han marcado los instantes elegidos para el análisis de la Competitividad Empresarial, $t_0, t_1, t_2, \dots, t_n$ y 6 mapas gráficos.

En la figura 1 se muestran sólo los mapas correspondientes a dos instantes consecutivos; mapas similares deben colocarse para cada uno de los $n+1$ instantes seleccionados t_0, t_1, \dots, t_n

Mapa 1.- De indicadores y Variables.

Mapa 2.- De los MCDBRs.

Mapa 3.- De eventos acontecidos entre dos instantes de análisis.

Mapa 4.- De diferencias de los mapas 1 y 2 correspondientes a 2 instantes.

Mapa 5.- De resultados de simulación

Mapa 6.- De diferencias de simulaciones correspondientes a dos instantes

¿Que se puede ver en el MED?

Una vez elaborado, se pueden ver, literalmente, en el MED:

En el Mapa 1

- Los indicadores empresariales elegidos para el análisis.
- Las variables (actores, factores y eventos (acciones y decisiones)) significativas relacionados con ellos en los diferentes niveles, micro, macro, meso y meta, correspondientes a cada instante.
- Sus valores y ponderaciones cuantitativas y cualitativas respectivamente.

En los Mapas 2, 3 y 4

1. Se observan detalladamente las relaciones de influencias entre los indicadores y variables y la dinámica
2. correspondientes a n-instantes diferentes
3. Se observan los cambios en los indicadores y variables, y de uno respecto de otro.
4. Se ven los sucesos acontecidos entre esos instantes y que posiblemente pudieron causar los cambios.

En los Mapas 5 y 6

- e. Los resultados de las simulaciones del instante correspondiente.
- f. Las diferencias entre dos simulaciones consecutivas.

CONCLUSIONES

Se ha propuesto la aplicación de los MCDBR para elaborar el modelo y la simulación de la competencia empresarial, desde una perspectiva sistémica, que incluya las variables tanto cualitativas como cuantitativas, intentando explotar al máximo las ventajas del uso de mapas y diagramas.

Se ha elaborado y presentado una herramienta gráfica que muestra los resultados del modelo y simulación, sobre un eje temporal para tener en diferentes instantes “fotografías dinámicas” de la competencia, recogiendo además los sucesos ocurridos entre esas “fotografías”.

Al mostrarse las relaciones causales entre los indicadores de competitividad y las variables del contexto involucradas, así como las consecuencias y escenarios potenciales de esa dinámica, se facilita el proceso de diseñar y probar estrategias y políticas con el modelo, diseñar y valorar escenarios (reemplazando, agregando o eliminando variables, modificando valores o ponderaciones, interviniendo en elementos claves, entre otros puntos).

Se considera que las mayores contribuciones del MED son:

- La utilidad gráfica, que provee un lenguaje para articular el entendimiento de la naturaleza dinámica de la competencia empresarial, capturar su esencia y facilitar la comunicación entre equipos multidisciplinarios y la junta de decisión, permitiendo por simple inspección de los mapas identificar su estructura, predecir comportamientos cualitativos, hacer inferencias y observar consecuencias dinámicas.
- La incorporación de un eje temporal que permite tener en diferentes instantes “fotografías dinámicas” de la competencia, recogiendo además los sucesos ocurridos entre esas “fotografías”.
- Aplicar los desarrollos en tecnologías de la Información como son los MCDBR para incorporar las variables cualitativas en el modelo y en la simulación.

REFERENCIAS

Axelrod, R. *“The Structure of Decision: Cognitive Maps of Political Elites”*. Princeton University Press, 1976

Carvalho, J.P., Tomé, J.A., “Fuzzy Mechanisms For Causal Relations”, Proceedings of the Eighth International Fuzzy Systems Association World Congress, IFSA'99, Taiwan, 1999

Carvalho, J.P., Tomé, J.A., “Interpolated Linguistic Terms: Uncertainty Representation in Rule Based Fuzzy Systems”, Proceedings of the 22nd International Conference of the North American Fuzzy Information Processing Society, NAFIPS2003, Chicago, 2003

Carvalho, J.P., Tomé, J.A., “Interpolated Linguistic Terms”, Proceedings of the 23rd International Conference of the North American Fuzzy Information Processing Society, NAFIPS2004, Banff, Canada, 2004

Carvalho, J.P., Tomé, J.A., “Mapas Cognitivos Baseados em Regras Difusas: Modelação e Simulação da Dinâmica de Sistemas Qualitativos”, PhD thesis, Instituto Superior Técnico, Universidade Técnica de Lisboa, Portugal, 2001

Carvalho, J.P., Tomé, J.A., “Qualitative Modelling of an Economic System using Rule Based Fuzzy Cognitive Maps”, FUZZ-IEEE 2004 - IEEE International Conference on Fuzzy Systems, Budapest, 2004

Carvalho, J.P., Tomé, J.A., “Rule Based Fuzzy Cognitive Maps - Fuzzy Causal Relations”, Computational Intelligence for Modelling, Control and Automation, Edited by M. Mohammadian, 1999

Carvalho, J.P., Tomé, J.A., “Rule Based Fuzzy Cognitive Maps – Qualitative Systems Dynamics”, Proceedings of the 19th International Conference of the North American Fuzzy Information Processing Society, NAFIPS2000, Atlanta, 2000

Klaus Esser / Wolfgang Hillebrand / Dirk Messner / Jörg Meyer-Stamer *“Competitividad Sistémica: Nuevo desafío a las empresas y a la política”*. Revista de la CEPAL, Santiago 1996

Kosko Bart. *“Fuzzy Cognitive Maps”*. Int. J. Man-Machine Studies (1986)**24**, 65-75

Krugman Paul, *“Competitiveness a dangerous obsession”*, en Foreign Affairs, marzo/abril 1994, Vol. 73, Nº 2.

Kuipers. Benjamin J. “Reasoning with qualitative models” Artificial Intelligence 59 (1993) 125-132 Elsevier.

Kuipers Benjamin J. “Qualitative Simulation”. Encyclopedia of Physical Science and Technology. Third Edition. Academic Press 2001. 287-300

Laukkanen, M., *“Comparative Cause Mapping of Management Cognition: A computer Database For Natural Data”*. Helsinki School of Economics and Business Publications, 1992

Sharon M. Oster. *“Análisis Moderno de la Competitividad”* Oxford University Press 3a Edición 2000

Warner Andrew. “Definición y Evaluación de la Competitividad: Consenso sobre su Definición y Medición de su Impacto”. *NOTA INFORMATIVA ELABORADA PARA EL BANCO INTERAMERICANO*

DE DESARROLLO. National Bureau of Economic Research Cambridge, Massachusetts y Center for Global Development Washington, D.C.

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ECOEficiencia: ¿ES LA CONTAMINACIÓN MEDIOAMBIENTAL IGUAL A INEFICIENCIA?

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RESUMEN

La segunda mitad del siglo XX se caracterizó por un creciente interés del ritmo de crecimiento económico y su impacto en el medio ambiente. Como consecuencia de ello surge el concepto de ecoeficiencia, que es una filosofía de gestión que conecta la excelencia medioambiental con la excelencia empresarial; esto es, hace referencia al proceso que busca maximizar la eficacia y eficiencia de la actividad empresarial, minimizando su impacto sobre el entorno. Tradicionalmente se ha pensado solo en los efectos negativos sobre los costes de ser responsable con el medioambiente, olvidando las importantes ventajas de productividad que contrarrestan esos costes y que se pueden obtener gracias a la innovación. Este trabajo pretende proporcionar evidencia empírica en relación con la ecoeficiencia en la industria de fabricación de productos minerales, examinando la relación entre resultado medioambiental (medido por el nivel de emisiones al aire y al agua de sustancias contaminantes) y resultado económico (aproximado por la eficiencia de costes y eficiencia de beneficios) mediante el uso de la técnica paramétrica denominada “distribution-free approach”. Los resultados apoyan la hipótesis de Porter et al (1995) de que “contaminación es igual a ineficiencia”.

INTRODUCCIÓN

La segunda mitad del siglo XX se caracterizó por un creciente interés, de alcance global, del ritmo de crecimiento económico y su impacto en el medio ambiente (Club de Roma, 1968; Límites del crecimiento, 1973; Informe Brundlandt, 1987; Conferencia de Naciones Unidas sobre Medio Ambiente y Desarrollo, 1992; etc). Como consecuencia de ello surge el concepto de *ecoeficiencia*, que es una filosofía de gestión que conecta excelencia medioambiental con excelencia empresarial (Desimone y Popoff, 1997) y, en términos generales, tiene como finalidad lograr el crecimiento económico a la vez que proporciona calidad medioambiental.

Con el trabajo de Schmidheiny (1992), el término ecoeficiencia pasa a ser ampliamente difundido en el ámbito empresarial, considerando la importancia y necesidad de la adopción de estrategias *ecoeicientes* por parte de los directivos con el objetivo de hacer que los procesos productivos sean más eficiente en la utilización de los recursos y gestión de residuos, cooperando con la conservación del medioambiente y, simultáneamente, creando valor empresarial.

De acuerdo con los numerosos estudios que han investigado la relación entre responsabilidad medioambiental y eficiencia económica (Shrivastava, 1995; Russo y Fouts, 1997; Murty y Kumar, 2003; Al-Tuwaijri et al., 2004; Burnett y Hansen, 2008), la adopción de mejoras medioambientales se relaciona con la eficiencia de la empresa en la medida que:

1. Contribuyen al desarrollo e implantación de estrategias que mejoren la utilización de los inputs (fomentan la conservación y renovación de la energía y recursos naturales) y outputs (contribuyen a la disminución de las emisiones, los vertidos y residuos).
2. Desarrollan procesos productivos que minimizan los impactos negativos sobre el medio ambiente. Los productos y/o servicios resultantes de este proceso obtienen en el mercado, además, el

diferencial propio del segmento de productos ecológicos, generando mayor poder negociador en los precios de mercado derivados de su especialización.

Los impactos negativos en el medio ambiente pueden ser considerados como señales de ineficiencias en los procesos productivos. Según Ekins (2005), las empresas no suelen operar en la frontera de la eficiencia económica en cuanto a la utilización de los recursos, la eliminación de residuos y las emisiones. Además, de acuerdo con Porter y Van der Linde (1995), la contaminación es un tipo más de ineficiencia, sugiriendo que los vertidos al medio ambiente de desperdicios, sustancias nocivas o formas de energía, son una señal de que se están usando los recursos de forma ineficiente, de que algo falla en el diseño de productos y procesos. Al considerar la contaminación como ineficiencia, logramos que esa variable ambiental sea tomada como variable estratégica para el incremento de la eficiencia económica en la empresa.

Sin embargo, la mayoría de las empresas siguen considerando el tema medioambiental como una dificultad extra para la consecución de sus objetivos. Esa visión empresarial estática, nubla oportunidades de mejora en aspectos económicos y sociales, impidiendo la evolución integrista de la eficiencia ecológica en los procesos productivos. En ese sentido, la intervención de políticas públicas puede ayudar a aceptar y superar esta visión, promoviendo la innovación, la productividad de los recursos y la competitividad a través del desarrollo de unas normas legales correctamente concebidas (Porter y Van der Linde, 1995; Mohr, 2002).

El objetivo de las leyes ambientales es mejorar la calidad medioambiental y puede impulsar la innovación empresarial. Para que sean beneficiosas para las empresas, dichas leyes deben ser flexibles, posibilitándoles la incorporación de las mejores técnicas disponibles adaptadas a las condiciones de cada empresa en particular. La innovación estimulada por el cumplimiento de la ley ambiental puede llevar a la adopción de prácticas medioambientales que serán rentables para las empresas, lo que se denomina ecoeficiencia guiada. También llamada win – win paradigma/ Hipótesis de Porter. La sociedad y las empresas son beneficiarios del cumplimiento de leyes ambientales; Ver Porter y Van der linde, 1995; Ekins, 2005; Burnett, 2008.

En ese sentido, la ley (influencia ejercida por el entorno) viene a incentivar la innovación del proceso productivo y del pensamiento creativo. Por otro lado, la empresa que adopta estrategias ecoeficientes voluntariamente Ecoeficiencia voluntaria es el proceso de control administrativo integrado en la estrategia de negocio de la empresa por libre decisión de sus directivos que tiene como objetivo reducir impactos negativos causados por sus actividades al medio ambiente y, a la vez, reducir costes y crear valor empresarial.

(libre de obligación legal) también puede reducir sus costes mediante el menor y mejor uso de recursos, residuos y previniendo la contaminación, de modo que (a) puede minimizar riesgos futuros y evitar modificaciones costosas y sanciones, (b) puede disfrutar de ventajas diferenciales con respecto a otras empresas, (c) gana atractivo y nuevas oportunidades de negocio por producir más ecológicamente y (d) puede mejorar su reputación (Ekins, 2005). Todo ello, probablemente, repercuta positivamente en su eficiencia económica.

Algunos autores han centrado sus investigaciones en aportar evidencias empíricas de la ecoeficiencia. Burnett y Hansen (2008) examinan como la normativa medioambiental puede ser beneficiosa para la empresa desde el punto de vista de la eficiencia económica. Sus resultados confirman la existencia de ecoeficiencia guiada, ratificando así la hipótesis de Porter *et al* (1995) de que “contaminación es igual a ineficiencia”. Sin embargo, en otras investigaciones (Al-Tuwaijri *et al.*, 2004) encontramos resultados que apuntan a que una empresa que hace ecoeficiencia voluntaria obtiene mejores resultados comparado con las empresas que hacen ecoeficiencia guiada; probablemente porque la ecoeficiencia voluntaria está mejor integrada en la estrategia de negocio de la empresa. A ese tipo de postura corporativa Aragón Correa (1998) la considera una estrategia proactiva o anticipadora.

Sin embargo, en la actualidad las evidencias empíricas de los beneficios de ser responsables con el medio ambiente son todavía escasas y poco concluyentes. Este trabajo investiga los potenciales beneficios en la mejora de la eficiencia económica de ser ecoeficiente en la industria de fabricación de productos minerales en España al adoptar mejoras en sus emisiones, de acuerdo con la ley española 16/2002

Ley 16/2002 de 1 de julio, de prevención y control integrado de la contaminación. La Ley tiene por objeto evitar o, cuando ello no sea posible, reducir y controlar la contaminación de la atmósfera, del agua y del suelo, mediante el establecimiento de un sistema de prevención y control integrados de la contaminación, con el fin de alcanzar una elevada protección del medio ambiente en su conjunto. Esta Ley será aplicable a las instalaciones de titularidad pública o privada en las que se desarrolle alguna de las actividades industriales, con excepción de las instalaciones o partes de las mismas utilizadas para la investigación, desarrollo y experimentación de nuevos productos y procesos.

EL MODELO

Una cuestión fundamental a la hora de medir la eficiencia es decidir qué concepto utilizamos. En este sentido, consideramos que los dos conceptos más importantes de eficiencia económica son la eficiencia de costes y la eficiencia de beneficios, ya que están basados en la optimización económica como reacción a los precios y competencia en los mercados y no tanto en el uso de una determinada tecnología; en otras palabras, estos dos conceptos de eficiencia responden a su vez a dos importantes objetivos económicos: minimización del coste y maximización de beneficios (Berges y Mester, 1997; Maudos, Pastor, Pérez y Quesada, 2002).

La idea de que una empresa maximice su rendimiento adoptando un comportamiento respetuoso con el medioambiente, puede ser posible siguiendo lo demostrado por Berger y Mester (1997) de que la eficiencia de beneficios no está necesariamente correlacionada positivamente con la eficiencia del coste, lo que sugiere que las empresas que incurran en mayores costes como consecuencias de adoptar medidas para reducir la contaminación ambiental, pueden compensar esa aparente ineficiencia alcanzando un mayor rendimiento que la competencia al utilizar una composición distinta de vectores de producción o beneficiándose del poder en los precios de mercado derivados de su especialización (Maudos, Pastor, Pérez y Quesada, 2002). Esa línea de investigación nos conduce a la posibilidad de que en el caso de que se produjera mayores costes de producción al introducir mejoras ambientales en la empresa, eso no significaría necesariamente una disminución en el rendimiento.

La ineficiencia de costes nos dice cuánto más alto son los costes de una empresa en relación con los costes de la empresa más eficiente que produce con la misma combinación de output y precio de los inputs, y la diferencia no puede ser explicada por un error aleatorio. La especificación de una frontera de costes permite estimar una función de costes que relaciona los costes observados para un conjunto de outputs, los precios de los inputs, un error aleatorio y la ineficiencia. Esta frontera puede expresarse como:

$$C = C(y, p, u_c, v_c)$$

donde C mide la variable costes, y es el vector de las cantidades de outputs, p es el vector de precios de las variables inputs, u_c representa las ineficiencias encontradas y v_c representa el error aleatorio. El factor de ineficiencia u_c incorpora tanto la ineficiencia asignativa, consecuencia de una reacción no óptima a los precios relativos de los inputs, p , como la ineficiencia técnica, debido al empleo de demasiados inputs para producir y . Para facilitar la estimación de la ineficiencia, se asume que el error aleatorio y la ineficiencia, v_c y u_c son separables del resto de la función de costes. En este trabajo la eficiencia de costes de la empresa i (EC_i) se estima como la ratio entre los costes mínimos necesarios para producir el vector de output y el coste de la empresa i , esto es

El rango de las eficiencias de costes está entre (0 – 1) y es igual a uno para la empresa más eficiente de las que integran la muestra. En la práctica, las eficiencias son generalmente definidas en relación a la

$$EC_i = \frac{\hat{C}^{\min}}{\hat{C}_i}$$

empresa más eficiente observada en el sector, más que en referencia al verdadero coste mínimo, ya que la tecnología subyacente es desconocida. Afortunadamente, para la mayoría de las hipótesis económicas es más apropiado usar el concepto de eficiencia relativa en lugar de la eficiencia absoluta.

El concepto de eficiencia de beneficios es mucho más amplio que el concepto de eficiencia de costes ya que considera los efectos de la elección del vector de producción tanto sobre los costes como sobre los ingresos. En contraste con la función de costes, la función de beneficio recoge como variable dependiente el beneficio en lugar de los costes y mantiene como variables exógenas las mismas que la función de costes. Así, la variable cantidad de output es constante mientras que su precio varía libremente y afecta al beneficio. De este modo, definimos la función de beneficio alternativa como:

donde π es la variable beneficio, y es el vector de las cantidades de outputs, p es el vector de precios de

$$\pi = \pi(y, p, u_\pi, v_\pi)$$

las variables inputs, u_π representa las ineficiencias encontradas que reducen el beneficio y v_π representa el error aleatorio. Para facilitar la estimación de la eficiencia, se asume que el error aleatorio y la ineficiencia son separables del resto de la función de costes. La eficiencia de beneficio (EB_i) se define en este estudio como la ratio entre el beneficio actual de la empresa i (π_i) y el nivel máximo que podría alcanzar la empresa más eficiente de la muestra (π^{\max}) esto es:

$$EB_i = \frac{\pi_i}{\pi^{\max}}$$

ANÁLISIS empírico

La base de datos que se utiliza en esta investigación está compuesta inicialmente por 200 empresas del sector de fabricación de productos minerales, que compiten por ofrecer similares productos a sus clientes y por utilizar parecidos factores de producción. Sin embargo, la falta de datos para uno o varios años de la muestra ha hecho que el número final de empresas analizadas fuese de 166. El estudio se realiza para el año 2003, 2004, 2005 y 2006 y la información utilizada se ha obtenido de la base de datos SABI.

Las variables seleccionadas del modelo son,

Outputs: Y1= Importe neto de las cifras de Ventas, Y2= Otros ingresos de explotación.

Inputs: P1= gastos de personal / nº de empleados, P2= materiales / activo total medio, P3= (otros gastos de explotación+ dotación amortización del inmovilizado) / activo total medio.

Coste total: C= gastos del personal + materiales + otros gastos de explotación + dotación amortización del inmovilizado.

Beneficio: π = beneficio de explotación.

La forma funcional más común en la literatura revisada para la estimación de eficiencias de costes y beneficios es la Translog con efectos principales y sin interacciones. La aplicación de dicho modelo no difiere del modelo Translog completo tal como se recoge en Rosa-González, González-Dávila y Arbelo-Alvarez (2007). Por tanto la expresión utilizada en este trabajo es:

$$\ln(C) = \alpha + \sum_{i=1}^2 \beta_i \ln(y_i) + \sum_{i=1}^3 \delta_i \ln(p_i) + \ln u + \ln v$$

Como disponemos de datos de panel, usaremos la *distribution-free approach* para estimar la eficiencia. Esta metodología asume que existe una eficiencia constante a lo largo del tiempo estudiado para cada empresa, mientras que el error aleatorio tenderá a compensarse a lo largo del periodo, siendo su promedio, por tanto, cero. En general, en los modelos paramétricos se establece una comparación entre las diferentes empresas y se dice que una empresa es mas o menos eficiente en función de aquella de la muestra que sea la mejor o la peor, respectivamente, después de haber eliminado el posible error aleatorio existente en los datos.

Una vez estimadas tanto la función de costes como la función de beneficios por mínimos cuadrados generalizados, los residuos obtenidos estarán compuestos tanto por la ineficiencia, $\ln u$, como por el error aleatorio, $\ln v$, pero como se ha asumido que el promedio de este error a lo largo del tiempo es cero, calcularemos el promedio de todos los residuos obtenidos para cada una de las empresas de la muestra, obteniéndose así la estimación del término de la ineficiencia $\ln u$. Para aquellas empresas con muy altas o muy bajas estimaciones se propone un ajuste, llamado truncamiento, para asignarles valores menos extremos de ineficiencia, ya que dichos valores podrían indicar que no se ha eliminado del todo el error aleatorio mediante el promedio. Esto puede deberse a un número demasiado corto de periodos en el estudio, como es el caso que nos ocupa. Esto hace que el promedio del error aleatorio no tenga suficientes elementos para su compensación. En cambio, si elegimos un número de periodos demasiado grande, la eficiencia individual pudiera perder algo de significado, pues no se estarían considerando posibles cambios en la gestión, en el entorno y otras situaciones que no serían constantes a lo largo del tiempo. Por último, se clasifican las 166 empresas de la muestra entre contaminantes y no contaminantes, en función de las emisiones al aire y al agua de sustancias y contaminantes generada por la industria de productos minerales, de acuerdo con los parámetros establecidos por el EPER-España (Registro estatal de emisiones y fuentes contaminantes de España).

RESULTADO Y CONCLUSIONES

La tabla 1 presenta la media de la estimación de la eficiencia de costes y beneficio obtenida. Los resultados se calcularon para distintos puntos de truncamiento (0, 1, 5 y 10%), y se observó que el nivel de las eficiencias de costes y beneficio dependía fuertemente del nivel de truncamiento elegido, siendo el 5% el nivel más razonable ya que el incremento que se produce al pasar del 5 al 10% no altera sustancialmente dicho nivel. Estos resultados ponen de manifiesto que las empresas del sector estudiado no contaminantes son en media un 9,25% más eficientes en costes y un 6,25% mas eficientes en beneficios. En conclusión, podemos afirmar que las empresas menos contaminantes del sector de fabricación de productos minerales presentan en media niveles de eficiencia, tanto de costes como de beneficios, superiores a las empresas más contaminantes, probablemente como consecuencia de que el esfuerzo innovador que supone contaminar menos trae consigo mejoras en los procesos productivos que finalmente suponen ahorros en costes y una mejor aceptación social de sus productos. Finalmente, este resultado viene a incrementar la evidencia empírica a favor de la hipótesis de Porter de que “contaminación es igual a ineficiencia”.

Tabla 1: Media de la eficiencia de costes y eficiencia de beneficio^a

	Eficiencia de costes (166 empresas)	Eficiencia de beneficio (166 empresas)	Efic. de costes no contaminan tes (59 empresas)	Efic. de beneficio no contaminan tes (59 empresas)	Efic. de costes contaminan tes (107 empresas)	Efic. de beneficio contaminante s (107 empresas)
Media	0,51	0,23	0,54	0,24	0,49	0,225

^a Nivel de truncamiento del 5%

REFERENCIAS

- Al – Tuwaijri, A. S., Christensen, T. E., & Hughes, K. E. (2004): “The relations among environmental disclosure, environmental performance, and economic performance: a simultaneous equations approach”. *Organizations and Society*, núm. 29, pp. 447 – 471.
- Aragón – Correa, J. A. (1998a). “Empresa y Medio Ambiente, gestión estrategia de las oportunidades medioambientales”. Granada: Editorial Comares.
- Berger, A.N., Mester, L.J., 1997, Inside the black box: What explains differences in the efficiencies of financial institutions?. *Journal of Banking & Finance* 21, 895-947.
- Burnett, R. D. y Hansen, D. R. (2008): “Ecoefficiency: Defining a role for environmental cost management.” *Accounting, Organizations and Society*, núm.33, pp 551 – 581.
- Desimone, L. D. y Popoff, F. (1997): “Eco – efficiency: The Business link to sustainable development”. World Business Council for Sustainable Development. MIT Press edition.
- Ekins, P. (2005): “Eco-efficiency: Motives, Drivers, and Economic Implications”. *Journal of Industrial Ecology*, vol.9, núm. 4, pp. 12 – 14.
- Maudos, J., Pastor, J.M., Pérez, F. y Quesada, J. 2002. “Cost and profit efficiency in European banks”, *Journal of International Financial Markets, Institutions and Money*, 12, 33-58.
- Mohr, R. D. (2002): “Technical Change, External economics, and the Porter Hypothesis”. *Journal of Environmental Economics and Management*, vol. 43, pp 158 – 168.
- Murty, M. N. y Kumar, S. (2003): “Win- win opportunities and environmental regulation testing of Porter hypothesis for Indian manufacturing industries”. *Journal of Environmental Management*, vol. 67, Issue 2, pp 139 – 144.
- Porter, M. E. y van der Linde, C. (1995). “Green and competitive: Ending the stalemate. *Harvard Business Review* (September – October), pp 120 - 134.
- Rosa-Gonzalez, F., Gonzalez-Dávila, E. y Arbelo-Alvarez, A. 2007. “Análisis de la eficiencia en pequeñas empresas bajo el enfoque de distribución libre usando datos de panel”. XXX Congreso Nacional SEIO, sep 25-28 Valladolid.
- Russo, M.V.; Fouts, P.A. 1997. “A resource-based perspective on corporate environmental performance and profitability”. *Academy of Management Journal*, 40 (3): 534 – 559.
- Schmidheiny, S. (1992): “Cambando el rumbo: una perspectiva global del empresariado para el desarrollo y medio ambiente”. World Business Council for Sustainable Development.
- Shrivastava, P. (1995): “The role of corporations in achieving ecological sustainability”. *Academy of Management Review*, 20: 936 – 960.

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LA MOTIVACIÓN Y EL CLIMA ORGANIZACIONAL EN LA FACULTAD DE CONTADURÍA PÚBLICA DE LA BENEMÉRITA UNIVERSIDAD AUTÓNOMA DE PUEBLA

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RESUMEN

En este trabajo se presenta un estudio de motivación realizado con los docentes de la Facultad de Contaduría Pública de la Benemérita Universidad Autónoma de Puebla, así como una propuesta de un modelo de motivación para lograr un mayor compromiso en su desempeño laboral. Para conocer el grado de motivación de los docentes de la FCP de la BUAP, se analizaron diversas teorías de la motivación y clima organizacional, como sustento teórico, para posteriormente tomar algunos factores que se consideraron importantes medir a través de la aplicación de un cuestionario a una muestra de 69 de ellos.

Se encontraron resultados importantes en las variables analizadas como el grado de satisfacción; conocimiento de su aportación al trabajo, arraigo en la institución, relaciones laborales, trabajo en equipo, reconocimiento del trabajo por los superiores, oportunidades de ascenso, etc., por lo que se infiere que los factores motivacionales que determinan el perfil de motivación, están sujetos a factores económicos, sociales y psicológicos. El objetivo de esta investigación es compartir los resultados obtenidos y la propuesta de un modelo de motivación para que pueda ser considerado por otras instituciones de educación superior para mejorar su sistema de motivación.

Palabras claves: motivación, clima organizacional, docentes universitarios

SIMULADOR EMPRESARIAL UDI BUSINESS GAME

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ABSTRACT

El UDI Business Game es un simulador empresarial desarrollado para la Universitaria de Investigación y Desarrollo UDI en Bucaramanga. Este proyecto nació como iniciativa del autor principal debido a la brecha enorme que existe entre la academia y el sector empresarial y fue gestionado desde el Grupo de Investigación en Desarrollo Empresarial Porter de la UDI. El documento presenta una inquietud acerca de la diferencia de aprender teoría y aprender jugando.

INTRODUCCIÓN

El UDI Business Game (UBG) es un juego computarizado que abarca períodos de operaciones, simulando parcialmente aspectos fundamentales en la toma de decisiones en las áreas financiera, de mercadeo, ventas, compras y recursos humanos. Es posible tomar un mínimo de 12 decisiones en cada período de juego (Inicialmente el periodo de juego está estipulado para un semestre académico que en la UDI corresponde a 17 semanas, sin embargo, el simulador permite modificar el periodo de tiempo para que se adapte a las condiciones que estipule el docente que haga uso de la herramienta).. El simulador enfoca la atención en tomar decisiones acertadas con respecto a la asignación de los recursos a las diferentes áreas funcionales de una organización. El éxito en la operación de la empresa se logrará mediante el uso de pronósticos, planeación estratégica aplicada a las diferentes áreas y contextos así como, en la fijación de precios y el control de sus operaciones.

Las siguientes son las principales características que hacen de la simulación un instrumento útil para la mejor preparación de los estudiantes:

- Los conocimientos teóricos son reforzados mediante el uso de herramientas y técnicas de la administración de empresas actual.
- Hay retroalimentación de los resultados obtenidos como consecuencia de cada una de las decisiones tomadas en periodos anteriores, permitiendo tomar experiencia para mejorar las nuevas decisiones.
- Se genera un alto nivel de motivación debido a que se tiene activa participación en la determinación de la situación futura de la empresa y en el posicionamiento de la empresa simulada.
- Se genera competencia y expectativa por parte de los estudiantes, lo que los motiva a trabajar por mejores resultados.
- Realización de una Junta Directiva al finalizar el juego, en donde los estudiantes deberán validar los resultados y decisiones tomadas ante los miembros de la Junta Directiva, la cual se conforma con personal externo y docentes de la Escuela de Administración de Empresas.

Todas las empresas (conformada por cada grupo de estudiantes) participantes en el juego inician con idénticas circunstancias económicas (igual capital). Todas compran y venden el mismo producto interactuando entre sí, de manera que las decisiones que tome una empresa afectan en algún sentido a otra empresa. En el juego se dan diversas condiciones económicas y de mercado que afectan la gestión de las empresas. Dichas condiciones son definidas por el docente que se encarga de aplicar y desarrollar el programa.

El objetivo de la simulación es determinar la estructura que mejor se ajuste a las circunstancias que se dan en el juego, usando para ello los conceptos, herramientas y técnicas aprendidas durante estudios previos. Las circunstancias cambian conforme cambian las condiciones económicas y de mercado que el docente estipule.

REVISIÓN LITERARIA

Las simulaciones de gestión de empresa son unas herramientas de aprendizaje que hacen posible que los participantes puedan aprender sobre los factores que influyen en las distintas áreas de sus negocios, comunicándose, argumentando, negociando, compitiendo, tomando decisiones, alcanzando compromisos y poniendo a prueba sus ideas de manera creativa, sin exponerse a los riesgos propios de una situación real, es decir, sin pérdidas económicas reales.

Según Porter (1), la formulación de una estrategia competitiva consiste esencialmente en relacionar una empresa con su ambiente. La intensidad de una industria no se debe a la coincidencia ni a la mala suerte. Esto significa que los resultados de las empresas son fruto de sus decisiones, sean estas tomadas a conciencia y obedeciendo a un estudio o sean tomadas a la ligera y de forma improvisada. Surge entonces la necesidad de reducir esa brecha entre la realidad empresarial y la academia.

Esa brecha se pretende minimizar con herramientas modernas de tecnología e información como el Internet. Dice Llofriu (2002): " Por qué hablamos sobre la tendencia futura del eLearning cuando todos los datos apuntan a que se encuentra en un estado inicial de desarrollo?. Porque la implantación del eLearning no debe ser una cuestión de tiempo sino de comprensión. Y digo de comprensión porque lo primero que hay que comprender es la posición de la formación dentro del organigrama de la empresa.

Pero, y la formación?, para que nos formamos?. Sobre todo, para capacitarnos y poder optar a mejores puestos de trabajo. Pero cuando presentamos nuestro currículum, siempre es más determinante la experiencia, independientemente del número de cursos o procesos formativos no reglados que hayas podido realizar. O sea, nos piden *aprendizaje*, no *formación*; quieren que tengamos *experiencia*, no que hayamos accedido a *contenidos*. También es un "engaño"?.

La formación se genera a través de la experimentación, para la cual retomamos a retomando a Byrne (2002), donde dice que: " La verdad es que no, simplemente es un enfrentamiento de puntos de vista entre dos partes que tienen que convivir, la empresa y el empleado. Y este hecho nos devuelve a la encrucijada *formación - aprendizaje*. Realmente qué es lo que se valora, lo que uno sabe (aprendizaje) o lo que tendría que saber (formación)?. Hay una frase de Aristóteles que refleja esta situación: "*Lo que tenemos que aprender, lo aprendemos haciendo*". " (2)

En este momento en que las empresas buscan optimizar los recursos de capital intelectual de sus miembros, la implementación de herramientas adecuadas de capacitación, formación y desarrollo profesional se demuestran imprescindibles para afrontar los cambios que el futuro nos hace prever. Es en este entorno caótico y cambiante, donde los juegos de simulación demuestran ser una acertada solución para los responsables de la gestión de las empresas. Simular la realidad, o lo que sería lo mismo, los juegos de simulación de empresa basados en la realidad apuntan como la mejor solución para un proceso permanente de revisión, remodelación, y reformulación de las capacidades y necesidades requeridas. Del mismo modo que la realidad cambia, que la empresa cambia, el juego de simulación de la realidad debe adaptarse a los mismos cambios y es por eso que se trata de simular ambientes competitivos reales no ajenos a lo que sucede realmente en un mercado cualquiera.

Todas las personas, ya sea que estén en los negocios, el gobierno, la universidad o en cualquier otra organización, se preocupan por la ética. En el Webster's Ninth New Collegiate Dictionary, la ética es definida como " la disciplina que se ocupa de lo que es bueno y malo desde el punto de vista del deber y la obligación moral".

Business Week sugiere varias ideas para la creación de la corporación ideal que debe fundarse en integridad, ética, equidad y confianza. (3) Surge entonces la preocupación por el manejo ético de las decisiones, ya que permite la fuga de información de una empresa a otra, debido a las amistades y preferencias por otros compañeros integrantes de cada empresa. Se debe manejar este aspecto también.

La toma de decisiones es de vital importancia en el éxito de las organizaciones, es por eso que dentro de este contexto: "el proceso de llevar a cabo una decisión podría ser considerado como 1) hacer premisas, 2) identificar alternativas, 3) evaluar alternativas en términos de la meta que se busca y 4) elegir una alternativa, es decir, tomar una decisión." (4)

METODOLOGÍA

El proceso metodológico comprenderá las siguientes fases: Recolección de datos (recopilación de información de las fuentes primarias), Selección de Fuentes Secundarias, Análisis de los Datos, Preparación de Variables del Simulador, Montaje Plataforma Administrador, Montaje Plataforma Docente, Montaje Plataforma Estudiante, Enlace Plataformas, Pruebas y Correcciones.

RESULTADOS

El resultado es la producción de un simulador empresarial llamado UDI Business Game, que funciona bajo ambiente web multiplataforma, desarrollado en PHP y MYSQL, y que de manera virtual simula un ambiente de competencia en un mercado determinado a través de la interacción de las empresas participantes. El simulador empresarial UDI Business Game presenta la siguiente pantalla inicial cuando se digita la dirección en el browser. Ver figura 1.

Figura 1. Plataforma principal UDI Business Game



Figura 2. Plataforma de selección de usuarios



Una vez hecho click en el icono central del simulador, aparece la opción de los diferentes usuarios: administrador, docente y estudiante. Ver Figura 2.

En la opción Administrador se generan las opciones de crear docente, estudiantes y grupos. Ver Figura 3.

En la opción Docente se generan las opciones de parámetros del juego (crear, editar y eliminar juego, crear jugada), parámetro generales (tipos de empresa, regiones geográficas, seguros, actividades promocionales y publicidad entre otros), ponderación (permite seleccionar el peso de las compras y ventas) y ejecutar la jugada (permite ejecutar la jugada para reflejar los resultados de la toma de decisiones). Ver Figura 4.

En la opción Estudiante se generan las opciones para que los estudiantes tomen decisiones (compras, ventas, mercadeo, finanzas, recursos y otros), reportes financieros (estado de resultados, balance general y flujo de efectivo), y visualicen información (del juego y de cada jugada). Ver Figura 5.

Figura 3. Plataforma Administrador



Figura 4. Plataforma Docente



Figura 5. Plataforma Estudiante



CONCLUSIONES

Estamos en presencia de un juego de estrategia online que simula el funcionamiento real de las organizaciones de nuestro entorno Colombiano. Esto implica la actuación como empresario. Una persona gestiona una empresa con todas las implicaciones que ello conlleva: personal, proveedores, clientes, calidad, stocks, mercados, exportación, importación, repercusión impositiva, repercusión legislativa, etc.

El juego coloca al estudiante ante la necesidad de tomar múltiples decisiones rápidas, para adaptarse a la realidad, que él mismo ayuda a conformar. Cualquier acción que el participante tome, afectará de inmediato al resto de jugadores que reaccionarán, en consecuencia de forma inmediata. Se aclara que se está simulando competencia en un mercado.

Cada participante adquiere un rol gerencial, para alcanzar sus objetivos como empresa, estos roles son los respectivos cargos gerenciales de la empresa (Gerente General, Gerente de Compras, Gerente de Ventas, Gerente de Mercadeo, Gerente Financiero y Gerente de Recursos Humanos). Las reacciones ante cualquier situación son reales, puesto que el resto de participantes son personas reales, al igual que el estudiante.

En definitiva, esta es una herramienta para la práctica de la toma de decisiones, estratégicas y empresariales. La mejor herramienta de integración de la teoría con la práctica.

REFERENCIAS

- (1) Porter, Michael (2006) "Estrategia Competitiva", Editorial CECSA, P19.
- (2) Llofriu, Guillermo (2002) "La tendencia evolutiva del eLearning: los entornos de entrenamiento" disponible en <http://winred.com/main.php?mid=a1400>
- (3) Byrne, Jhon (2002) "After Enron: The ideal Corporation" Business Week, Agosto 26 de 2002, P68-74.
- (4) Koontz, Weihrich y Cannice (2008) "Administración, una perspectiva global y empresarial" Editorial McGraw Hill, P157.

BIOGRAFÍA

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ESTIMACIÓN DE LA EFICIENCIA EN EL SECTOR HOTELERO EN CANARIAS

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ABSTRACT

La Organización Mundial del Turismo (OMT) ha reconocido recientemente que la industria turística afronta tiempos difíciles debido al alcance global de la crisis y el grado de incertidumbre existente. El turismo en Canarias no ha sido inmune a la crisis y al cambio de ciclo, que ha hecho mella en el sector algo más tardíamente aunque en mayor medida que en otros sectores. Este estudio discute la eficiencia en el sector hotelero en Canarias como determinante fundamental de la competitividad empresarial, mediante el uso de la técnica paramétrica denominada “distribution-free approach”. Se estiman las eficiencias de costes y beneficios para el periodo 2002-2006, obteniéndose significativas ineficiencias en ambos casos, aunque muy superiores las de beneficios a las de coste.

INTRODUCCIÓN

La presente situación de crisis económica está dibujando un escenario mucho más competitivo, dinámico y agresivo, que está haciendo que las empresas vean erosionados progresivamente sus márgenes de beneficios. El sector turístico no es ajeno a esta situación y en algunas economías como la Canaria, con un alto grado de dependencia del citado sector, las consecuencias puede ser dramáticas si no se toman medidas dirigidas a posicionarse ventajosamente en un mercado altamente competitivo (Cohen, 2005; Zoreda, 2007). Tradicionalmente el sector turístico en Canarias gozaba de ventajas, en relación a otros destinos turísticos, que se apoyaban en la fuerte inversión pública (promociones e infraestructuras) y una envidiable situación geográfica (un medioambiente relativamente conservado, una climatología muy benigna y cerca de los grandes mercados emisores de Europa). Sin embargo, en los últimos años estas ventajas se han ido diluyendo como consecuencia de la irrupción en el mercado internacional del turismo de nuevos destinos altamente competitivos, tanto desde el punto de vista de las infraestructuras como de su situación geográfica (Barroso González y Flores Ruiz, 2006; Lanquar, 2006). Esta circunstancia está obligando al sector turístico en Canarias a buscar nuevas fuentes de ventajas competitivas que le permita recuperar, o en el mejor de los casos mantener, su posición competitiva en el mercado mundial del turismo (Fluviá, Espinet y Rigall, 2005). La homogeneización de los destinos turísticos desde el punto de vista del entorno, va a provocar que el foco en la búsqueda de nuevas fuentes de ventajas competitivas bascule hacia los recursos de la empresa hotelera.

El turismo mundial se ha convertido cada vez más en un producto de masas y, por tanto, en un producto estandarizado de difícil diferenciación, por lo que la lucha en costes pasa a jugar un papel fundamental (Okumus, 2004; Phillips, 2005; Castelltort, 2006). La búsqueda de ventajas en costes requiere de grandes volúmenes de producción de forma eficiente y de la reducción de costes basado en la experiencia. La eficiencia se erige así en un factor clave de competitividad de la empresa hotelera. Los dos conceptos más importantes de eficiencia económica son la eficiencia de costes y la eficiencia de beneficios, ya que están basados en la optimización económica como reacción a los precios y competencia en los mercados y no tanto en el uso de una determinada tecnología; en otras palabras, estos dos conceptos de eficiencia responden a su vez a dos importantes objetivos económicos: minimización del coste y maximización de beneficios (Berges y Mester, 1997; Maudos, Pastor, Pérez y Quesada, 2002). El objetivo de este trabajo es

estimar la eficiencia en la empresa hotelera en Canarias y analizar cómo mejorando sus niveles poder alcanzar ventajas competitivas.

CONCEPTO Y MEDIDA DE LA EFICIENCIA

Eficiencia de costes

La ineficiencia de costes nos dice cuánto más alto son los costes de una empresa en relación con los costes de la empresa más eficiente que produce con la misma combinación de output y precio de los inputs, y la diferencia no puede ser explicada por un error aleatorio. La especificación de una frontera de costes permite estimar una función de costes que relaciona los costes observados para un conjunto de outputs, los precios de los inputs, un error aleatorio y la ineficiencia. Esta frontera puede expresarse como:

donde C mide la variable costes, y es el vector de las cantidades de outputs, p es el vector de precios de

$$C = C(y, p, u_c, v_c) \quad (1)$$

las variables inputs, u_c representa las ineficiencias encontradas y v_c representa el error aleatorio. El factor de ineficiencia u_c incorpora tanto la ineficiencia asignativa, consecuencia de una reacción no óptima a los precios relativos de los inputs, p , como la ineficiencia técnica, debido al empleo de demasiados inputs para producir y . Para facilitar la estimación de la ineficiencia, se asume que el error aleatorio y la ineficiencia, v_c y u_c son separables del resto de la función de costes. Tomando logaritmo neperiano en ambos lados de (1), tenemos:

$$\ln C = f(y, p) + \ln u_c + \ln v_c \quad (2)$$

donde f representa la forma funcional elegida y los términos, $\ln u_c + \ln v_c$, se considera como un término de error compuesto. En este trabajo la eficiencia de costes de la empresa i (EC_i) se estima como la ratio entre los costes mínimos necesarios para producir el vector de output y el coste de la empresa i , esto es:

El rango de las eficiencias de costes está entre (0 – 1) y es igual a uno para la empresa más eficiente de las

$$EC_i = \frac{\hat{C}^{\min}}{\hat{C}_i} \quad (3)$$

que integran la muestra. En la práctica, las eficiencias son generalmente definidas en relación a la empresa más eficiente observada en el sector, más que en referencia al verdadero coste mínimo, ya que la tecnología subyacente es desconocida. Afortunadamente, para la mayoría de las hipótesis económicas es más apropiado usar el concepto de eficiencia relativa en lugar de la eficiencia absoluta. Sobre la base de la estimación de la forma funcional de la expresión (2), la eficiencia de costes puede estimarse como (Maudos, Pastor, Pérez y Quesada, 2002):

$$EC = \frac{C^{\min}}{C} = \frac{\exp[f(y, p)] \exp(\ln v)}{\exp[f(y, p)] \exp(\ln u) \exp(\ln v)} = \exp(-\ln u) \quad (4)$$

Eficiencia de beneficio

El concepto de eficiencia de beneficios es mucho más amplio que el concepto de eficiencia de costes ya que considera los efectos de la elección del vector de producción tanto sobre los costes como sobre los ingresos. En contraste con la función de costes, la función de beneficio recoge como variable dependiente

el beneficio en lugar de los costes y mantiene como variables exógenas las mismas que la función de costes. Así, la variable cantidad de output es constante mientras que su precio varía libremente y afecta al beneficio. De este modo, definimos la función de beneficio alternativa como:

$$\pi = \pi(y, p, u_\pi, v_\pi) \quad (5)$$

donde π es la variable beneficio, y es el vector de las cantidades de outputs, p es el vector de precios de las variables inputs, u_π representa las ineficiencias encontradas que reducen el beneficio y v_π representa el error aleatorio. Para facilitar la estimación de la eficiencia, se asume que el error aleatorio y la ineficiencia son separables del resto de la función de costes. Tomando logaritmo neperiano en ambos lados de (5), tenemos:

$$\ln(\pi + \psi) = \pi(y, p) + \ln v_\pi - \ln u_\pi \quad (6)$$

donde ψ es una constante que se añade a la variable beneficio de todas las empresas para asegurarnos un

valor positivo del mismo y poder así aplicar logaritmos neperiano (la constante ψ se tendrá en cuenta a la hora de rescatar los valores de la eficiencia). La eficiencia de beneficio (EB_i) se define en este estudio como la ratio entre el beneficio actual de la empresa i (π_i) y el nivel máximo que podría alcanzar la empresa más eficiente de la muestra (π^{\max}) esto es:

$$EB_i = \frac{\pi_i}{\pi^{\max}} \quad (7)$$

Sobre la base de la estimación de la forma funcional de la expresión (6), la eficiencia de beneficios puede estimarse como (Maudos, Pastor, Pérez y Quesada, 2002):

$$EB = \frac{\pi}{\pi^{\max}} = \frac{\exp[\pi(y, p)] \exp(\ln v) \exp(-\ln u) - \psi}{\exp[\pi(y, p)] \exp(\ln v) - \psi} \quad (8)$$

MODELO EMPÍRICO

Muestra y selección de variables

La base de datos que se utiliza en esta investigación está compuesta por 84 empresas hoteleras de Canarias, que compiten por ofrecer similares productos a sus clientes y por buscar similares factores de producción. El estudio se realiza para el periodo 2001 al 2006 y la información utilizada se ha obtenido de la base de datos SABI. Las variables seleccionadas del modelo son:

Outputs: Y1= Importe neto de las cifras de Ventas, Y2= Otros ingresos de explotación.

Inputs: P1= gastos de personal / nº de empleados, P2= consumo de materiales / activo total medio, P3= (otros gastos de explotación+ dotación amortización del inmovilizado) / activo total medio.

Coste total: C= gastos del personal + aprovisionamientos + otros gastos de explotación + dotación amortización del inmovilizado.

Beneficio: π = beneficio de explotación.

Metodología

En este trabajo usaremos la *distribution-free approach* para estimar la eficiencia de costes y beneficios en la empresa hotelera en Canarias. Esta metodología asume que existe una eficiencia constante a lo largo del tiempo estudiado para cada empresa, mientras que el error aleatorio tenderá a compensarse a lo largo del periodo, siendo su promedio, por tanto, cero.

En general, en los modelo paramétrico se establece una comparación entre las diferentes empresas y se dice que una empresa es mas o menos eficiente en función de aquella de la muestra que sea la mejor o la peor, respectivamente, después de haber eliminado el posible error aleatorio existente en nuestros datos. Si consideramos una expresión general de estos modelos, esta podría venir dada, en el caso de la función de costes, por

$$\ln C = f(p, y) + \ln u + \ln v$$

(9)

donde f es la forma funcional, C representa los Costes, p es el vector de precios de los inputs, y es la cantidad de outputs, u representa la ineficiencia y v es el error aleatorio. La función de beneficios es exactamente igual a la de costes, sólo varía la variable dependiente que en este caso es el beneficio, π . Dado que el beneficio puede ser negativo, para poder aplicarle logaritmos se le suma a todos los valores de la muestra el valor menor de la misma más uno (ϕ), de forma que todos los valores de esta variable sean positivos. Así, la función de beneficio podría expresarse como,

$$\ln(\pi + \phi) = f(p, y) + \ln u + \ln v \quad (10)$$

Una vez estimadas tanto la función de costes como la función de beneficios por mínimos cuadrados generalizados, los residuos obtenidos estarán compuestos tanto por la ineficiencia, $\ln u$, como por el error aleatorio, $\ln v$, pero como se ha asumido que el promedio de este error a lo largo del tiempo es cero, calcularemos el promedio de todos los residuos obtenidos para cada una de las empresas de la muestra, obteniéndose así la estimación del término de la ineficiencia $\ln u$.

Una vez definida la técnica de estimación, tenemos que precisar la forma funcional. La más común en la literatura revisada para la estimación de eficiencias de costes y beneficios es la Translog con efectos principales y sin interacciones. La aplicación de dicho modelo no difiere del modelo Translog completo tal como se recoge en Rosa-González, González-Dávila y Arbelo (2007). La expresión utilizada es:

$$\ln(C) = \alpha + \sum_{i=1}^2 \beta_i \ln(y_i) + \sum_{i=1}^4 \delta_i \ln(p_i) + \ln u + \ln v \quad (11)$$

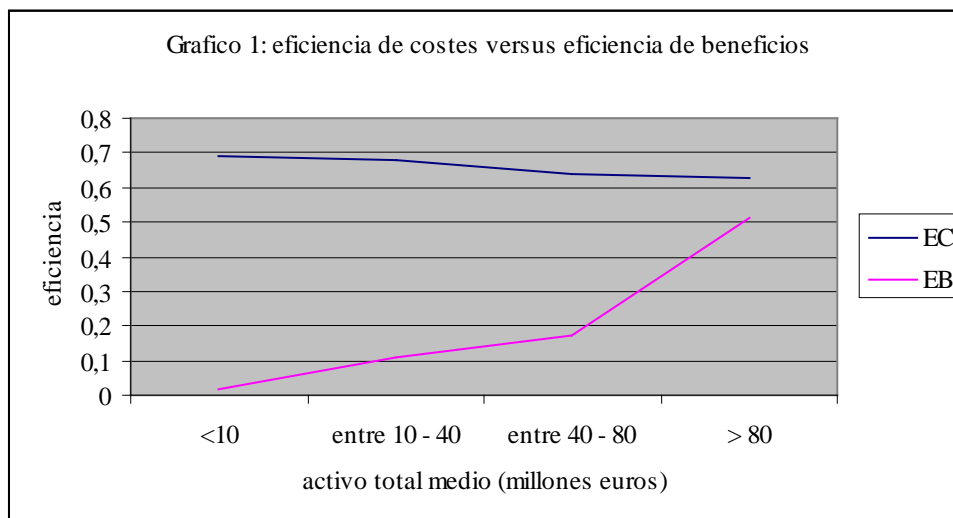
RESULTADO Y CONCLUSIONES

La tabla 1 presenta la media de la estimación de la eficiencia de costes y beneficio obtenidas. Estos resultados revelan una eficiencia de costes de los hoteles de la muestra del 67% y una eficiencia de beneficios del 12%.

Tabla 1: Media de la eficiencia de costes y eficiencia de beneficio.

	<i>Eficiencia de costes</i>	<i>Eficiencia de beneficio</i>
Media	0,67	0,12
Desv. típ.	0,114	0,360

Como se observa en el gráfico 1, mientras la eficiencia de costes se mantiene prácticamente constante para todos los tamaños de los hoteles, la eficiencia de beneficios se incrementa con el tamaño del hotel, siendo muy significativo este incremento para hoteles con activo total medio superior a 80 millones de euros.



En conclusión, estos resultados suponen que en media los hoteles de Canarias podrían mejorar sus costes en alrededor de un 33% y los beneficios en un 88%, si eliminasen completamente sus ineficiencias. Lo que significa que para un nivel de costes medios de los hoteles de la muestra de 15.831.000 euros, éstos podrían reducirse en 5.224.000 euros de media; y para el caso de los beneficios, con un nivel medio de 508.000 euros, éstos podrían incrementarse en 447.000 euros de media.

REFERENCIAS

Barroso Gonzáles, M. y Flores Ruiz, B. (2006): “La competitividad Internacional del destino turístico: del enfoque macroeconómico al enfoque estratégico”, Cuadernos de turismo, nº 17

Berger, A.N., Mester, L.J., 1997, Inside the black box: What explains differences in the efficiencies of financial institutions?. *Journal of Banking & Finance* 21, 895-947.

Castelltort, C. 2006: “La rentabilidad del turismo español: ¿Problema de producto o de demanda?: El caso de Suiza, Cuadernos Turísticos, nº 167

Cohen, E., 2005: Principales Tendencias del turismo Contemporáneo, Política y Sociedad, Nº 42, Vol. 1

Lanquar, R. 2006: “Le futur des industries du voyage”, Universidad de Tous- les- Sarvoirs

Maudos, J., Pastor, J.M., Pérez, F. y Quesada, J. 2002. “Cost and profit efficiency in European banks”, *Journal of International Financial Markets, Institutions and Money*, 12, 33-58.

Okumus, F. 2004: “ Implantation of Yield Management. Practices in service Organization”, The service Industries Journal

Phillips, R.L. 2005: Pricing and Revenue Optimization, Stanford Bussiness School

Rosa-Gonzalez, F., Gonzalez-Dávila, E. y Arbelo-Alvarez, A. 2007. “Análisis de la eficiencia en pequeñas empresas bajo el enfoque de distribución libre usando datos de panel”. XXX Congreso Nacional SEIO, sep 25-28 Valladolid.

Zoreda, J. 2007: “Tendencias actuales del mercado turístico”, Jornadas sobre turismo en Andalucía, 2007

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APLICACIÓN DE LA INTELIGENCIA EMOCIONAL PARA MEJORAR EL DESARROLLO Y DESEMPEÑO DE LOS EMPLEADOS DE VENTAS, CASO: ING, S.A. DE C.V.

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ABSTRACT

La investigación que se presenta fue realizada en la empresas Seguros ING SA de CV en la ciudad de Mexicali, B.C.; con el objetivo de conocer cualitativamente el nivel de Inteligencia Emocional que se utiliza actualmente dentro de la compañía de Seguros y ver su efecto en la fuerza de ventas de la plaza. La investigación se realizó a través de un estudio descriptivo, llevando a cabo un análisis y síntesis del objeto de estudio. En esta investigación se presentan los resultados de la aplicación del cuestionario aplicado a 55 agentes miembros de la fuerza de ventas de la empresa, ésta actividad permitió, conocer el grado de aplicación de la inteligencia emocional que poseen, así como su manejo ante situaciones factibles que se dan en su desarrollo laboral, la forma en que ésta es utilizada y los problemas que con mayor frecuencia se presentan. En base a ello se presenta una serie de propuestas encaminadas a solucionar o minimizar los problemas más comunes en su desempeño y destacar aquellas áreas de oportunidad para crear de esta forma una herramienta de mejora que se reflejara en sus incrementos en los niveles de venta, así como la administración de sus recursos.

MARCO DE REFERENCIA

Conocer siempre más y mejorar nuestra inteligencia emocional (I.E.), será de gran ayuda para enfrentarnos a un futuro cada día más cambiante e incierto. En un mundo laboral y profesional cada vez más cambiante es indispensable mantener una mentalidad abierta al cambio y una preparación que nos permita estar a tono con las innovaciones que surjan y surgirán en una sociedad que se encuentra cada día más globalizada y con un mayor grado de competencia en todos sus aspectos. Estamos conscientes que el obtener o manejar una buena I.E., no es fácil, pero también creemos que si existe la intención de adaptarla, esto nos traerá extraordinarios beneficios personales y organizacionales. La excelencia depende más de las competencias emocionales que de las capacidades cognitivas.

Para efectos de esta investigación se estudio la Inteligencia Emocional (I.E.), concibiéndola como la capacidad para captar las emociones de un grupo y conducirlas hacia un mejor resultado, aplicándola en la compañía SEGUROS ING SA DE CV, empresa dedicada a la venta de seguros en la Ciudad de Mexicali, B.C., específicamente en el área de ventas, de la Gerencia Mexicali dentro de la compañía.

SEGUROS ING S.A. DE C.V. es una empresa conformada a partir de la unión de ING Group, Seguros Comercial América y Afore Bital. Brinda servicios financieros a todas las personas que buscan concretar sus proyectos de negocios en México y salvaguardar sus niveles de riesgo a través de sus diversos productos de seguros y derivados.

Consideramos que es importante llegar a determinar la importancia que se le debe dar a la I.E. dentro de una organización que su principal herramienta de trabajo es el potencial humano, ya que a través de ellos

se logran un mejor desarrollo de nuestras relaciones con las personas, en el área familiar-afectiva, social y laboral-profesional.

Antecedentes

El concepto de inteligencia emocional, aunque esté de actualidad, tiene a nuestro parecer un claro precursor en el concepto de Inteligencia Social de Thorndike (1920, p. 228) quien la define como "*la habilidad para comprender y dirigir a los hombres y mujeres, muchachos y muchachas, y actuar sabiamente en las relaciones humanas*". Más recientemente, Gardner (1983) en su obra "*Frames of Mind*", revoluciona el concepto de inteligencia a través de la teoría de Inteligencias Múltiples, introduce dos tipos de inteligencia muy relacionadas con la competencia social, y hasta cierto punto emocional, la Inteligencia Interpersonal y la Inteligencia Intrapersonal. Gardner define a ambas como sigue:

"La Inteligencia Interpersonal se construye a partir de una capacidad nuclear para sentir distinciones entre los demás: en particular, contrastes en sus estados de ánimo, temperamentos, motivaciones e intenciones. En formas más avanzadas, esta inteligencia permite a un adulto hábil leer las intenciones y deseos de los demás, aunque se hayan ocultado... "(Gardner, 1993: 40) Y a la Inteligencia Intrapersonal como "el conocimiento de los aspectos internos de una persona: el acceso a la propia vida emocional, a la propia gama de sentimientos, la capacidad de efectuar discriminaciones entre las emociones y finalmente ponerlas un nombre y recurrir a ellas como un medio de interpretar y orientar la propia conducta..." (Gardner 1993: 42). Quizás sea esta última, la que mayor relación tiene con nuestro constructor teórico de interés, la I.E. Goleman (1996, p. 74), interpreta y resume estas dos capacidades, propuestas por Gardner, como "la capacidad de discernir y responder apropiadamente a los estados de ánimo, temperamentos, motivaciones y deseos de las demás personas" en referencia a la inteligencia interpersonal, y en cuanto a la inteligencia Intrapersonal como " la capacidad de establecer contacto con los propios sentimientos, discernir entre ellos y aprovechar este conocimiento para orientar nuestra conducta".

La I.E., es la capacidad de comprender las emociones y conducirlas, de tal manera que podamos utilizarlas para guiar nuestra conducta y nuestros procesos de pensamiento, para producir mejores resultados. Incluye las habilidades de: percibir, juzgar y expresar la emoción con precisión; contactar con los sentimientos o generarlos para facilitar la comprensión de uno mismo o de otra persona; entender las emociones y el conocimiento que de ellas se deriva y regular las mismas para promover el propio crecimiento emocional e intelectual.

I.E. es un término que intenta definir la capacidad de una persona para concienciar, regular, adecuar y transformar de modo real, concreto y vivencial su despliegue interno de fuerzas, impulsos, tendencias y predisposiciones emocionales expresadas en forma de humor, afectos, temperamento, conductas, reacciones viscerales, etc. Estudios realizados en la Universidad de Yale demostraron que un grupo de control liderado por una persona entusiasta y alegre era capaz de transmitir optimismo, al contrario de grupos con líderes irritables o desanimados. Es simplista, no obstante, afirmar que la persona con una desarrollada IE tiene un buen desempeño en el trabajo, pues es necesario desarrollar ciertas habilidades: capacidad de influencia, creatividad, liderazgo o iniciativa.

La Inteligencia Emocional bien aplicada en una empresa nos puede aportar:

- Mejorar la comunicación;
- El trabajador se sentirá más persona, más feliz, más pleno y con mayor calidad de vida; aumenta la motivación;
- Las relaciones personales mejoran;
- Las personas se implican más en su trabajo y son más responsables y autónomas;
- Se mejora el clima laboral; nuestro poder (especialmente el carismático) y nuestro liderazgo se ven

reforzados;

- Aumenta la eficacia y eficiencia de las personas y de los equipos;
- Los procesos de cambio y de mejora continua se agilizan;
- Mejoran las relaciones con los clientes y con todos los públicos de la empresa; La empatía crea una actitud esperanzada. La empatía nos tranquiliza, fortalece nuestras relaciones con los demás y nos ayuda a crear una actitud que nos permite doblarnos más que quebrarnos.

Justificación

Nuestro interés por este tema es porque consideramos que la inteligencia emocional es un aspecto de vital importancia para todo individuo, pero nos centramos mas en la inteligencia emocional de los profesionales de la venta de seguros puesto que averiguamos el grado de inteligencia emocional que poseen estos profesionales para actuar en diferentes situaciones ya que consideramos que son una parte crucial en el desarrollo de la gestión de venta y esto influye de una manera importante en su estado emocional, pues el mal empleo de la I.E., puede traer consecuencias negativas e importantes en el cierre de los negocios ante sus clientes potenciales.

Por lo que esto nos permite determinar cómo la mayoría de las emociones que demuestran las personas dentro de la empresa de seguros influyen directamente ya sea para bien o para mal, en su rendimiento laboral, ya que este se ve repercutido por la actitud mostrada ante el prospecto, dando la pauta al tipo de relación, la I.E., influye directamente en la forma en que nos relacionamos, cómo respondemos, cómo nos comunicamos, nos comportamos y en general cómo estamos trabajando.

De igual forma consideramos que se podrá llegar a determinar quienes son aquellos que tienen una buena aplicación de esta, considerando los niveles desde el operacional hasta gerencial, cuales son sobresalientes y así poder implementar seminarios y talleres prácticos para enfocarla correctamente, en los cuales se incluyan programas de acercamiento entre la compañía y el individuo, y de esta forma poder demostrar que con una buena aplicación de la I.E., se puede lograr un equilibrio entre el trabajo y persona, reflejado en resultados positivos de incrementos de sus ventas. Esto partiendo de la idea que en los seminarios, según el origen etimológico de la palabra, las personas adquieren información básica –con algún ejercicio práctico- respecto al origen y al alcance de la I.E., además de aprender las habilidades básicas de autoconciencia, autorregulación, motivación, empatía y las sociales (5 habilidades básicas). En los Talleres, se aprenden en profundidad cada una de las 5 Habilidades Prácticas, participando de las dinámicas de grupo y de los ejercicios que acompañan el desarrollo de cada una de las habilidades. Sin dejar de lado que el hecho de poseer una elevada I.E., no garantiza que la persona haya aprendido las competencias emocionales que más importan en el mundo laboral sino tan sólo que está dotada de un excelente potencial para desarrollarlas.

Problema

¿Qué beneficios proporcionará en una compañía de venta de seguros la aplicación de la inteligencia emocional a diferencia de los cursos de motivación o aquellos de capacitación para mejorar la atención al cliente implementados, para lograr incrementos en las ventas?

Objetivos

Determinar si el desarrollo de la inteligencia emocional en la empresa SEGUROS ING SA de CV se encuentra en el propio desarrollo de la fuerza de ventas (los promotores y agentes de seguros), y con esto llegar a alcanzar incrementos en los niveles de venta siendo más competitivos en el mercado. Además:

1. Determinar si la voluntad al cambio influye en su aceptación.
2. Conocer como se toman las decisiones, a que nivel de conciencia.
3. Formular un modelo de aplicación de la inteligencia emocional, para que de esta forma logren desarrollar la capacidad de trabajar en una organización inteligente.
4. Conocer de que forma se lleva a cabo el proceso de reclutamiento y preparación de un agente de ventas.
5. Conocer que importancia se le da al aspecto emocional de la fuerza de ventas.
6. Conocer en que forma se lleva a cabo el proceso de la venta de seguros.

MÉTODO

Hipótesis: A través de la implementación de la Inteligencia Emocional puede desarrollarse la fuerza de ventas, mejorando su desempeño e incrementando sus niveles de ingresos por ventas.

La investigación se realizó a través de un estudio descriptivo, siguiendo un proceso riguroso formulado de una manera lógica, permitiendo con ello la adquisición del conocimiento del objeto de investigación al obtener información precisa de manera organizada sobre el mismo; llevando a cabo un análisis y síntesis del objeto de estudio.

A través del desarrollo de esta investigación se hicieron varias consideraciones importantes, como lo fueron: el conocimiento que se tenía hasta ese momento sobre el problema y el tema de estudio planteados, el alcance que podía tener la investigación; los trabajos realizados por otros investigadores sobre el mismo objeto de estudio, la manera y la forma en que lo habían estudiado, así como la información no documentada que tenían algunas personas con experiencia en el tema, así una vez construido el marco de referencia, se procedió a realizar un estudio descriptivo para poder llegar, a una mayor profundidad al conocimiento del problema, el cual tiene como propósito delimitar los hechos que conforman el problema a estudiar, estableciendo las características y número de promotorias a estudiar, el nivel de ventas e ingresos en el que se encuentran, los problemas reales que enfrentan, ya que la investigación descriptiva nos permite analizar y evaluar la realidad de estas.

La aplicación y desarrollo del estudio se efectuaron a través de una serie de etapas, como lo es el planteamiento del problema del cual parte esta investigación, la formulación de la hipótesis seguida de una búsqueda y recolección de información, así como la aplicación del instrumento para poner a prueba la hipótesis, proceder a su análisis y finalmente llevar a cabo las conclusiones tomando en consideración la confirmación o el rechazo de la hipótesis planteada con anterioridad.

RESULTADOS

En este capítulo se presentan los resultados de la aplicación del cuestionario aplicado a 55 agentes miembros de la fuerza de ventas de la gerencia Mexicali de Seguros ING SA de CV, la aplicación de este instrumento tiene como objeto el conocer el grado de aplicación de la inteligencia emocional que poseen, así como su manejo ante situaciones factibles que se dan en su desarrollo laboral, la forma en que esta es utilizada y los problemas que con mayor frecuencia se presentan. Una vez aplicado el instrumento de medición los datos obtenidos se procesaron y analizaron.

Con los resultados obtenidos se tiene un diagnóstico del grado de aplicación de la I.E., entre los agentes y su postura ante ella; con esta información se busca establecer una serie de propuestas encaminadas a solucionar o minimizar los problemas mas comunes en su desempeños y destacar aquellas aéreas de oportunidad para crear de esta forma una herramienta de mejora que se reflejara en sus incrementos en los niveles de venta, así como la administración de sus recursos.

Esta investigación presenta los resultados obtenidos, graficando y describiendo los datos que se tenga una mejor comprensión:

Figure 1: Identificación E Información General

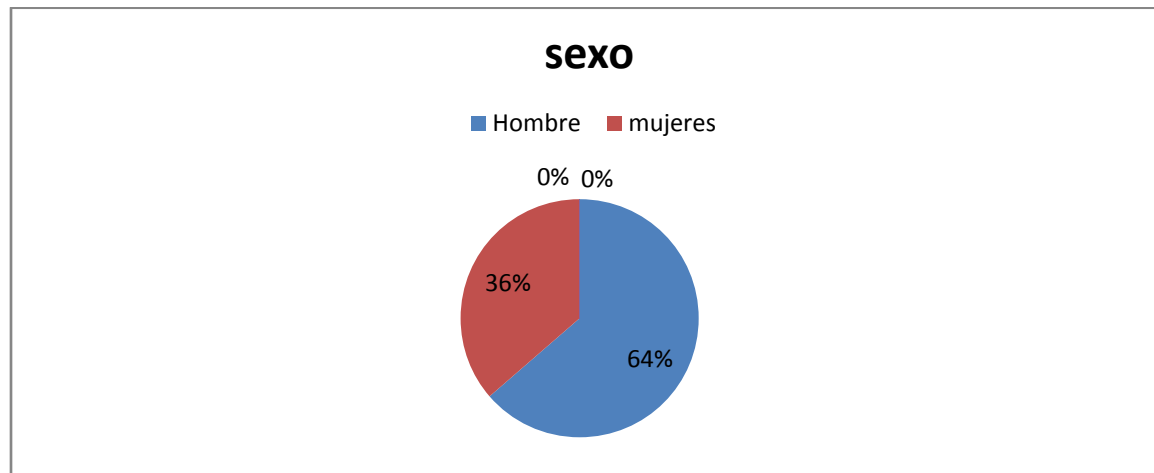


Fig. 1 Sexo del Agente de seguro

El 64% de las personas encuestadas resultaron ser agentes de sexo masculino de los centros de costo de la gerencia, de esta forma la tendencia de agentes se encuentran encaminada a ser una profesión de hombres, lo que nos puede indicar que la profesión esta mas diferenciada a ser agente de seguro como una forma de desarrollo profesional; 36% ocupado por mujeres las cuales al ser agente no el 100% de su tiempo lo dedican a ejercer la profesión.

Figura 2: Profesión del Encuestado

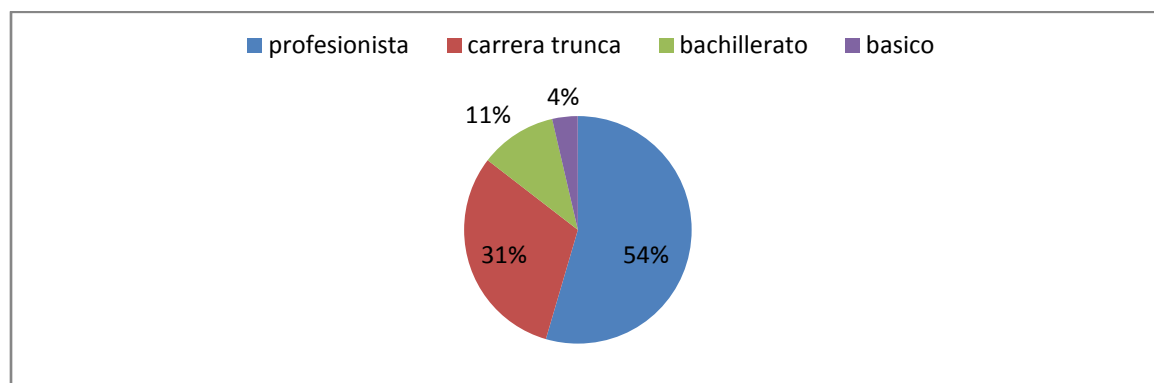


Fig. 2 Profesión

En cuanto a la profesión que tienen las personas a las que se les aplicó la encuesta, se encontró que el 54% cuenta con una carrera universitaria, contrario a lo que algunos pudieran señalar al degradar esta profesión. Los profesionistas en algunos casos ven en este tipo de profesión como la oportunidad de poner en práctica sus conocimientos, tener un ingreso extra o bien el aumentar su patrimonio. Mientras que un 33% tiene la carrera trunca o bien están en proceso de culminarla, así como el 11% cuentan con el mínimo requerido por la comisión de seguros y fianzas para desarrollarse en el medio y obtener su cedula básica para dedicarse a la venta.

Figure 3: Los Años De Experiencia En La Operación Como Agente De Seguros



Fig.3 Años de operación.

La antigüedad de los agentes ejerciendo como tal varía desde un año hasta 11 o mas años de actividad, predominando aquellos que tienen de 7 a 10 años con un 36%, 22% con 1 a 3 años, 16% aquellas con 4 a 6 años respectivamente, 13% aquellos con menos de un año así como aquellos con 11 o mas los extremos fueron comunes. En resumen se tiene una base de agentes relativamente jóvenes en la profesión ya que no llevan ni una década dedicados al ramo de seguros.

Figure 4: Porcentaje Aproximado De Sus Ventas Las Realiza En Cada Uno De Los Siguietes Ramos

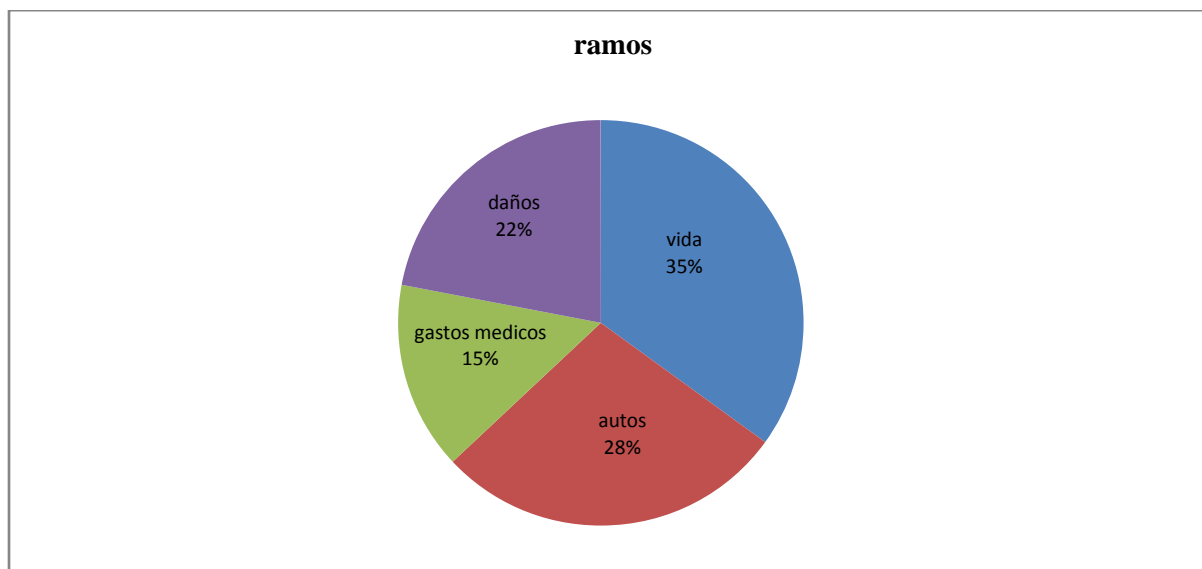


Fig. 4 Ramos de ventas

Con respecto al ramo al que se enfocan mas sus ventas se distingue que su enfoque principal son las líneas personales teniendo una relevancia el ramo de las pólizas de vida con un 35% seguido del ramo de autos con un 28% y del 22% de daños tanto habitacional como comercial, y por ultimo el delicado ramo

de los gastos médicos esto refleja la problemática que se puede dar al concretar este tipo de producto con un 15%.

Figura 5: Señale En Qué Etapa Del Proceso Siente Que Es Menos Efectivo

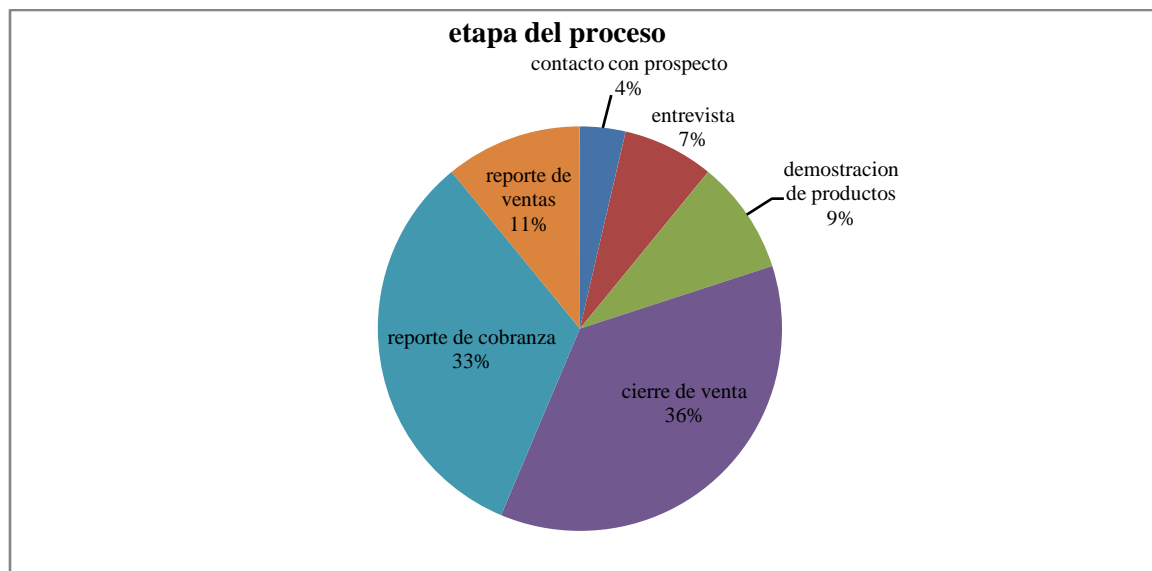


Fig. 5 Etapas del proceso de ventas

Refiriéndonos a la etapa del proceso de venta en el que nuestros agentes se sienten menos efectivos o menos capaces llama la atención que se les facilita la etapa en la que se da el primer contacto con el prospecto o futuro cliente siendo del 4% al 9% , y la principal problemática se da al concretar el cierre de la venta con el 36% es el tropezón mas fuerte ya al final de todo el proceso.

Figurea6: ¿Qué Considera Más Importante Para Su Formación?

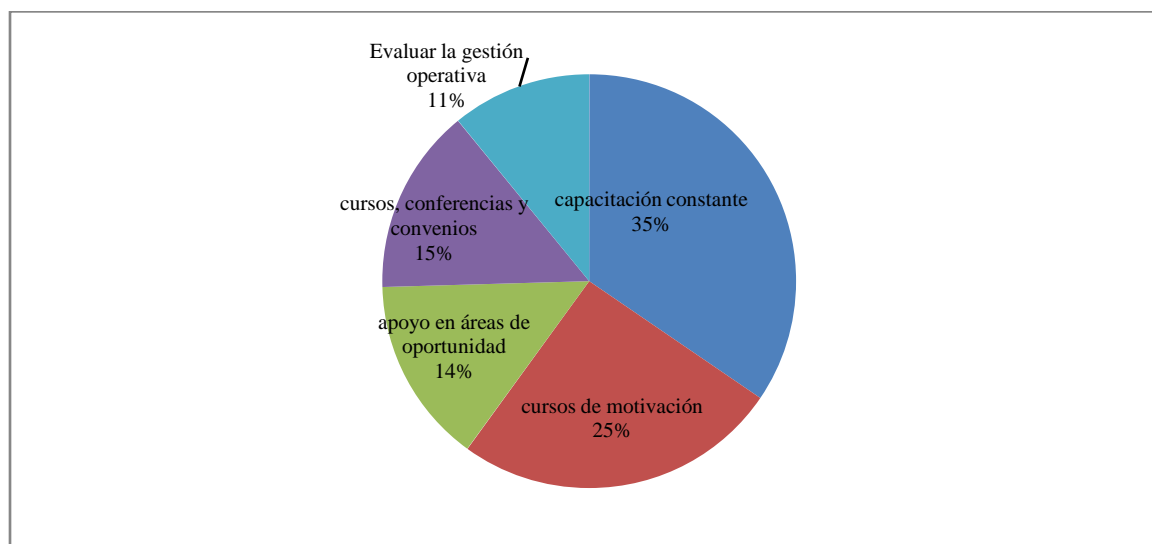


Fig. 6 ¿Qué consideran importante para su formación?

Este rubro es muy importante ya que de esta forma nos podemos percatar que es lo que le preocupa a la fuerza de ventas en cuanto a su eficiente desempeño destacando de esta forma el hecho de que se les de

una capacitación constante es de su máximo interés manifestando un 35%, inmediatamente seguido por los cursos de motivación de esta forma nos daremos cuenta que tan básico es el sentirse motivados a seguir luchando por sus metas, en un 15% aparecen los cursos, conferencias y convenios que se pueden programar para estar actualizando y compartiendo experiencias, el 14% se enfoca al que se le brinde apoyo en aquellas áreas de oportunidad que destaquen en su actuación y como ultimo punto el que se les esta constantemente evaluando en su operación para darles seguimiento oportuno.

Figure 7: ¿Qué Característica Lo Distingue En Su Labor Como Buen Agente?

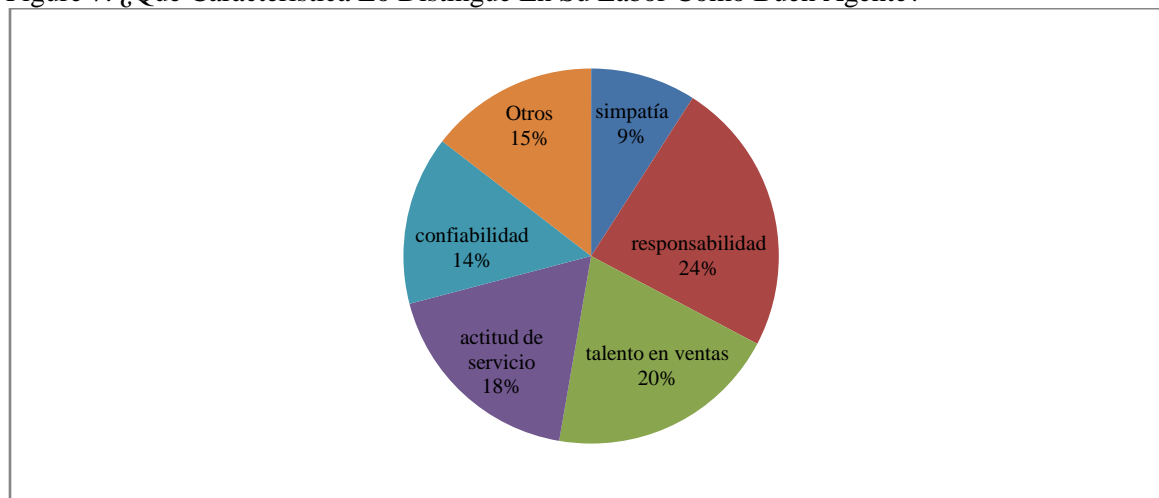


Fig.7 Calidad destacable del agente

Esta ilustración refleja que aspecto cree el agente que lo ayuda a efectuar su trabajo lo mejor posible siendo aquella cualidad que lo caracteriza, considerando que la responsabilidad en un 24% lo respalda primeramente, su talento para ventas en un 20%, la actitud en un 18% considerándola como una herramienta para proporcionar un mejor servicio.

Figure 8: ¿Cómo Considera Su Labor?

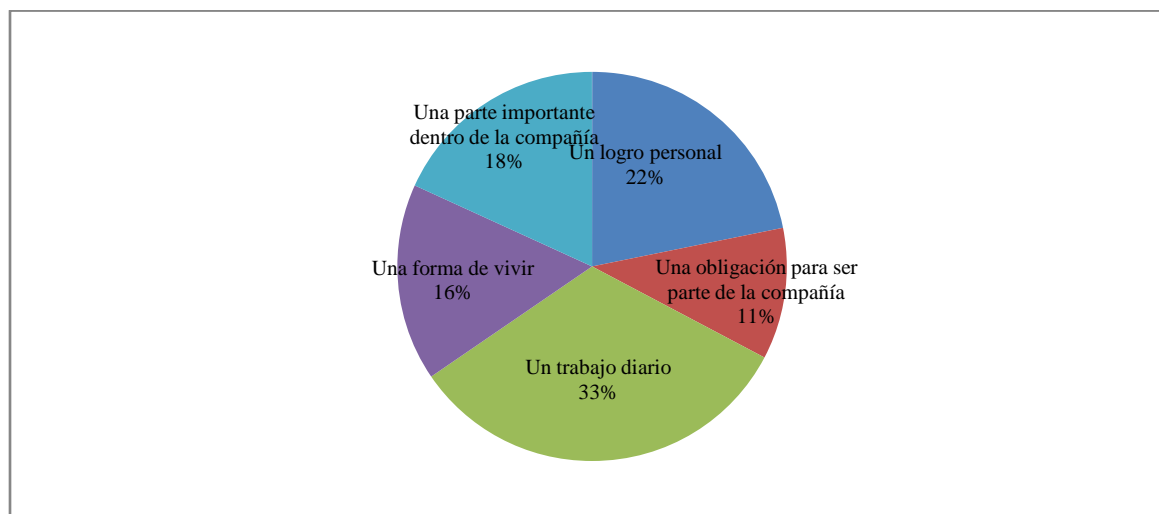


Fig. 8 Cómo ve su labor

Esto es el reflejo de su profesión, por lo que es de llamar la atención de que se ve como un trabajo diario su actividad primordial con un 33%, mientras que un 22% lo ve como un logro personal una superación

de su esfuerzo, el 18% lo ve como un eslabón importante en la formación de la empresa como si efectivamente formara parte un gran grupo en el que su parte esta contemplada en los resultados finales.

Figure 9: ¿Siente Que Tiene Las Bases Para Ser Considerado Un Buen Agente De Seguros?

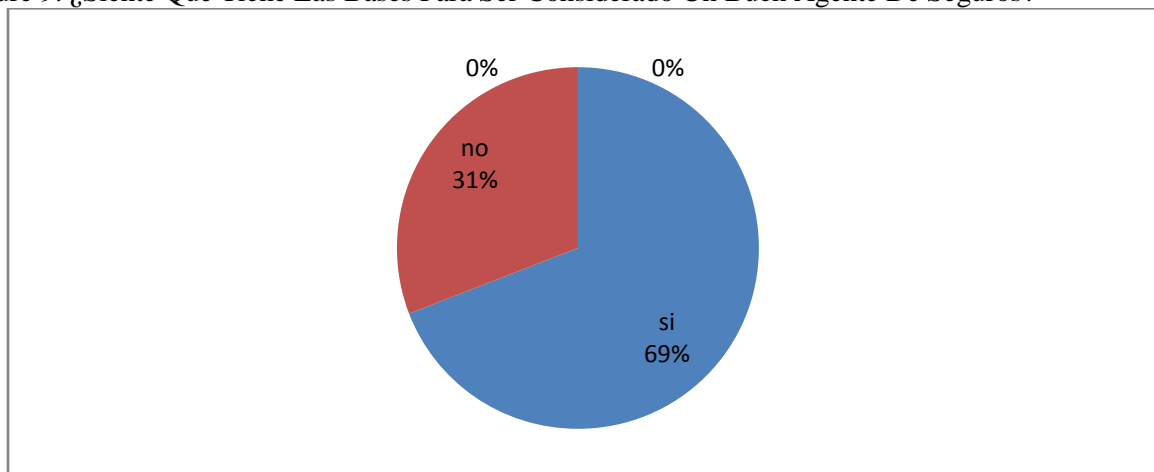


Fig. 9 Es un buen agente

La autoestima que refleja la fuerza de ventas se refleja a través de este grafico ya que se calificaba como buen agente, dando una tendencia favorable en un 69% rebasando la media en forma significativa, pero se debe trabajar en aquellos que aun se consideran no como buenos agentes demeritando su actuación.

Figura 10: Señale En Base A Qué Información Proyecta Sus Ventas.

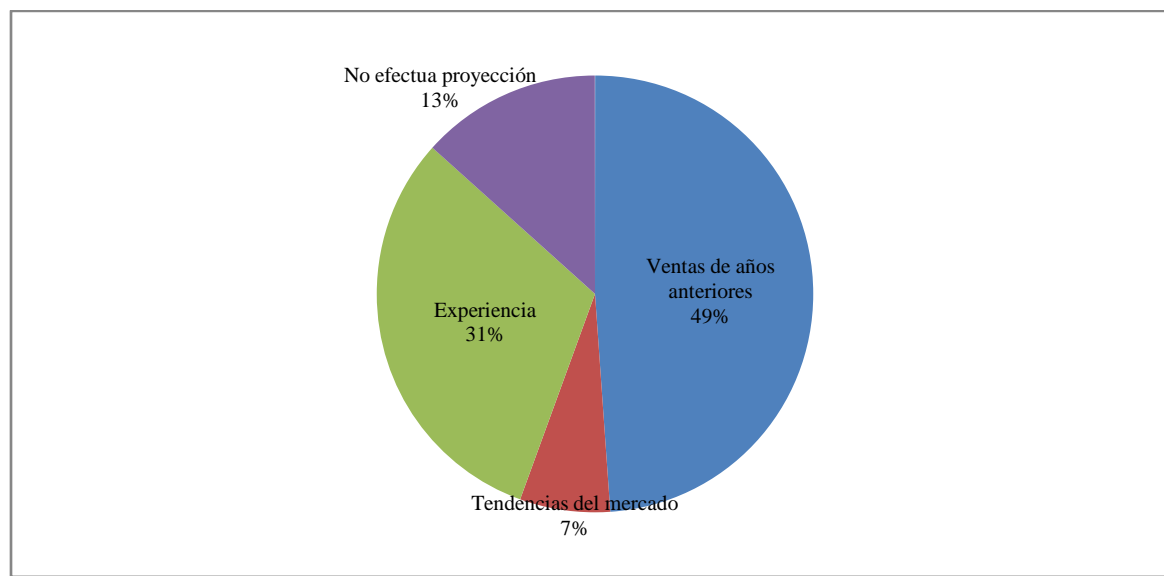


Fig. 10 Formas de proyección de ventas implementadas

Una buena herramienta para elevar el desempeño y fijarse metas es la proyección, por lo que la forma mas común de llevarla a cabo es con la comparación de ventas de años anteriores en su gran mayoría con un 49%, la experiencia se impone nuevamente en un 31%, pero llama la atención aquellos que no la consideran importante siendo quizá una de las principales causas del por que no se alcancen metas ni se incrementen su niveles de ventas.

Figura 11: ¿Qué Considera Puede Dejarle Un Curso De Motivación?

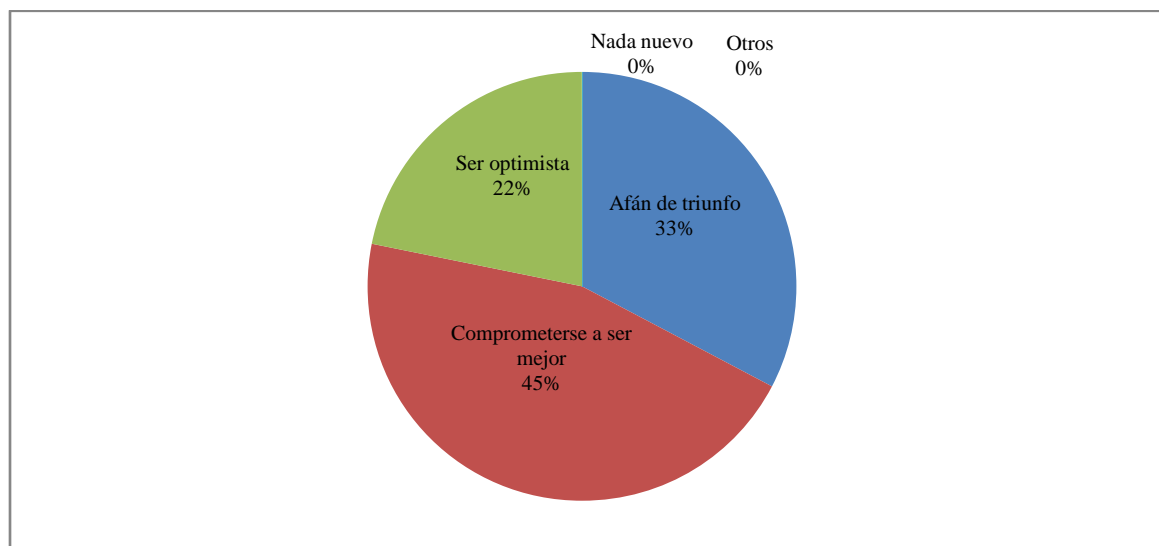


Fig. 11 Qué les dejan los cursos de motivación.

Una vez que se conoció esta información podemos darnos cuenta que si se le brinda atención al desempeño de la fuerza de ventas y sobre todo existe un perseguimiento a su labor se puede obtener gente mas comprometida a ser mejores reflejado por un 45%, mientras que un 33% despierta un afán por triunfar que lo volverá competitivo y un 22% restante cambiara su actitud convirtiéndolo en un elemento optimista y sin temores a no alcanzar sus metas.

CONCLUSIONES

La Inteligencia Emocional es importante en la vida de las personas, ser equilibrado en una reacción emocional, saber controlar las emociones y los sentimientos, conocerse y auto-motivarse. Eso da a la persona la capacidad de ser mejor persona, con mejores relaciones, lo que hará en su vida personal y profesional. En el presente estudio se realizó un diagnóstico de la aplicación de la I.E., en Seguros ING S.A. de C.V., mediante la aplicación de un cuestionario, con el objetivo de conocer los recursos, herramientas, problemática y la aplicación de la I.E, en el desarrollo de su trabajo diario, así como el uso que se le da a esa información en la empresas.

Con base al análisis de los resultados obtenidos se llegó a las siguientes conclusiones:

1. Los índices mostrados de las variables de escolaridad y experiencia son factores claves en el desempeño y operación de la fuerza de ventas, ya que estos individuos tienen una mejor comprensión de la operación de su profesión como agentes de seguros, la necesidad de capacitarse y de aplicar cambios en la forma de efectuar la colocación de la venta para con esto un mejor desempeño.
2. La fuerza de ventas no aplican herramientas establecidas para el proceso de una venta efectiva la cual se convierte en una garantía de confirmación y colocación de producto. Se siguen basando principalmente en, no le dan la importancia relativa desde el primer contacto con el prospecto como un futuro su experiencia y en las ventas para tomar decisiones, sin tomar en consideración los gastos y costos en que incurrir por postergar cada uno de los procesos y no darle el seguimiento correcto al proceso y posible cliente, la explicación de cada uno de los productos teniendo pleno conocimiento de cada uno de ellos de todos los ramos de acuerdo con el tipo de cedula que cada uno de ellos posea, el cierre de la venta como punto clave ya que si no se efectúa el correcto proceso frente al prospecto todo puede decaer,

siento esta la fase mas complicada para la fuerza de ventas con lo que se puede reflejar que dicha deficiencia es consecuencia de la poca complicidad y comunicación que se tiene entre todos y cada uno de los individuos que integran el flujo del departamento de comercialización.

Nunca se debe de perder de vista que los agentes integran su equipo de trabajo y todos constituyen un sistema con el cual si alguna de las partes no aporta su optimo desempeño no se lograra el equilibrio para destacar dentro del centro de negocios al que pertenecen, es importante considerar aquellos detalles que causen descontento o inseguridad en su gente dando prioridad a aquellas que requieren de atención inmediata, esto les permitirá estar en mejores condiciones de enfrentar sus problemas y a la competencia.

BIBLIOGRAFÍA

Balart María Julieta, Herramientas Y Sistemas Para Desarrollar La Inteligencia Emocional
Boletín Peisa 2. Puebla especialidades industriales s.a. De c.v. Año 1 no. 2 enero de 2001.
Www.orgpeisa.com.mx

Cooper Robert k, Sawaf Ayman, la inteligencia emocional aplicada al liderazgo y a las organizaciones, grupo edit. Norma, 1997
Diccionario enciclopédico ilustrado océano uno (*1), edición 1999. Edit. Carvajal, Colombia

Goleman Daniel, La Inteligencia Emocional, Jorge Vergara Editor, Grupo Zeta, 25 Edición, 2000

Goleman Daniel, Working With Emotional Intelligence, 1998

Segal, Jeanne . Su inteligencia emocional. Aprenda a incrementarla y a usarla.
Barcelona, 1997. Grijalbo Mondadori s.a., primera edición.
Valls Roig, Antonio . Inteligencia emocional en la empresa. Barcelona, 1997. Ediciones gestión 2000 s.a., primera edición.

Vargas Trepaud, Ricardo, La Psicología Aplicada A La Seguridad Industrial.
Lima, 1999. Encarte especial de seguridad & gestión.
Revista de administración moderna de la seguridad y medio ambiente. Año 2, n° 6.

Vola Luhrs Roberto, Info@Inteligencia-Emocional.Org

Williams, Martha . Bryne, John . Y Piera, Gustavo. Cómo medir y desarrollar la inteligencia emocional,
Barcelona, 1999, en: training & development digest; n°. 16.

Weisinger h.: *la inteligencia emocional en el trabajo*. Ed. Javier Vergara editor Buenos Aires, 1998.

Wisner, a.: *ergonomía y condiciones de trabajo*.. Ed. Humanitas, Buenos Aires, 1988.

Sivadon, P., y Fernández -Zoila, a.: *tiempo de trabajar, tiempo de vivir. Psicopatología de sus ritmos*. Ed. Herder, Barcelona, 1994.

ANÁLISIS DE LOS PORTALES DE INTERNET COMO HERRAMIENTA DE LA TRANSPARENCIA DE LA GESTIÓN DE LAS UNIVERSIDADES PÚBLICAS

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RESUMEN

En múltiples ocasiones, el concepto de “transparencia” se utiliza como sinónimo de rendición de cuentas sin que realmente lo sea, ya que la transparencia es una característica que abre la información de las instituciones al escrutinio público, mediante sistemas de clasificación y difusión de la gestión. La transparencia es un concepto referido a la apertura y flujo de información de las organizaciones políticas y burocráticas al dominio público. Sin duda, la medición de la transparencia impulsa la eficiencia y la efectividad de los esfuerzos de las organizaciones. Pero, ¿Existe transparencia en las Instituciones de Educación Superior? ¿Las unidades académicas de las universidades hacen visible su gestión y los procedimientos con los cuales operan? El trabajo que se presenta busca responder esas interrogantes. El estudio que se aborda es de tipo exploratorio en la modalidad de análisis de contenido, examina la información contenida en las páginas web de las unidades académicas que integran el campus Ensenada de la Universidad Autónoma de Baja California (UABC). Su propósito consiste en conocer cómo se da la transparencia y rendición de cuentas de las unidades académicas de una universidad pública. El análisis permite concluir que la transparencia en las universidades públicas es incipiente.

INTRODUCCIÓN

El portal de internet de una institución de educación superior pública (IESP) debe propiciar la hiperlectura, que refiere a la posibilidad de saber distinguir entre la abundancia informativa y de contenidos. Debe ser un producto multifuncional que promueva con eficiencia el posicionamiento de la institución. No se trata solamente de un sitio, se trata de lo que se debe ver de la institución: significados que hagan fácil al público y a la sociedad percibir en ellos valores añadidos como el de una identidad singular, un estilo fuerte o una imagen nítida que refleje la transparencia de su gestión (Pardo, 2006).

Pinto et.al. (2004) opinan que la publicación de información en la *World Wide Web* por parte de las instituciones de educación superior constituye, sin duda, un aspecto coadyuvante de dichas políticas de transparencia, responsabilidad y calidad.

Actualmente muchos de los estudios que se han realizado sobre el análisis de portales de internet de las IESP son tendientes a determinar la facilidad de uso (usabilidad), esto es, conocer el grado de eficacia, eficiencia y satisfacción con la que usuarios específicos pueden lograr objetivos particulares, en contextos de uso especiales (Gómez, 2004). Pero dentro de esa facilidad de uso no se incluye identificar si la IES es transparente o no en la gestión de los recursos que le son asignados.

La identificación de la transparencia de las IESP va más allá de una simple curiosidad. Dado que este tipo de organizaciones reciben subsidios gubernamentales para su subsistencia, por lo que deben comunicar al exterior los resultados de la gestión de los recursos que les son asignados, así como de su impacto en la enseñanza y la investigación; esto es, no sólo tienen la responsabilidad de rendir cuentas en términos

fiscales y de gestión, sino también en cuanto a la manera en que recaudan sus fondos, los distribuyen y los gastan (Mahoney, 2001).

Actualmente no existe uniformidad en los parámetros para evaluar el nivel de su desempeño respecto a la transparencia de su gestión y al grado de rendición de cuentas. Por tanto, es necesario conocer cuál es el grado de transparencia de estas instituciones ya que en la medida en que ésta se dé, se pondrá de manifiesto el cabal cumplimiento de sus objetivos y la adecuada aplicación de sus recursos.

Con base en lo expuesto en los párrafos que anteceden, se diseñó el presente estudio cuyo propósito consiste en conocer cuál es el grado de transparencia de estas instituciones considerando el acceso a la información de los portales de internet en cuatro niveles: identidad de la organización, servicios que oferta, transparencia y, estructura de la página web.

El trabajo se centra en el estudio de las páginas web de unidades académicas de una institución de educación superior pública (UABC) consultadas durante los meses de enero y febrero de 2009

El estudio se limita conceptualmente a transparencia y rendición de cuentas, espacialmente a las Unidades Académicas que integran el campus Ensenada de la Universidad Autónoma de Baja California, Institución de Educación Superior Pública ubicada en el noroeste de México. Temporalmente la investigación cubrirá el periodo comprendido en 2009 y la limitación disciplinaria está dada por la Gestión Pública.

REVISIÓN LITERARIA

El término transparencia ha sido tomado como estandarte político concediéndosele facultades mágicas y considerándola como panacea contra la corrupción. Afortunadamente para entenderlo pueden citarse definiciones muy precisas adoptadas por diversos autores en torno de este polémico concepto (Alatorre, 2006).

Con la intención de poner en claro el término, se empezará por decir que la palabra transparencia proviene del vocablo inglés *transparency*, cuya traducción al castellano remite a la cualidad de transparente, esto es, que se deja atravesar, adivinar o vislumbrar sin declararse o manifestarse (RAE, 2001).

En realidad, la transparencia es un término que indica apertura y flujo de información de las organizaciones políticas y burocráticas al dominio público. De acuerdo con Valverde (2004):

“La transparencia implica que la información esté disponible sin trabas o requisitos, que sea comprensiva al incluir todos los elementos relevantes, y que sea confiable y de calidad, que permita tanto una contribución al diseño de políticas públicas como a dar certidumbre y confianza a los mercados”.

Según Ferreiro citado por Emmerich (2004), existen dos modalidades de transparencia: activa y pasiva; la primera consiste en la difusión periódica y sistematizada de la información acerca de la gestión pública mientras que la segunda, denota la obligación del Estado para conceder, a los ciudadanos que lo requieran, acceso oportuno a la información que obre en poder de las instancias públicas, salvo que medie justificación para la reserva.

Es evidente que la transparencia no significa rendir cuentas a un destinatario específico, es, sencillamente la práctica de poner a disposición la información para los interesados en consultarla, revisarla o analizarla e inclusive utilizarla para denunciar y solicitar sanción a la autoridad competente. Rendición de Cuentas (RdC) es un término mucho más complejo; significa, según Burneo (2007):

“un proceso mediante el cual los funcionarios responsables de la gestión presupuestal y de la administración del patrimonio de una entidad pública, muestran, al término de un periodo, los resultados de su gestión para que ésta, luego de ser examinada, sea aprobada o desaprobada por el organismo o institución competente”.

La RdC es la obligación de responder ante una responsabilidad conferida; significa “una obligación asumida por todos aquellos que ejercen el poder, de responder por la manera en que se han desempeñado en el cumplimiento de sus responsabilidades confiadas” (Burneo, 2007).

La transparencia es pues, un instrumento del sistema de rendición de cuentas, por tanto, resulta impreciso usarlo como un sinónimo (Ugalde, 2002).

La transparencia frena a la corrupción, mientras que la rendición de cuentas permite sancionar a aquellos servidores públicos que no utilizan correctamente los recursos que le son confiados para su administración. Ambas constituyen elementos mediante los cuales los ciudadanos ejercen su potestad sobre los actos de gobierno (Valverde, 2005).

Un elemento fundamental de la RdC y transparencia, es el acceso a la información también conocido como derecho a la información. De acuerdo al artículo 19 de la Declaración Universal de Derechos Humanos, el derecho de información es la garantía fundamental que toda persona posee a: allegarse de información, a informar y a ser informada (Villanueva, 2003).

Valverde (2005), define el derecho a la información como “el conjunto de normas jurídicas que regulan el acceso de los ciudadanos a la información de interés público, [...] pues la información de otras fuentes está protegida por el derecho a la privacidad”.

En la década reciente, un número sin precedentes de países han adoptado leyes de acceso a la información y transparencia; este suceso ha sido el resultado de iniciativas de organizaciones no gubernamentales y académicas (Valverde, 2005). En México fue sino hasta 1977 cuando el derecho a la información se incorporó en la Constitución, así en el artículo 6º del aludido precepto se menciona: “La manifestación de ideas no será objeto de ninguna inquisición judicial o [...]; el derecho a la información será garantizado por el Estado” (Castellanos, 2005).

Así, ya incorporado, transcurrieron casi tres décadas hasta que se elaboró la Ley reglamentaria correspondiente: Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental (LFTAIPG), fue publicada en el Diario Oficial de la Federación (DOF) en junio del 2002, su finalidad consiste en proveer lo necesario para garantizar el acceso de toda persona a la información en posesión de entidad federal (LFTAIPG, art. 1). En términos generales, los objetivos más importantes de esta Ley consisten en transparentar la gestión pública, favorecer la rendición de cuentas de los ciudadanos y contribuir con la democratización de la sociedad mexicana (LFTAIPG, art. 5).

Con relación a las Instituciones de Educación Superior (IES), comentan Alcántar y Guillén (2006), que según la citada Ley se especifica que sólo están obligadas a cumplirla aquellas IES de carácter federal; sin embargo, aquellas IES de carácter estatal cuyas entidades federativas ya emitieron una Ley estatal semejante, también tienen la obligatoriedad de cumplirla.

Precisamente en el supuesto anterior se encuentran algunas universidades públicas, tal es el caso de la UABC; la cual debe dar cumplimiento a la Ley Federal y Estatal. Además, esta organización ha demostrado buena disposición para transparentar sus operaciones y la gestión de sus recursos; la muestra de ello es que en el 2003, el Rector en funciones, emitió el Acuerdo que fija las bases para la

transparencia a la información relacionada con la administración de los recursos económicos y los indicadores de calidad institucional, Unidades Académicas y Programas Educativos de la UABC.

Alcántar y Guillén (2006), indican que dentro de los objetivos de este documento se resalta: proveer lo necesario para que cualquier persona pueda tener acceso a la información de la Universidad y transparentar la gestión universitaria a través de la difusión de esta información.

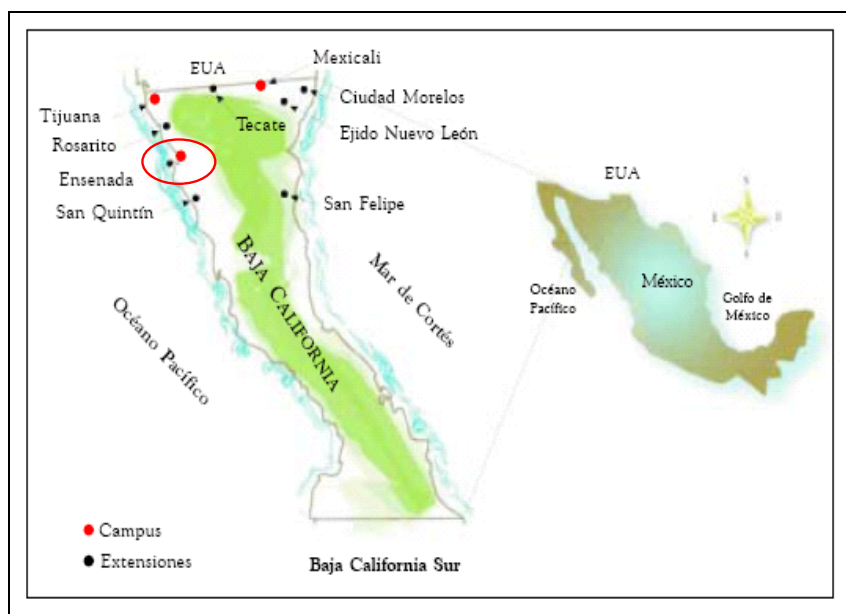
Ciertamente el acceso a la información navegó durante treinta años al arbitrio de las autoridades, otorgando discrecionalidad a quien la controlaba y, consecuentemente generando abuso de poder y corrupción. Pero, desde aproximadamente diez años nace un movimiento mundial para transparentar la gestión de las instituciones públicas dentro de las cuales se encuentran las instituciones de educación superior.

METODOLOGÍA

Se realizó una investigación de tipo exploratorio con diseño no experimental, definida en función de los trabajos de Hernández, et.al. (2003), cuyo fin es identificar cuál es el estado que guardan las páginas web de las unidades académicas del campus Ensenada de la UABC respecto a la transparencia y rendición de cuentas.

El objeto de estudio de este trabajo de investigación son las facultades y escuelas que conforman el campus Ensenada de la UABC localizado en la ciudad de Ensenada, B. C., México (Ver Figura 1).

Figura 1. Localización del campus Ensenada de la UABC



Fuente: UABC (2006)

El universo de la investigación está constituido por nueve Unidades Académicas cuyo nombre y dirección electrónica se enlistan en la Tabla 1.

Tabla 1. Unidades Académicas del campus Ensenada de la UABC

Nombre de la Escuela/Facultad	Dirección electrónica
Facultad de Ciencias Administrativas y Sociales	http://fcays.ens.uabc.mx/
Facultad de Ciencias	http://fciencias.ens.uabc.mx/webfc/
Facultad de Ciencias Marinas	http://oceanologia.ens.uabc.mx/
Facultad de Ingeniería	http://ing.ens.uabc.mx/~siete/Index.php
Escuela de Enología y Gastronomía	http://eeg.ens.uabc.mx/
Escuela de Ciencias de la Salud	http://medicina.ens.uabc.mx/
Escuela de Artes	http://www.uabc.mx/artes/
Escuela de Deportes	http://deportes.uabc.mx/index.php?option=com_frontpage&Itemid=1
Facultad de Idiomas	http://idiomas.ens.uabc.mx/

Fuente: Elaboración propia

Como ayuda metodológica para la investigación se utiliza el análisis de contenido. El propósito básico de este análisis consiste en la identificación de los elementos que integran los portales de internet de las unidades académicas de la IES estudiada con la idea de analizar su contenido (Fernández, 2000). Se trata pues de una técnica para estudiar y analizar la información de una manera objetiva, sistemática y cualitativa.

Para tal efecto, se abordan los portales de internet en cuatro niveles diferenciados (unidades de análisis): Identidad de la Unidad Académica, Servicios que ofrece, Transparencia y Estructura de la página web. Para realizar el análisis se utiliza la plantilla ilustrada en la Tabla 2, la cual permite recabar datos de cada uno de los portales de Internet del objeto de estudio.

Tabla 2. Plantilla de Análisis de Contenido aplicada a los portales de Internet

Variables	Unidades de análisis	Unidades de contexto
ACCESO A LA INFORMACIÓN	Identidad de la Unidad Académica	1. Descripción de la Estructura Orgánica de la Unidad Académica. 2. Objetivos y Metas de la Unidad Académica.
	Servicios que ofrece	3. Descripción de los servicios que ofrece la Unidad Académica. 4. Definición de los programas (carreras) ofertados por la Unidad Académica. 5. Dirección de correo electrónico para quejas, reclamos o solicitudes 6. Facilidad para solicitar información sobre los servicios que se ofertan
	Transparencia	7. Documentación de las reuniones de los Órganos Administrativos (OA) 8. Definición de las cuotas de inscripción de la Unidad Académica 9. Informes sobre la gestión de la administración de la Unidad Académica. 10. Nombre de los integrantes de Consejos, Comités y Academias (OA) 11. Dirección de los funcionarios de la Unidad Académica. 12. Normatividad interna de la Unidad Académica. 13. Plan de Trabajo (Plan de Desarrollo) del Director de la Unidad Académica
	Estructura de la Página Web	14. Acceso al portal de Unidad Académica 15. Fecha de la última actualización de la página web 16. Mapa del Sitio para facilitar la navegación 17. Definición de un buscador interno 18. Diseño del portal en más de un idioma

Fuente: Elaboración propia

RESULTADOS

Los resultados obtenidos en el curso del análisis de los portales de Internet de las Unidades Académicas del campus Ensenada, se sintetizan en la Tabla 3. En los párrafos precedentes se describen los hallazgos de acuerdo a las unidades de análisis.

Identidad de la Unidad Académica (UA)

El primer nivel se refiere a aquella información concerniente a la identificación de la organización, referida a estructura orgánica, misión, visión, objetivos, contactos, entre otros.

Respecto a la identidad de la UA, el 55.5% de las Facultades o Escuelas publica su estructura orgánica sin embargo, únicamente en el 33.3% de los casos exhibe sus objetivos o metas.

Servicios que ofrece la Unidad Académica

Este segundo nivel evalúa la publicación de los programas o carreras que oferta la UA, incluyendo los servicios relativos a la existencia y funcionamiento del sistema de quejas y reclamos.

En relación a los servicios que proporcionan las UA, en el 77.7% de los casos es fácil localizar en los portales de Internet los servicios que se ofertan; además, en el 78.9% se describen y son fácilmente ubicables los programas (carreras) que se ofrecen. Aún cuando los servicios se definen perfectamente en las paginas web, solamente el 55.5% de las UA tiene una dirección de correo electrónico asequible para quejas, reclamos o solicitudes.

Transparencia

El tercer nivel es relativo a la transparencia como un reflejo del buen manejo de la gestión, se analiza la apertura de información de las UA al dominio público mediante su publicación en el portal de Internet, encontrando que no se exhiben en el portal de Internet, informes, minutas de reunión, ni lineamientos que rigen las actividades de las instituciones; lo anterior se sustenta en los resultados que se describen enseguida.

Dentro de estos hallazgos resalta el hecho de que cerca del 90% de las UA no tienen publicadas las cuotas de inscripción, esto es, no se informa el costo de los servicios que se ofrecen. Esta información resulta valiosa para aquellas personas dispuestas a ingresar a cualquiera de los programas que se ofertan

Se detectó que el 100% de la UA no publican en su portal de Internet el informe de la gestión de la dirección; además, 55.6% de ellas no exhibe el Plan de Trabajo de la Dirección. Estos elementos resultan importantes porque a través de ellos es posible ubicar la forma en que los directivos manejan los recursos de la institución.

Respecto a los órganos de administración, el 66.6% de las UA no publica los nombres de los integrantes de Consejos, Comités y Academias y el 100% de ellas tampoco exhibe las minutas de las reuniones de estos órganos.

Estructura de la página web

El cuarto nivel se relaciona con la estructura del portal de internet, en cuanto a qué punto dicha información se presenta adecuadamente para que sea “usable” por los usuarios

Aquí se exploró la forma en que la información se presenta adecuadamente para que sea de utilidad a los usuarios, encontrando que en el 88.9% de los casos es fácil o muy fácil acceder al portal de Internet de la UA. Sin embargo, la página web de ese mismo porcentaje no tiene un mapa del sitio que le facilite la navegación.

Además de ello, el 66.7% de las UA no tiene definido un buscador interno en su portal que facilite la localización de palabras o documentos y el 55.6% de esas páginas, no describe la fecha de la última actualización de la página web.

Tabla 3. Frecuencias

UNIDADES DE ANALISIS		RESPUESTAS (N=9)				
	ITEM	No se publica/ No aplica	Muy difícil acceso	Difícil acceso	Fácil acceso	Muy fácil acceso
Identidad de la institución	p1	44.4%			33.3%	22.2%
	p2	66.7%			22.2%	11.1%
Servicios	p3	11.1%		11.1%	33.3%	44.4%
	p4	11.1%			77.8%	11.1%
	p12	33.3%		11.1%	44.4%	11.1%
Transparencia	p15	33.3%			55.6%	11.1%
	p5	100.0%				
	p6	88.9%	11.1%			
	p7	100.0%				
	p8	66.6%			11.1%	22.2%
	p9	33.3%	11.1%		44.4%	11.1%
	p10	77.8%			11.1%	11.1%
	p11	55.6%		11.1%	11.1%	22.2%
Estructura de la página	p13			11.1%	11.1%	77.8%
	p14	55.6%			22.2%	22.2%
	p16	88.9%			11.1%	
	p17	66.7%			33.3%	
	p18	100.0%				

Fuente: Elaboración Propia

CONCLUSIONES

La transparencia es un concepto de aplicación reciente dentro de la UABC, por lo que puede decirse que su implementación está en proceso, es decir, se está gestando una cultura de transparencia, la cual se espera poco a poco vaya cubriendo todas y cada una de las áreas que integran la universidad.

Los portales de Internet son una ventana de la transparencia, a través de ellos las entidades dan a conocer a la sociedad en general información pertinente sobre la: Identidad de la Unidad Académica, Servicios que ofrece, Transparencia y Estructura de la página web, entre otros. Sin embargo, los resultados del presente análisis ilustran que las UA objeto de estudio no explotan en su total dimensión a los portales de Internet como medio de transparencia, ciertamente si presentan información sobre la identidad y algunos de los servicios, pero aún faltaría ampliar información sobre los mismos y dar a conocer los proyectos y planes de trabajo que guían el desarrollo de cada una de las UA.

Por ello se infiere que el grado de transparencia de estas instituciones según sus portales de Internet es bajo, siendo relevante que la autoridad correspondiente de cada UA conciba a su portal de Internet como un medio de transparencia, en consecuencia empiece a usarlo como un medio para informar a su comunidad y sociedad en general, sobre las actividades que se desarrollan dentro de sus claustros así como los proyectos de crecimiento y otra información que se considere pertinente.

Además, como la transparencia es una cultura en desarrollo dentro de la UABC, se recomienda que la universidad delimite una política de transparencia dirigida a las Unidades Académicas, donde especifique con claridad la información que debe mostrarse dentro de los portales de Internet, ello apoyaría a incrementar el nivel de transparencia y a consolidar la cultura.

REFERENCIA

Alatorre, J. (2006). El papel de la transparencia y la rendición de cuentas en la consolidación democrática, *Acta Republicana Política y Sociedad*, Año 5, Núm. 5, pp. 89-93

Alcántar, V.M. y Guillén, A.M. (2006). Acciones Institucionales en torno a la Transparencia y Rendición de cuentas de la Universidad Autónoma de Baja California. X Congreso Anual de la Academia de Ciencias Administrativas A.C. San Luís Potosí, Mayo de 2006

Burneo, M. N. (2007). Auditoría a la Rendición de Cuentas. *Auditoría Pública* (41), 65-70.

Castellanos, L. (2005). Información básica para rendición de cuentas México: Alianza cívica, AC [en línea]: [http://www.mexicotransparente.org.mx/pdf/Vol_1%20\(2\).pdf](http://www.mexicotransparente.org.mx/pdf/Vol_1%20(2).pdf)

Diccionario de la Lengua Española (22 edición) (2001). Real Academia Española, consultado en agosto de 2008, de: <http://www.rae.es/rae.html>

Emmerich, E. (2004). Transparencia, rendición de cuentas, responsabilidad gubernamental y participación ciudadana Polis: Investigación y Análisis Sociopolítico y Psicosocial, segundo semestre, Vol. 2, Núm.004

Fernández, F. (2000). El análisis de contenido como ayuda metodológica para la investigación, *Ciencias Sociales*, Junio, Vol. II, Número 96, pp.35-54

García, J. (2004). Usabilidad de las páginas de inicio de los diarios digitales españoles, *Scire*, 10:2, pp. 9-31

Hernández-Sampieri R., Fernández, C y Baptista, P. (2003). Metodología de la Investigación, Tercera Edición, México: McGrawHill Interamericana Editores, SA de CV

Mahoney, (2001). En Albrighton, F. Y Thomas., J. (Eds.), *Managing external relations*. Philadelphia: Open University Press.

Pardo, H. (2006). Pautas hacia un modelo de aplicación web institucional universitaria. El caso de los *webcom*: sitios de facultades de comunicación de Iberoamérica, *Zer*, 21, p. 139-160

Pinto, M., Alonso, J., Cordon, J., Fernández, V., García, C., García, J., Gómez, C. y Zazo, A. (2004). Análisis cualitativo de la visibilidad de la investigación de las universidades españolas a través de sus páginas web, consultado en enero de 2009 en: <http://reina.usal.es/papers/pinto2004analisiscuali.pdf>

Poder Ejecutivo Federal. *Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental*. México, DF. Diario Oficial de la Federación, junio de 2002

Ugalde, L.C. (2002). Rendición de cuentas y democracia. El caso de México. Instituto Federal Electoral <http://www.ife.org.mx/documentos/DECEYEC/cuaderno21.pdf>

UABC (2006). El desarrollo y fortalecimiento institucional en la Universidad Autónoma de Baja California 2005, en Cuadernos de Planeación y Desarrollo Institucional en: <http://www.uabc.mx/planeacion/cuadernos/EldesarrolloyFortInstenlaUABC2005.pdf>

Valverde, M.A. (2004). Transparencia, acceso a la información y rendición de cuentas: experiencias en la Unión Europea y México, IX Congreso Internacional del CLAD sobre la Reforma del Estado y de la Administración Pública, Madrid, España, 2 – 5 Nov. 2004 [en línea]: <http://www.clad.org.ve/fulltext/0049614.pdf>

_____ (2005). Transparencia, acceso a la información y rendición de cuentas: Elementos conceptuales y el caso de México. *Jurí polis*, Revista de Derecho y Política del Departamento de Derecho, No. 7, pp. 235-250, [en línea], Consultada en abril de 2007, en: <http://www.ccm.itesm.mx/dhcs/fjuripolis/archivos/7Valverde.pdf>

Villanueva, E. (2003). Derecho de acceso a la información pública en Latinoamérica. Estudio introductorio y Compilación, 1ª. Edición, México: Instituto de Investigaciones Jurídicas de la UNAM

BIOGRAFÍA

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DISEÑO DE ESTRATEGIAS DE MERCADEO EDUCATIVO QUE PERMITAN INCREMENTAR Y CONSOLIDAR LA MATRICULA ESTUDIANTEL: CASO: INSTITUTO UNIVERSITARIO DE TECNOLOGÍA INDUSTRIAL, EXTENSIÓN GUACARA.

Ero Del Canto, Universidad de Carabobo

Carlos Vargas, Universidad de Carabobo

ABSTRACT

Las organizaciones buscan ser competitivas con productos y servicios que disponen, y lograr mayor eficiencia y rentabilidad, mediante la satisfacción de necesidades y exigencias de mercados competitivos donde están presentes, por lo cual requieren aplicar estrategias novedosas de mercadeo que les permitan ser atractivas para sus clientes basadas en calidad del servicio. El Instituto Universitario de Tecnología Industrial, Extensión Guacara, donde se realizó este estudio, se propone aplicar estrategias de mercadeo educativo con la finalidad solucionar su problemática actual: la baja matrícula estudiantil en turnos diurnos. La investigación fue de proyecto factible, de campo, no experimental. Se estudiaron dos colectivos, el primero conformado por directivos y coordinadores quienes fueron censados y se les aplicó una entrevista, un segundo colectivo compuesto por estudiantes del segundo año del ciclo diversificado del Municipio Guacara del Estado Carabobo, los cuales se analizaron mediante muestras representativas en las instituciones públicas y privadas y se les aplicó una encuesta. Se concluye que aplicando las estrategias de mercadeo educativo propuestas y evaluación periódica de los resultados, se podría solucionar el problema de estudio.

Palabras Claves: Mercadeo, Educación, Estrategias, Matrícula Estudiantil.

INTRODUCCIÓN

Al iniciarse este nuevo milenio se plantean grandes desafíos y retos para las instituciones de educación superior a nivel mundial a la hora de mercadear y prestar sus servicios, ya que, por una parte el estudiante se ha vuelto mucho más exigente, está mejor informado y posee cada vez mayores y muy variadas ofertas a su alcance; y por la otra, la competencia se ha intensificado en todas las opciones existentes en el mercado. Es por ello que se necesita competir de la manera más inteligente posible, creando no solamente nuevos servicios, sino diversificándolos y adecuándolos a las necesidades de los estudiantes universitarios y del mercado laboral actual. Puede decirse que las instituciones de educación superior en Venezuela, específicamente las pertenecientes al sector privado, han estado siempre y se encuentran en la actualidad, en una constante y sostenida lucha por incrementar y consolidar sus matrículas estudiantiles, pero en tiempos de crisis pareciera difícil lograrlo sin llegar a ofrecer carreras atractivas, interesantes y útiles para los estudiantes exigentes que ingresan cada día al mundo universitario. Algunas de las causas por las cuales las empresas educativas necesitan ofrecer carreras atractivas e interesantes, es debido a los constantes desafíos que se enfrentan en el mercado, ya que el aumento de la competitividad y los constantes cambios en el entorno dificultan la planeación estratégica de dichas instituciones, por tal razón para que esto se solucione y mejore deben crearse estructuras organizativas acordes a las exigencias del mercado actual.

El IUTI, institución de educación superior especializada en formar profesionales en carreras universitarias en las ramas de la Ingeniería y la Administración a nivel de Técnicos Superiores, posee 30 años en el mercado nacional, con sedes en Valencia, Guacara, Maracay, Caracas, Maracaibo y San Cristóbal, alcanzando hasta la fecha gran éxito y prestigio debido al principal atributo que ha utilizado durante todo este tiempo y que se ha mantenido en el mercado educacional del país, como es la calidad docente para la formación de excelentes profesionales en dichas carreras universitarias. En el caso del IUTI Guacara, ofrece actualmente tres turnos de clases; mañana, tarde y noche, siendo el nocturno el que capta mayor número de estudiantes. El proyecto de investigación que a continuación se presenta, está referido al diseño de estrategias de mercadeo educativo que permitan incrementar y consolidar exitosamente la matrícula estudiantil en los turnos diurnos del Instituto Universitario de Tecnología Industrial, Extensión Guacara, ya que la institución ha venido padeciendo esta difícil situación desde que inició las actividades en dichos turnos, razón por la que se requiere dar una solución inmediata a tal problemática, lo cual constituye la razón de ser de la formulación y aplicación práctica de este estudio.

REVISION LITERARIA

Antecedentes de la Investigación

A continuación se dan a conocer investigaciones que anteceden a éste estudio y sirven de base para comprender mejor la aplicación del mercadeo en diferentes organizaciones educacionales y en diversos ámbitos geográficos a nivel mundial y nacional, de las cuales existen pocos estudios precedentes, entre los que se señalan:

El investigador Edgar Enrique Zapata Guerrero (1984,12), en su trabajo denominado “El Plan de Mercadeo”, señala:

“durante muchos años las instituciones educativas han venido creciendo, gracias a la inercia propia de un mercado poco competitivo. La situación que deben enfrentar en la actualidad es muy diferente. La fuerte e intensa competencia las obliga a responder a una demanda exigente, con propuestas innovadoras, ajustadas a las necesidades del mercado al que dirigen sus ofertas educativas”.

En este estudio se demuestra la imperiosa necesidad de las organizaciones pertenecientes al sector de educación superior, de analizar el mercado y aplicar nuevas técnicas y estrategias de mercadeo educativo, a fin de poder competir con posibilidades de éxito en un mercado cada día más complejo y exigente. En esto concluye el autor al realizar sus investigaciones, lo que indica lo importante que es para todas las organizaciones del sector educacional el aplicar novedosas estrategias de mercadeo que le permitan triunfar en tan difícil y competido mercado. Lo anteriormente expuesto constituye un valioso aporte a la presente investigación, al confirmar que la única forma de triunfar en el mercado de educación superior es conociéndolo y adecuando las propuestas educacionales a las necesidades cada vez mayores del estudiante de hoy.

Igualmente el profesor Goncalo Nuno (2003,25), en su trabajo titulado “Marketing en los Servicios de Educación: Modelos de Percepción de Calidad”, señala:

“la educación es también un servicio, buscado por múltiples consumidores, que requiere una gestión bastante cuidadosa y rigurosa. A la luz de las características universales de los servicios, tampoco la educación puede ser saboreada, sentida y tocada. La inseparabilidad de la producción y el consumo se vuelve evidente en el escenario del aula”.

En este caso se observa la gran importancia de estar concientes que la educación es un servicio requerido por muchas personas, pero para ser exitoso al prestarlo, el mismo debe cumplir con altos niveles de exigencia, pues aunque no pueda ser tocado, será su excelente calidad lo que lo diferenciará y permitirá que origine una gran demanda. Acá el autor aporta a la investigación en proceso, el hecho relevante de que para poder triunfar en el mercado educativo, este requiere poseer gran calidad y ser percibido como tal en el salón de clases.

Maria Rodella, en su trabajo de grado titulado “Estrategias Educativas para ofrecer oportunidades de estudio a Técnicos Superiores en Química, Universidad de Carabobo, año 2003, señala la importancia de analizar los problemas que se investigan mediante la aplicación de una Matriz DOFA (Serna Gómez, 2000, Gerencia Estratégica), ya que la misma permite enumerar los factores claves de mayor impacto en cuanto a Fortalezas, Oportunidades, Debilidades y Amenazas de la organización, lo cual facilitará definir las estrategias de Fortalezas / Oportunidades (FO), Fortalezas / Amenazas (FA), Debilidades / Oportunidades (DO) y Debilidades / Amenazas (DA). De este antecedente se desprende la necesidad de utilizar el Análisis DOFA para lograr diseñar estrategias acordes al problema estudiado y dar la solución adecuada, así como el uso de las fuentes de información para obtener todos los datos requeridos acordes a la investigación realizada.

Bases Teóricas

Los ejes teóricos que sustentaron la presente investigación se refieren a:

- El mercadeo y la mercadotecnia: evolución histórica, funciones e importancia.
- El mercado: características, clasificación, segmentación, tipos, criterios, el posicionamiento de los mercados.
- La investigación de mercados y los tipos de investigación de mercados.
- Planes de mercadeo Educativo.
- El proceso de Gerencia Estratégica.

METODOLOGIA

La metodología utilizada fue de tipo descriptiva porque se interpretan hechos reales que serán descritos, se efectúan registros, análisis e interpretaciones de la naturaleza del caso estudiado. Su diseño es de campo no experimental con apoyo documental. En su primera fase se revisó material bibliográfico y en su segunda fase se recogieron datos directamente de la realidad donde ocurren los hechos, y en cuanto a su modalidad es de proyecto factible, por ser un modelo operativo viable, cuyo propósito es la solución de problemas y satisfacción de necesidades. La Población y muestra utilizada en el presente estudio estuvo conformada por dos colectivos. El primer colectivo está integrado por Directivos y Coordinadores del IUTI Guacara, quienes fueron censados mediante aplicación de entrevistas estructuradas, siendo el siguiente: directivos 03, coordinadores 06, y un segundo colectivo, conformado por Estudiantes del Segundo Año de Educación Diversificada del Municipio Guacara del Estado Carabobo. El número de personas que lo integran es de alrededor de 5.000, por lo que se considera finita. El tamaño de la muestra en el segundo colectivo se aplicó la fórmula de Shao para población finita, es decir, a estudiantes del 2do. Año de Educación Diversificada del Municipio Guacara, Estado Carabobo. Asumiendo un nivel de confianza del 90% y un error máximo en el muestro del 10%, los tamaños de la muestra fue de 67 con una población estimada en 4.778 estudiantes

Se utilizó el muestreo estratificado, los estratos fueron en primera instancia las Parroquias que conforman el Municipio Guacara y luego las Instituciones de Educación Media Diversificada tanto Públicas como Privadas. Una de las técnicas utilizadas fue la encuesta, a través del instrumento como el cuestionario conformado por preguntas tipo Lickert y preguntas abiertas, aplicadas a la muestra conformada por

estudiantes del 2do. Año del Ciclo Diversificado de Educación Media de Guacara. La otra técnica fue la entrevista, usando una guía para realizar preguntas a entrevistados de la segunda muestra, Coordinadores y Directivos del IUTI Guacara.

La confiabilidad del instrumento fue medida mediante la fórmula Alfa Cronbach, la técnica empleada para el procesamiento de los datos, fue mediante equipos computarizados y el uso de programas de cálculo como Microsoft Excel. El análisis de los datos se realizó utilizando herramientas de análisis de estadística descriptiva, tales como: Análisis Estadísticos Descriptivo de datos gráficos de sectores y gráficos de Barras.

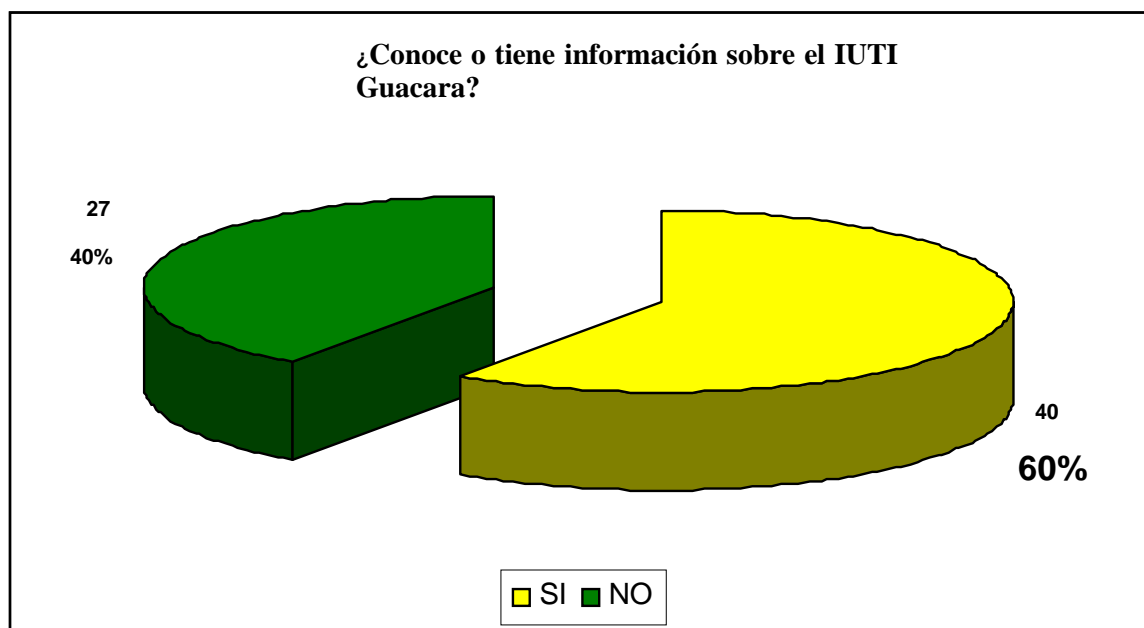
RESULTADOS

A continuación se presentan los resultados más significativos que arrojaron la aplicación de los instrumentos a los dos colectivos con respecto al caso estudiado.

Análisis de Resultados de la Encuesta

A continuación se presentan los resultados más significativos de las encuestas realizadas al primer colectivo conformado por una muestra de 67 estudiantes del 2do. Año de Educación Diversificada, distribuidos en la totalidad de instituciones educativas tanto públicas como privadas, ubicadas en el Municipio Guacara del Estado Carabobo. Dichos resultados permiten conocer la información de los estudiantes de esta zona, a cerca de sus preferencias al momento de decidir que carrera universitaria en que institución educativa desean estudiar.

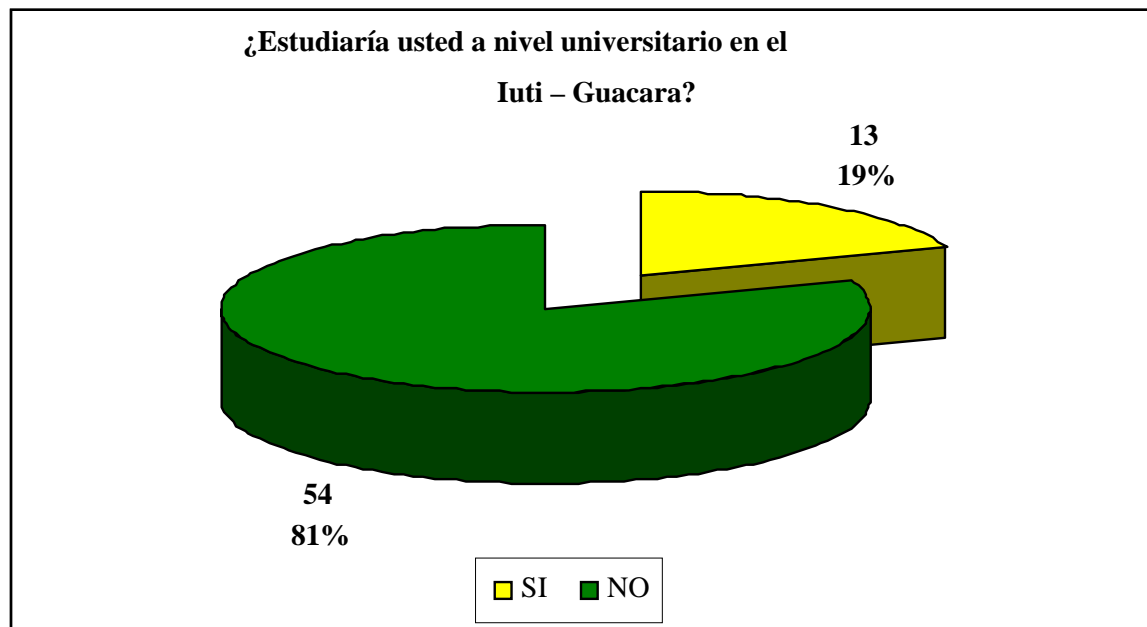
Figura 1: IUTI informacion



Fuente: Elaboración propia. Guacara, Mayo 2007.

Análisis: En esta pregunta se obtiene como resultado que de los 67 encuestados, 40 estudiantes es decir el 60% conoce o posee información sobre el IUTI – Guacara, mientras que 27 estudiantes es decir el 40% no conoce o no dispone de información sobre la institución investigada. Por tal razón, es importante aplicar una campaña publicitaria efectiva que permita dar a conocer realmente al IUTI Guacara.

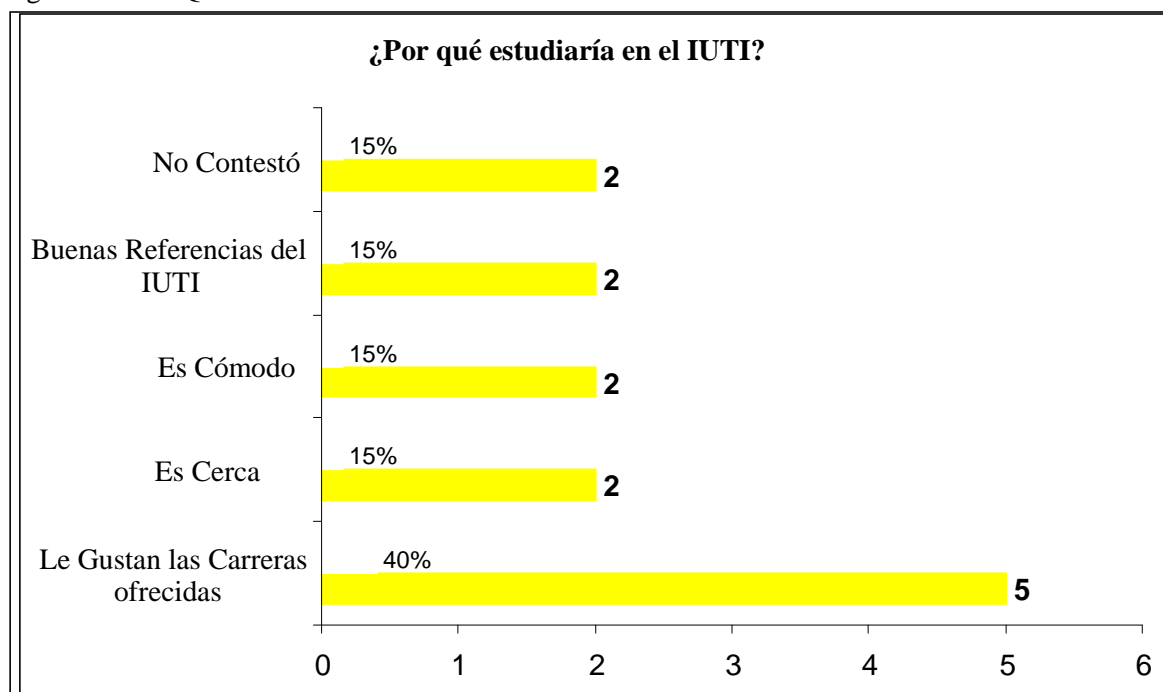
Figura 2: Nivel Universitario



Fuente: Elaboración propia. Guacara, Mayo 2007.

Análisis: En esta pregunta, 54 estudiantes que representan el 81% de los encuestados afirman que no estudiarían en el IUTI - Guacara, mientras que 13 estudiantes que representan el 19% contestan que si lo harían. Es muy importante conocer el porqué de esta tendencia, y en este sentido se recomienda llevar a cabo una campaña informativa sobre la institución y sus beneficios, a fin de revertir en el corto plazo esta opinión negativa y adversa.

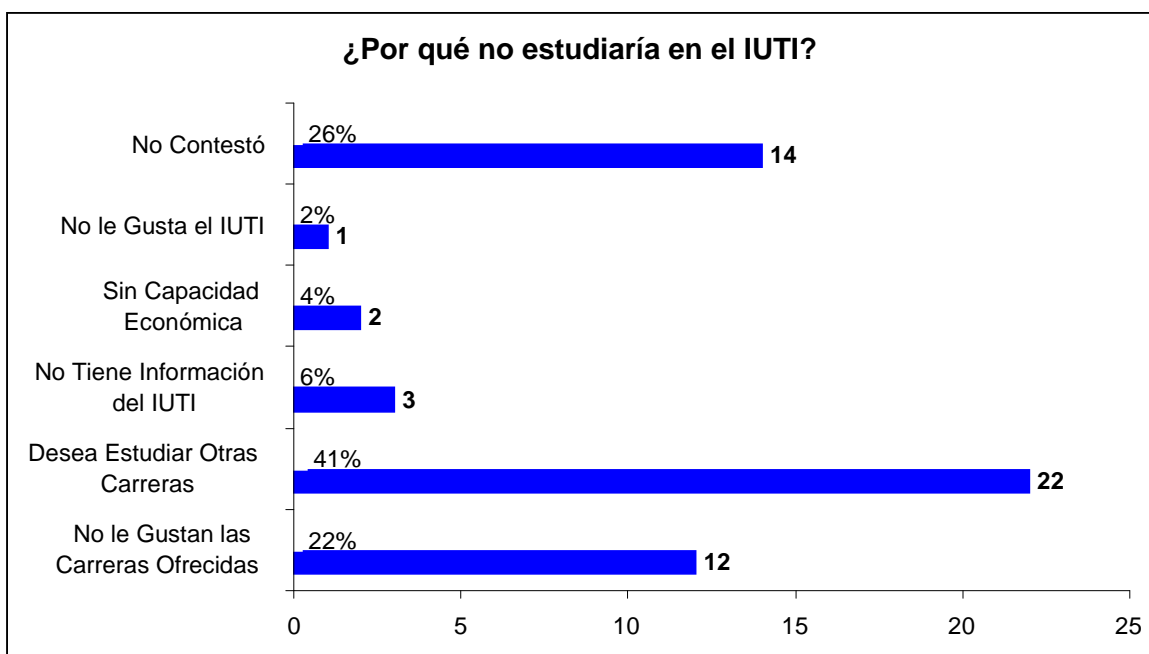
Figura 3: Por Que Estudia



Fuente: Elaboración propia. Guacara, Mayo 2007.

Análisis: En esta pregunta el 40% de los encuestados contesta que si estudiaría en el IUTI - Guacara porque le gustan las carreras allí ofrecidas, el 15% porque es cerca, el 15% porque es cómodo, el 15% porque tiene buenas referencias del IUTI - Guacara y un 15% no contestó. De allí se puede observar una tendencia positiva sobre el interés de estudiar en el IUTI Guacara y también en los turnos diurnos.

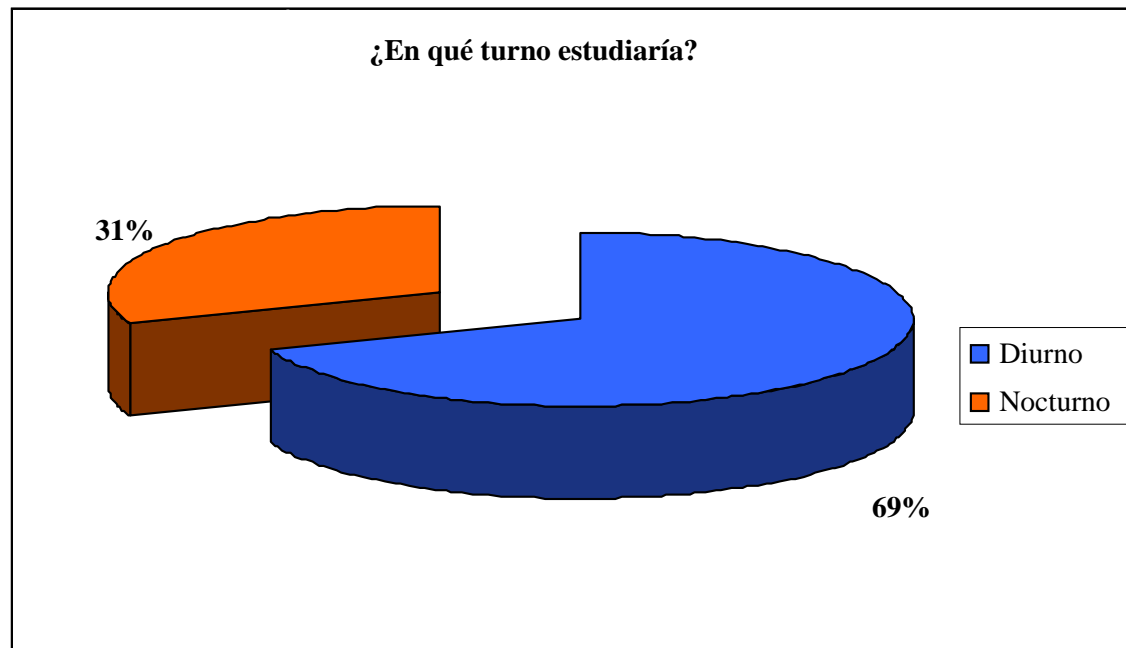
Figura 4 Porque no Estudia



Fuente: Elaboración propia. Guacara, Mayo 2007.

Análisis: En este caso, el 40% de los encuestados afirma que no estudiaría en el IUTI - Guacara porque desean estudiar otras carreras diferentes a las ofrecidas en esta institución, el 26% no contestó, el 22% no le gustan las carreras ofrecidas, el 6% no tiene información sobre el IUTI - Guacara, el 4% no posee capacidad económica para cubrir el costo de la matrícula y al 2% no le gusta el IUTI - Guacara. Es decir, que una vez más se confirma la necesidad de aplicar estrategias de mercadeo que faciliten el solucionar esta situación negativa para la institución.

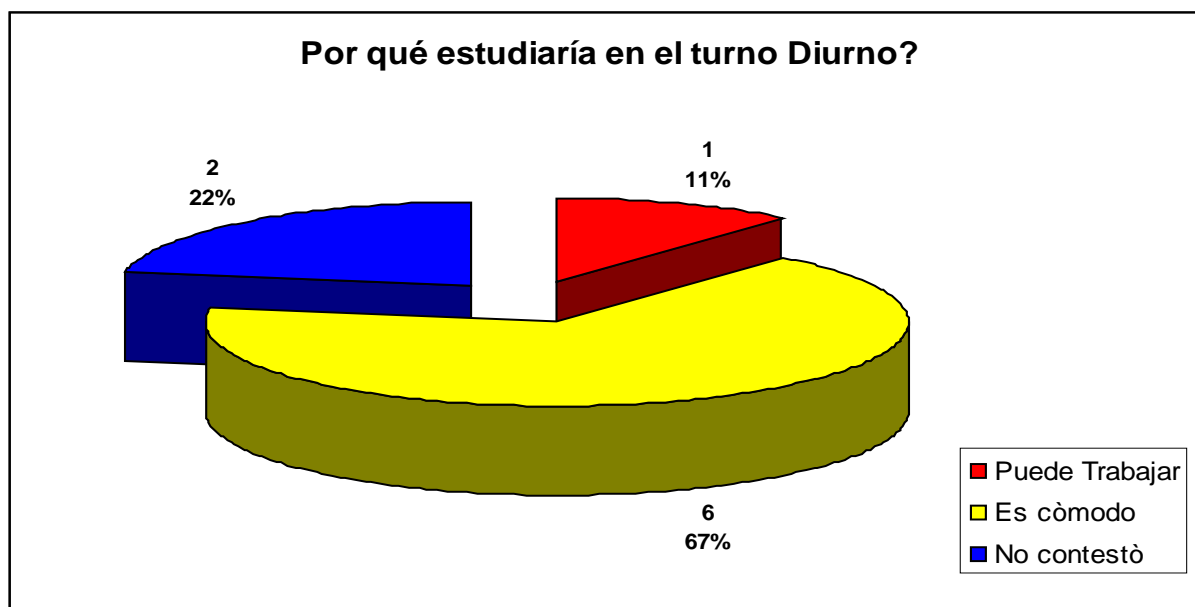
Figura 5: Turno



Fuente: Elaboración propia. Guacara, Mayo 2007.

Análisis: En esta pregunta, de los 13 encuestados que estarían dispuestos a estudiar en el IUTI - Guacara, 09 que corresponden al 69% lo harían en los turnos diurnos, mientras que 04 que corresponden al 31% estudiarían en el turno nocturno. Esto indica una cierta tendencia positiva que existe en el estudiantado a estudiar en el IUTI Guacara y sobre todo en el turno diurno.

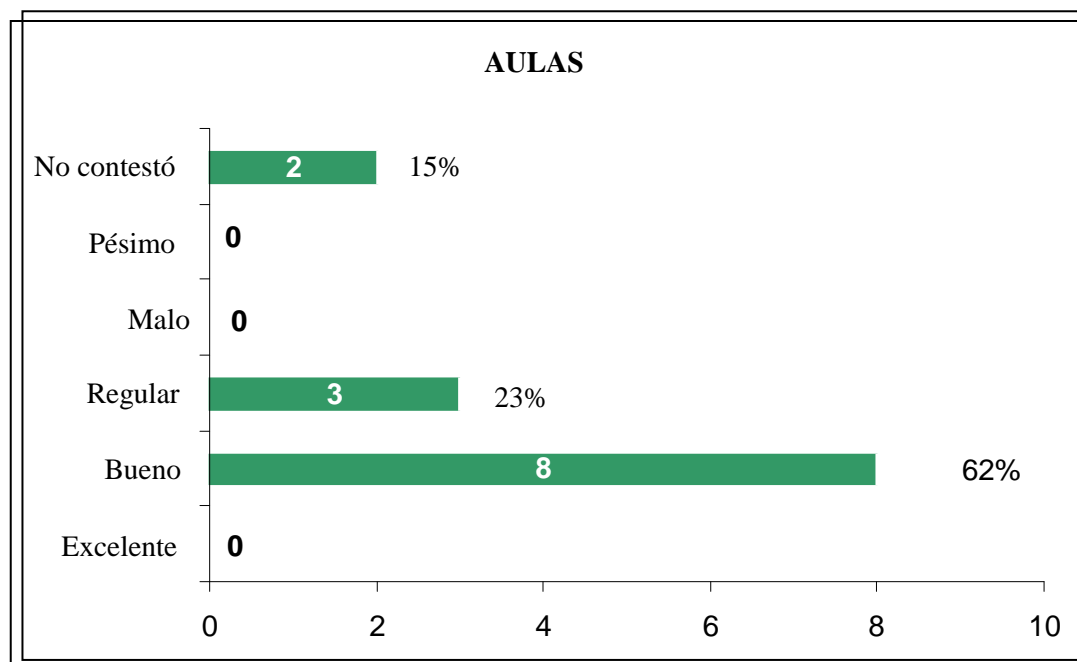
Figura 6: Turno Diurno



Fuente: Elaboración propia. Guacara, Mayo 2007.

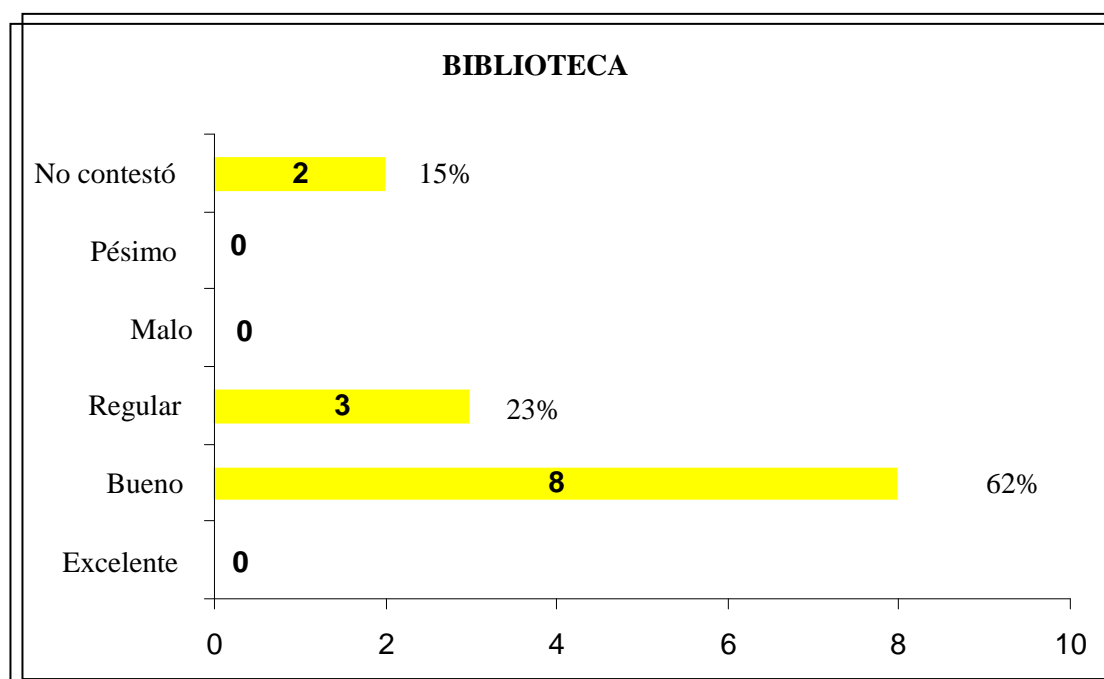
Análisis: En este caso, de los 09 estudiantes que prefieren los turnos diurnos, el 67% opina que estudiaría en dichos turnos en el IUTI - Guacara porque es cómodo, el 22% no contestó y el 11% porque puede trabajar. Acá se observan las principales razones del porqué los encuestados escogerían el IUTI Guacara para estudiar a nivel universitario

Figura 7: ¿Cómo evalúa las instalaciones y servicios del IUTI –Guacara?



Análisis: En cuanto a como evalúan los encuestados las instalaciones y servicios del IUTI - Guacara, en lo referente a las Aulas el 62% lo evaluó como bueno, el 23% como regular y el 15% no contestó. En este caso como en todas las demás evaluaciones de los servicios e instalaciones del IUTI Guacara, esta se efectúa porque la institución posee un programa de visitas a las instituciones de educación media del Municipio Guacara para informar sobre los beneficios que ofrece la institución.

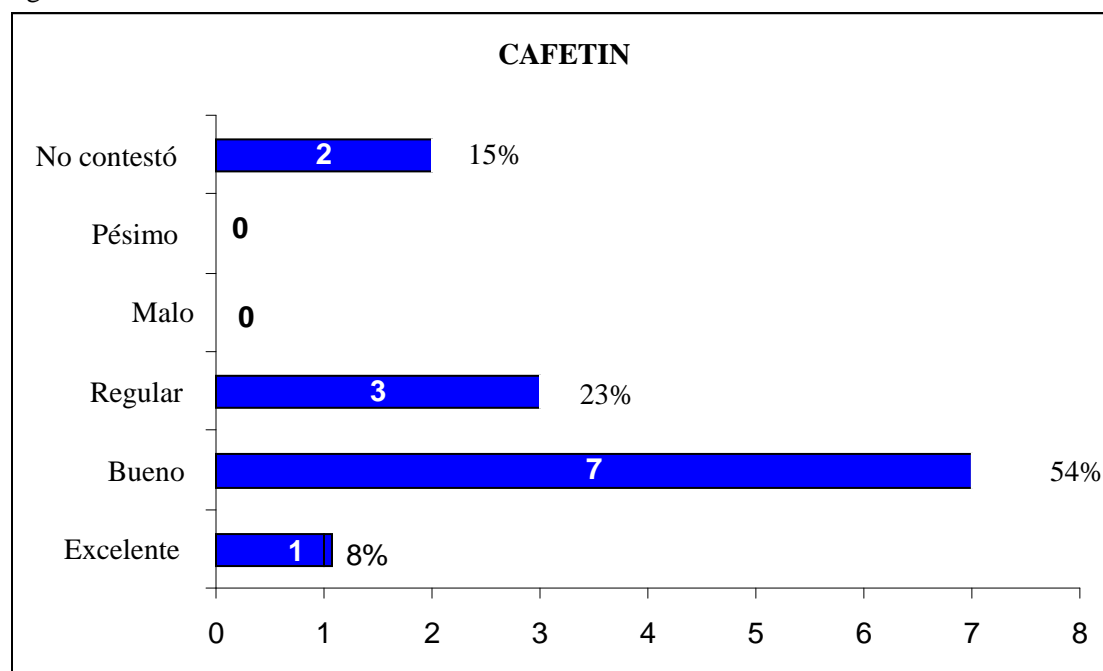
Figura 8: Biblioteca



Fuente: Elaboración propia. Guacara, Mayo 2007.

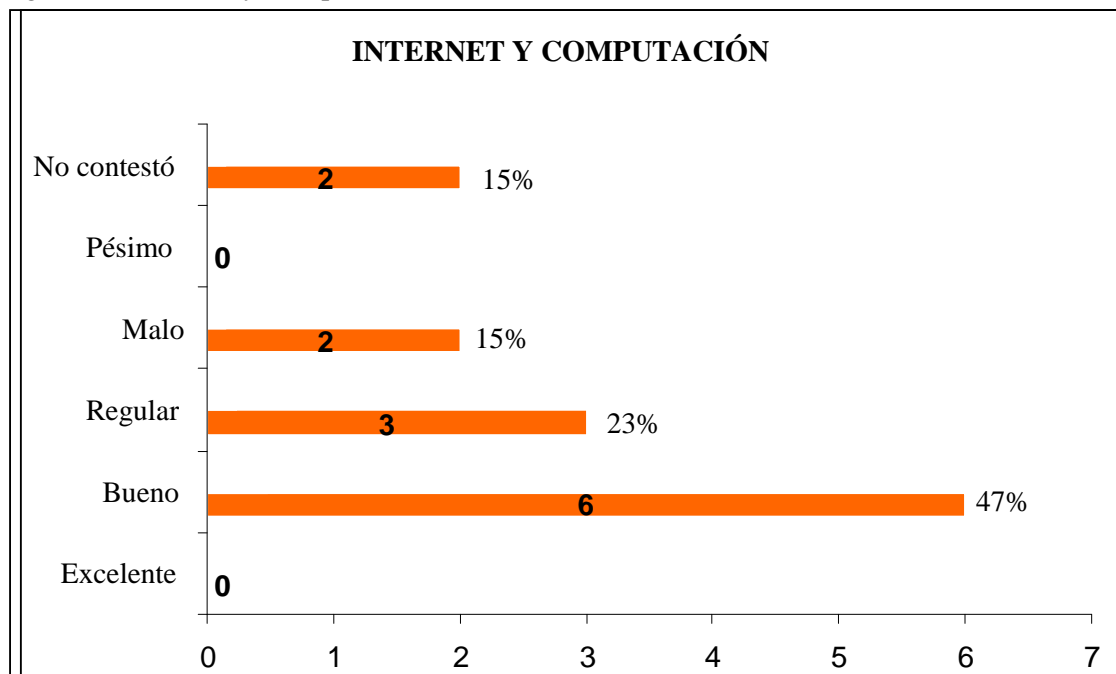
Análisis: En lo referente a la evaluación de la Biblioteca, el 62% de los encuestados opina que es buena, el 23% regular y el 15% no contestó. Esto indica que los posibles estudiantes poseen una opinión positiva sobre la biblioteca del IUTI Guacara.

Figura 9: Cafetin



Análisis: Al evaluar el cafetín, el 54% opina que es bueno, el 23% indica que es regular, el 15% no contestó y el 8% dice que es excelente. Aquí se observa que los posibles estudiantes poseen una opinión positiva sobre el Cafetín del IUTI Guacara.

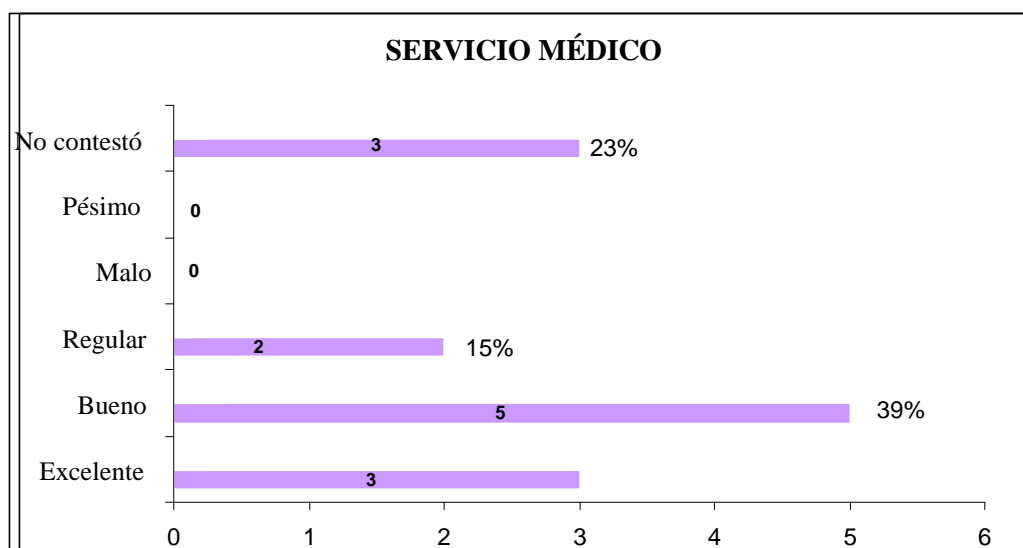
Figura 10: Internet y Computacion



Fuente: Elaboración propia. Guacara, Mayo 2007.

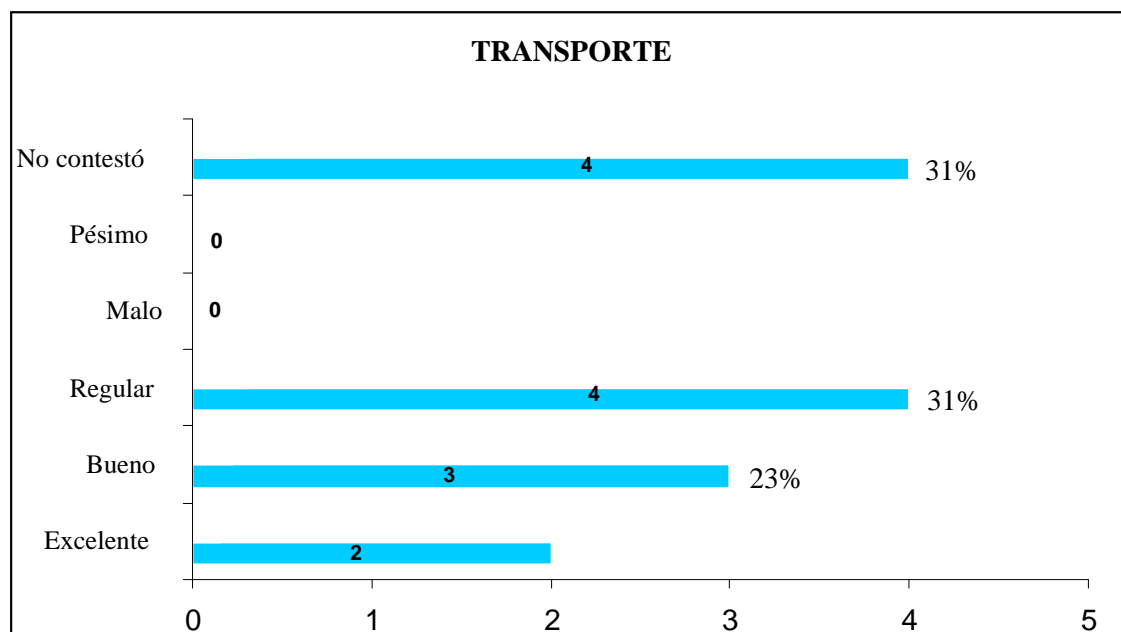
Análisis: En la evaluación del servicio de Internet y salas de computación, se obtuvo que el 47% de los encuestados opina que es bueno, el 23% regular, el 15% indica que es malo y el 15% no contestó. Indica que los posibles estudiantes poseen una opinión positiva sobre el Internet y Computación del IUTI Guacara.

Figura 11: Servicio Medico



Análisis: Al evaluar el servicio médico, se obtuvo que el 39% de los encuestados opina que es bueno, el 23% indica que es excelente, el 23% no contestó, y el 15% dice que es regular. Esto indica que los posibles estudiantes poseen una opinión positiva sobre el Servicio Médico del IUTI Guacara.

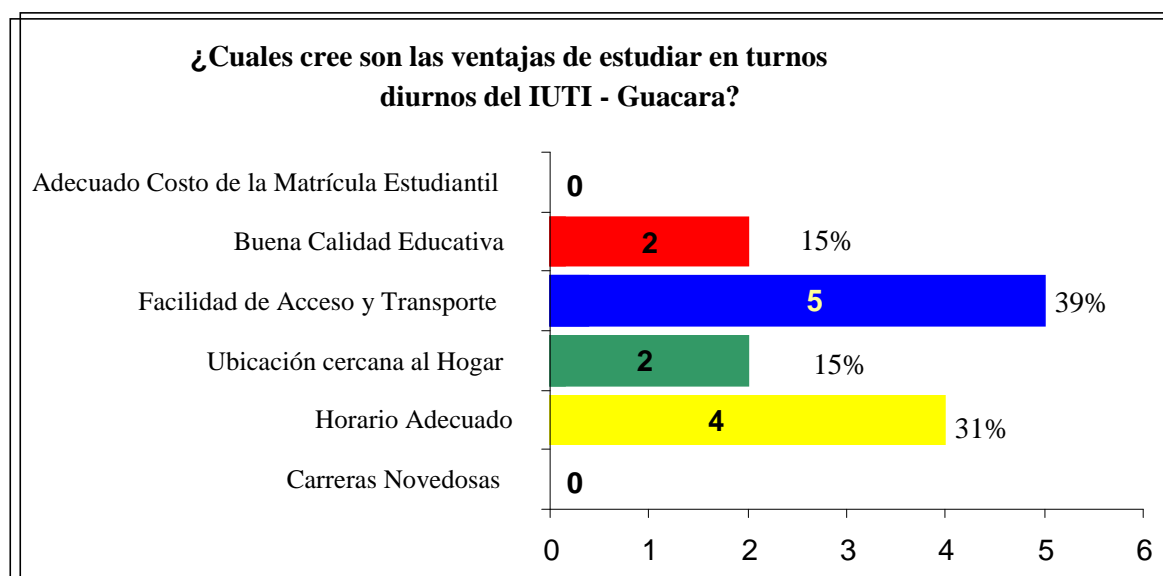
Figura 12: Transporte



Fuente: Elaboración propia. Guacara, Mayo 2007.

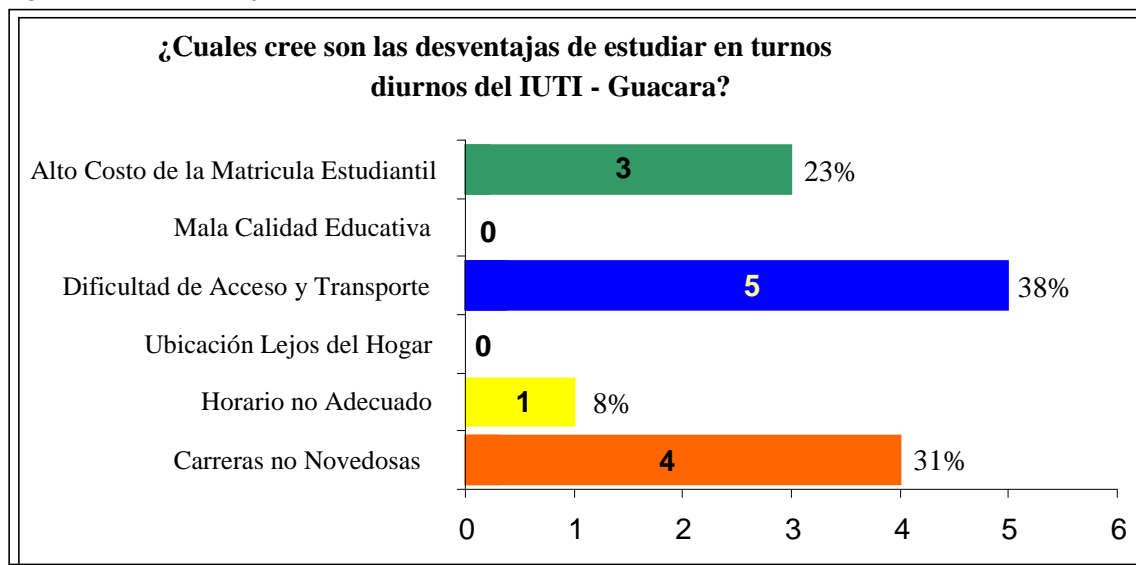
Análisis: En relación a la evaluación del servicio de transporte, se obtuvo que el 31% de los encuestados opina que es regular, el 31% no contestó, el 23% indica que es bueno y el 15% dice que es excelente. Acá se observa que los posibles estudiantes poseen una opinión positiva sobre el servicio de Transporte del IUTI Guacara.

Figura 13: Ventajas



Análisis: Al preguntar sobre las ventajas de estudiar en los turnos diurnos del IUTI - Guacara, el 39% de los encuestados indica la facilidad de acceso y transporte a la institución, el 31% el horario adecuado, el 15% la ubicación cercana al hogar, y el 15% la buena calidad educativa. Se observa que la facilidad de acceso y transporte, así como el horario adecuado son las razones principales para estudiar en los turnos diurnos del IUTI Guacara.

Figura 14: Desventajas



Fuente: Elaboración propia. Guacara, Mayo 2007.

Análisis: Al indagar sobre las desventajas de estudiar en los turnos diurnos del IUTI - Guacara, el 38% de los encuestados indicó la dificultad de acceso y transporte a la institución, el 31% las carreras no novedosas, el 23% el alto costo de la matricula estudiantil, y el 8% el horario no adecuado. En este caso la dificultad de acceso y transporte y las carreras no novedosas serían las principales desventajas de estudiar en los turnos diurnos del IUTI Guacara.

Análisis de Resultados de la Entrevista

En el caso de la segunda población estudiada, la cual está conformada por los Directivos y Coordinadores del Instituto Universitario de Tecnología Educativa, IUTI - Guacara, se les aplicó una entrevista, y se obtuvieron los siguientes resultados:

6. N° Entrevistados: 09.

Tabla 1: Entrevista a Directivos y Coordinadores del IUTI Guacara

Pregunta	Respuesta de Encuestados
¿Cuáles cree UD. son las ventajas de estudiar en el turno diurno del IUTI - Guacara?	En esta interrogante se obtuvo: 02 entrevistados indicaron que existe mayor seguridad en el turno diurno, 08 entrevistados dicen que los estudiantes diurnos tienen mas tiempo de dedicación para estudiar y por lo tanto obtener un mejor rendimiento estudiantil que los estudiantes nocturnos, 02 se inclinan por que los estudiantes pueden trabajar por turno, 03 indican que hay mas facilidad de adaptación al nivel universitario por ser el mismo turno al que están acostumbrados, y 03 opinan que es un turno mas descansado para estudiar.
¿Cuáles cree UD. son las desventajas de estudiar en el turno diurno del IUTI - Guacara?	En este caso, la totalidad de los entrevistados coincidieron en que la mayor desventaja de estudiar en el turno diurno es la limitación para trabajar en el día.
¿Cuáles son las nuevas carreras que ofrece el IUTI Guacara?	En este punto, todos los entrevistados indican que no existen en este momento nuevas carreras que se estén ofreciendo, pero 02 entrevistados sostienen que se está estudiando la posibilidad de ofrecer nuevas carreras tales como Recursos Humanos, Contaduría, Banca Comercial, Administración y Negocios.
¿Cuáles son las nuevas carreras ofrecidas por las Instituciones Educativas competidoras del IUTI en Guacara?	En este punto, la mayoría de entrevistados sostiene que las instituciones educativas competidoras con el IUTI - Guacara ofrecen carreras como Administración, Contaduría, Mercadotecnia, Aduanas, Informática, etc., pero también señalan que el IUTI ofrece carreras que ninguna otra institución de la zona posee, como Producción Industrial y Administración Industrial.
¿Que recomendaciones daría para mejorar la matricula del turno Diurno del IUTI – Guacara?	En esta interrogante, todos los entrevistados señalan la necesidad de crear estrategias que permitan atraer nuevos estudiantes para el turno diurno, así como mejorar los servicios ofrecidos actualmente.

Fuente: Directivos y Coordinadores del IUTI Guacara. Junio 2007.

LA PROPUESTA

A continuación se mencionaran las diferentes estrategias de mercadeo educativo que se le proponen a la institución:

1- (F4O1). Aplicar campañas publicitarias en las zonas geográficas de influencia y crear nuevas campañas.

Hasta ahora se realizan campañas publicitarias en las zonas de influencia del IUTI Guacara como son Guacara, San Joaquín, Mariara y Los Guayos, e inclusive Valencia, pero es recomendable continuar su aplicación y reforzarlas tomando en consideración los horarios y programas de mayor audiencia en Valencia, Guacara y áreas circunvecinas, a fin de mantenerse siempre presente en la mente de los potenciales estudiantes del IUTI Guacara

2- (F5O1). Plan de visitas a instituciones educativas de la zona.

La actividad de visitas a instituciones educativas de Guacara actualmente es llevada a cabo por la Coordinación de Información de la Institución, y la misma debe continuarse aplicando, pues permite explicar de manera directa y detallada a los estudiantes del 2do. Año del Ciclo Diversificado del área de influencia del IUTI Guacara a cerca de las carreras ofrecidas, las ventajas que posee cada una de ellas y la utilidad de estudiarlas, así como el mercado laboral del que dispondrán al graduarse.

3- (D1A2), (D1O2), (D2A3). Ofrecer excelentes instalaciones físicas y servicios educativos acordes a los requerimientos del mercado.

La mas fuerte debilidad del IUTI Guacara encontrada en el estudio se refiere a las deficientes instalaciones físicas, situación negativa que está actualmente en proceso de ser totalmente solucionada, pues se ha efectuado una importante inversión económica y ha adquirido un terreno a fin de construir una nueva sede, moderna, cómoda y segura, la cual esté a la altura de las exigencias y requerimientos del mercado educativo de la zona. Por supuesto que esta nueva sede, debe ser acompañada con servicios estudiantiles de alta calidad, que permitan satisfacer todas las necesidades y exigencias de sus estudiantes, pues según los resultados del estudio dichos servicios presentan deficiencias y deben ser solucionadas a la brevedad posible. Entre estos están: aulas, bibliotecas, cafetín, Internet y computación, servicio medico, transporte entre otros.

4- (F2O1), (F2O3). Ofrecer mayor información sobre carreras menos demandadas para turnos diurnos y resaltar ventajas de todas las especialidades.

En el caso de las carreras de Mecánica Térmica y de Administración de Compras, que en el estudio aplicado se obtiene como resultado que no tienen ningún tipo de interés por parte del estudiantado encuestado, es decir, no presentan demanda, por lo que debería darse un especial énfasis informativo al momento de realizar las visitas a los estudiantes por parte de la Coordinación de Información del IUTI Guacara, a fin de explicar muy detalladamente sobre estas dos carreras. Así mismo se debe comunicar en las campañas publicitarias a cerca de las ventajas de estudiar en el IUTI Guacara, pues la investigación arrojó que entre estas están la facilidad de acceso a la institución, el horario adecuado para estudiar y la buena calidad docente, aspectos que deben ser resaltados en dichos planes informativos.,.

5- (F2A1) Analizar continuamente el Mercado para conocer nuevas carreras que puede ofrecer el IUTI Guacara.

Es importante para cualquier organización, estar constantemente monitoreando el mercado donde se desempeña y compite, pues es la única manera de estar realmente informado sobre las necesidades y requerimientos de los clientes de dicho mercado, pues permitirá diseñar las respuestas apropiadas y acordes a las solicitudes, permitiendo ofrecer los productos o servicios que efectivamente sean demandados. Es el caso del IUTI Guacara, se ha venido realizando algunos análisis de este tipo, pero debe realizarlos por lo menos una vez al año, a objeto de mantenerse actualizado sobre dicha información, ya que es la mejor manera de decidir sobre cuales carreras de las actualmente ofrecidas deben seguir siendo dictadas por la suficiente matrícula existente.

6- Aplicar estrategias básicas al servicio del IUTI Guacara.

En la extensa literatura existente sobre estrategias de mercadeo, Michael Porter en su texto “Estrategias Competitivas” describe 3 Estrategias Básicas de Servicio, entre las que resaltan las referidas a las ventajas competitivas del servicio como son los bajos costos y la diferenciación, las cuales en el caso del estudio sobre el IUTI Guacara, deberían analizarse a fin de implementarlas de manera exitosa, así se tiene:

- (F3O4). Bajar costos sin disminuir calidad. Prestar un óptimo servicio a bajo costo, ser productivos.

En esta estrategia se plantea el prestar un servicio a todos los clientes de manera óptima y generar el menor costo posible, es decir, se busca alcanzar el mayor nivel de productividad en la relación costo - beneficio o en la relación costo - servicio al cliente. Se trata en el caso del IUTI Guacara de dar un servicio acorde a requerimientos particulares de cada estudiante y fijar un precio o valor de la matrícula que no sea superior al de la competencia, a fin de captar gran cantidad de estudiantes que permitan mantener bajos dichos costos y lograr alcanzar un margen razonable de rentabilidad económica para la institución, lo que haga atractivo el servicio para el estudiantado.

B-(F1O3). Diferenciar el servicio en base a excelente calidad. Realzar el servicio en relación a la competencia.

Esta diferenciación puede estar dada por los detalles particulares como el servir al cliente en cualquier horario y de forma constante, la innovación en los procedimientos de atención y la resolución de sus problemas, para que éste se mantenga satisfecho y sus expectativas estén cubiertas totalmente.

En el caso estudiado, dicha diferenciación se refleja en dos aspectos como:

7. Informar a los estudiantes potenciales sobre las carreras que solo son ofrecidas por el IUTI Guacara (Producción Industrial, Administración Industrial, etc.) y no por las otras instituciones superiores de la zona (CUAM, UNITEC e IUTA), lo que daría al IUTI ventajas competitivas sobre los competidores.
8. Reforzar aspectos positivos obtenidos en el estudio como es la calidad docente, ya que puede influir decisivamente en la escogencia del estudiantado a la hora de definir sobre donde realizar sus estudios universitarios.

c-(F1O3) Concentrar el servicio. Seleccionar el segmento del mercado y aplicar estrategias simultaneas de bajos costos y diferenciación.

En este caso la estrategia es la de segmentar el mercado que se atiende o se va a atender y seleccionar aquel segmento donde se pueda competir exitosamente, en el cual se presenten las mayores ventajas en relación a la competencia. La primera, dirigida a estudiantes de turnos diurnos que son el motivo de esta investigación, informándoles sobre las carreras ofrecidas, ventajas y beneficios de estudiarlas, calidad docente al impartirlas, cómodos horarios de clases de que disponen, etc., a objeto de que comparen con lo ofrecido por las otras instituciones educativas y se decidan a favor del IUTI. La segunda, dirigida al estudiantado del turno nocturno, informándoles sobre carreras ofrecidas, ventajas y beneficios de estudiarlas, calidad docente al impartirlas, cómodos horarios de clases, etc., aspectos éstos que son similares a los turnos diurnos, pero además reforzar la ventaja para aquellos estudiantes que requieran laborar en el día, pueden hacerlo sin afectar sus estudios universitarios.

7- (F1O5). Poseer visión de servicio, visión de excelencia educativa.

El IUTI Guacara debe tomar como referencia para que la institución se mantenga como el líder en el mercado donde compite, distinguiéndose por: Brindar calidad educativa y excelencia en el servicio, lo cual ha sido, es actualmente y deberá seguir siendo en el futuro el norte que dirija el servicio de la organización y efectuar reuniones periódicas para escuchar al estudiantado sobre sus problemas individuales.

8- (F1O5), (D2O5). Alcanzar altos estándares de calidad para satisfacer altos niveles de exigencia.

Para el IUTI Guacara el estándar o parámetro de calidad debe ser siempre muy alto, de gran exigencia en cuanto al nivel del servicio brindado por la institución en relación a lo ofrecido en su publicidad, ya que esté será uno de los aspectos que permitirá convertir a esta organización en triunfadora y exitosa, pues genera gran valor agregado a los estudiantes actuales y potenciales.

9- (F1A4). Liderar sobre el terreno, liderazgo interno.

Este liderazgo interno en el caso del IUTI Guacara debe estar siempre presente en todo su personal, es decir, en su gerencia alta y media, así como también a nivel académico, administrativo y trabajadores en general, pues la presencia de esos líderes en la institución es lo que facilitará que todo el personal funcione y actúe acorde a los requerimientos de un mercado actual cada vez mas competido y exigente.

10- (F1A4). Poseer integridad, liderar con el ejemplo.

Esta debe ser una cualidad distintiva del personal del IUTI Guacara a todo nivel, tanto alto, medio, como del personal de base, donde las acciones de toda su gente sean basadas en la integridad como personas y en la ética como profesionales, para que así el servicio brindado sea cada vez mejor por ser personas amplias y con un gran crecimiento y calidad humana, aspectos que hacen posible el poder dar lo mejor de sí a los estudiantes de la Institución y a sus compañeros de trabajo, permitiendo mantener el excelente clima y ambiente organizacional.

Al proponer la aplicación de estrategias de mercadeo educativo, se requerirá evaluar su efectividad real en la resolución de la problemática. Esta medición se efectuará a través de los Índices de gestión, entre los cuales están: índices de eficacia: participación en el mercado, crecimiento de la matrícula estudiantil, crecimiento económico del IUTI Guacara. Índices de equidad: inversión en capacitación, inversión en programas sociales y comunitarios, utilidad por acción, entre otros.

CONCLUSIONES

El diseñar y aplicar novedosas y atractivas estrategias de mercadeo en una empresa que desee competir de manera exitosa en los mercados donde participa, permite a la misma tener mayores posibilidades de alcanzar niveles óptimos de crecimiento económico, mayor eficiencia en el desempeño de sus diferentes procesos y actividades tanto internas como externas, a la vez de poder lograr su completo desarrollo y estabilidad organizacional. Puede concluirse que el implementar estrategias de mercadeo educativo en el Instituto Universitario de Tecnología Industrial, Sede Guacara, hará posible solucionar su problemática actual referida a la baja matrícula estudiantil en los turnos diurnos, lo cual afecta negativamente sobre todo en los aspectos económicos y financieros, que son vitales para su sana y correcta administración.

Dichas estrategias han sido diseñadas basándose en el análisis de la información recabada directamente, para así proponer alternativas de resolución a cada aspecto que conforma la problemática existente en la organización, a través de la consulta tanto de bibliografía especializada y actualizada, como de expertos en las áreas de mercadeo y educación, con lo que se espera solventar las deficiencias matriculares actuales del IUTI Guacara y convertirla en una organización estable con posibilidades de continuar desarrollándose y creciendo exitosamente.

RECOMENDACIONES

En primer lugar, se sugiere aplicar las estrategias de mercadeo educativo que han sido diseñadas y propuestas en este estudio, y que las mismas sean evaluadas al término de un período de 06 meses, esto con la finalidad de medir si verdaderamente se ha incrementado de manera significativa la cantidad de estudiantes en los turnos diurnos, tal como es lo esperado. Igualmente se recomienda continuar siendo la Institución líder que siempre ha sido, en cuanto a su empeño por alcanzar un inmejorable clima organizacional, mediante el esfuerzo continuo para optimizar la atención y el servicio educativo al estudiantado Iutense, así como el excelente trato y respeto brindado siempre a todo su personal docente, administrativo y obrero. También se aconseja seguir reforzando la imagen positiva de la Institución, a través de campañas publicitarias en las áreas geográficas de influencia como las actualmente realizadas, que le permitan mantenerse presente en la mente de todos los estudiantes actuales y de los estudiantes futuros. Por último, continuar apuntando siempre hacia el futuro, con el deseo y la acción de ser una institución pujante, creciendo en positivo y con el firme propósito de ser prospera, superando los obstáculos actuales y los que se presenten, pero siempre con el objetivo primordial de alcanzar el éxito educativo, económico y organizacional.

REFERENCIAS BIBLIOGRAFICAS

Goncalo, Nuno. (2003) Marketing en los Servicios de Educación: Modelos de Percepción de Calidad. Universidad Complutense de Madrid. España.

Kotler, Philip. (1993) Dirección de Mercadotecnia. 7a. Edición. Editorial Prentice Hall. México. 1993.

Sabino, Carlos. (1992) El Proceso de Investigación. Ediciones Panapo. Venezuela.

Serna, H. (1996) Planeación y Gestión Estratégica. RAM Editores. Colombia.

Serna., H (1999). Gerencia Estratégica. Sexta Edición. 3R Editores. Colombia.

Shao, Lincoln. (1996) Estadística para las Ciencias Administrativas. Mc Graw Hill. Mexico

Tamayo y Tamayo, Mario. (1994) El Proceso de la Investigación Científica. 3a. Edición. Editorial Limusa.

Zapata Edgar. (1984) El Plan de Mercadeo. Editorial Editar. Colombia.

PRIMERA APROXIMACIÓN AL ANÁLISIS DE LA OFERTA TURÍSTICA EN EL CORREDOR TURÍSTICO PLAYAS DE ROSARITO – ENSENADA, B.C., MÉXICO, PARA DETERMINAR SU NIVEL DE COMPETITIVIDAD COMO PRODUCTO TURÍSTICO

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RESUMEN

El turismo como actividad económica es hoy por hoy uno de los grandes retos que se plantea México ante la inminente disminución de su PIB por dos motivos en particular: el primero de ellos es la disminución de las exportaciones del petróleo y sus derivados, debido a la creciente tendencia de hacer uso racional de los mismos para disminuir el calentamiento global y hacer del planeta un lugar sostenible; en segundo, por la disminución de las remesas que se obtienen de los connacionales que viven en Estados Unidos y que enfrentan de manera frontal la crisis económica de ese país que ha tenido efectos a nivel mundial. Por otro lado, el país tiene un sin fin de recursos naturales que por su propia naturaleza se postulan como productos competitivos de gran calidad y atractivo. Tal es el caso de Popotla, zona urbana ubicada en el corredor turístico Tijuana – Playas de Rosarito – Ensenada, que por su cercanía a los grandes consumidores turísticos estadounidenses y canadienses, goza de afluencia turística los fines de semana, temporadas vacacionales y días festivos. En este primer acercamiento y tomando como base la metodología de la SECTUR para analizar productos turísticos competitivos, se busca determinar las características de la oferta turística de un poblado del municipio de Playas de Rosarito, denominado Popotla.

INTRODUCCION

El turismo es una actividad que desarrollándola de manera planeada y sistemática, puede representar para un municipio, estado o país, una gran fuente de generación de recursos económicos y de empleo.

Para que se produzca esta riqueza, debe garantizarse la competitividad del destino turístico que a su vez dependerá de la capacidad de su industria para innovar y mejorar permanentemente la calidad de sus productos. No en vano, se habla de que la competitividad implica realizar un análisis estructural de los mercados para elegir las alternativas que permitan lograr condiciones favorables para el mismo (Porter, 2003).

Por otro lado, la metodología para determinar productos turísticos competitivos, diseñada por la Secretaría de Turismo (SECTUR), hace referencia a que se deben desarrollar básicamente cuatro puntos secuenciales: 1) el análisis de la oferta turística; 2) el análisis de la demanda turística; 3) el análisis estratégico; y por último con base en toda la información anterior, se debe 4) diseñar una cartera de productos adecuada a las condiciones del entorno.

La aproximación que se hace en este trabajo es la primera fase de una investigación macro que se encuentra en su fase de diseño, cuyo objetivo es determinar las características de la oferta y de la demanda turística que existe en el corredor playas de Tijuana – Playas de Rosarito – Ensenada, para con esto describir las opciones que se tienen para potenciarlo como destino turístico competitivo. Tomando como base la metodología de la SECTUR, en este primer acercamiento, se busca determinar las

características de la oferta turística de un poblado del municipio de Playas de Rosarito, denominado Popotla.

CARACTERIZACIÓN DEL MUNICIPIO DE PLAYAS DE ROSARITO Y LA COMUNIDAD DE POPOTLA, BAJA CALIFORNIA.

La frontera norte de México cuenta con una extensión de 3,152 kilómetros de colindancia con Estados Unidos que representa uno de los mercados turísticos más importantes del mundo registrando anualmente 72.3 millones de visitantes fronterizos, equivalentes al 82% del total de la captación de visitantes internacionales en el país.

El Estado de Baja California se distingue por la atención y el dinamismo que le ofrecen a sus visitantes en términos de los diferentes tipos de turismo ofrecidos, como son: turismo de aventura, ecoturismo, turismo de salud y spa, turismo arqueológico, de sol y playa, turismo gastronómico, colonial y rural entre otros. Y es en esta diversidad donde precisamente puede radicar la consolidación de ventajas competitivas como destino turístico.

El corredor Playas de Tijuana – Playas de Rosarito – Ensenada, está ubicado en paralelo con la costa del Océano Pacífico y por su fácil y rápido acceso, se convierte en una opción privilegiada para el turismo estadounidense y canadiense. Popotla, que es la localidad objeto de estudio, geográficamente se encuentra en el municipio de Playas de Rosarito, que según el Instituto Nacional para el Federalismo y el Desarrollo Municipal del Gobierno del Estado de Baja California (2005), es el cuarto municipio del estado, cuenta aproximadamente con 67,835 habitantes y su actividad predominante es el turismo que se ha venido convirtiendo en el centro de gravitación de las operaciones económicas, contribuyendo aproximadamente con el 34.4% del PIB y dando empleo al 61% de la población económicamente activa del mismo.

Durante los años setentas se construyeron en la ciudad de Playas de Rosarito, nuevos hoteles, restaurantes, condominios turísticos y empresas proveedoras de servicios para cubrir las demandas de la creciente población que se asentaron en áreas urbanas denominadas: la ampliación del Ejido Mazatlán y la Colonia Echeverría. Hasta este momento, la principal fuente de ingresos ha sido el turismo, seguido de la industria, la ganadería y la agricultura dando como resultado un perfil económico único en el Estado. Posteriormente, con la instalación de la de Termoeléctrica y Petróleos Mexicanos (PEMEX), Playas de Rosarito experimentó un crecimiento acelerado, dando origen a nuevos centros turísticos en toda la costa, como Popotla (objeto de estudio), Calafia y Cantamar entre otros. La principal actividad económica de Popotla es la pesca, y se ofrece venta directa de pescados y mariscos en una serie de restaurantes ubicados en la orilla de la playa del poblado, donde los turistas pueden apreciar el mar y las actividades de pesca mientras consumen. Como actividad complementaria se ofrecen ventas de artesanías y dulces típicos mexicanos.

LA IMPORTANCIA DEL ANÁLISIS DE LA OFERTA TURISTICA

Para poder implementar un programa de turismo masivo con efecto directo en la economía es indispensable que se produzca un proceso racional de análisis de la oferta turística. Según la SECTUR, existen tres elementos que concentran la atención en el análisis de la oferta turística de una región y estos son la infraestructura de apoyo, los atractivos y los servicios complementarios. El primer elemento hace posible que los viajeros disfruten de manera adecuada y placentera de los recursos disponibles e influye en la percepción y satisfacción que experimenta el turista cuando visita un destino turístico. Como puede verse en la Tabla 1, el análisis de la oferta turística está constituida por tres grandes áreas como son: la física, la comercial, la de recursos humanos y la de recursos financieros.

Figura 1. Ubicación Geográfica De Popotla En El Municipio De Playas De Rosarito, Baja California, México.



Fuente: Adaptación propia tomado de PueblosAmerica.com. En: <http://mexico.pueblosamerica.com/i/popotla/> (2008).

Tabla 1. Infraestructura De Apoyo Al Sector Turismo

<i>Física</i>	<i>Comercial</i>	<i>Recursos Humanos</i>	<i>Recursos Financieros</i>
<ul style="list-style-type: none"> - Aeropuertos - Carreteras - Telecomunicaciones - Agua potable y alcantarillado - Electricidad - Señalización - Centros de información - Servicios médicos 	<ul style="list-style-type: none"> - Centros comerciales - Plazas turísticas - Mercados de artesanías - Ferias y exposiciones - Eventos comerciales 	<ul style="list-style-type: none"> - Universidades - Escuelas de turismo - Escuelas de idiomas - Centros de capacitación - Disponibilidad de recursos humanos - Disponibilidad de guías turísticas 	<ul style="list-style-type: none"> - Inversión pública - Inversión privada - Fondos turísticos - Fondos de financiamiento sectorial - Programas financieros federal y estatal.

Fuente: Secretaría de Turismo, 2005.

El segundo elemento, hace posible la identificación de los atractivos turísticos, sean estos de orígenes naturales, artificiales o conformados por la mezcla de ambos. Su principal virtud es la capacidad para cautivar y atraer a los turistas y se cree que en esto radica básicamente el desarrollo de ventajas competitivas. Gracias a este inventario, se pueden detectar las fortalezas y debilidades que se tienen internamente para aprovechar las oportunidades y minimizar las amenazas del entorno, generando sobre conocimientos sólidos programas de participación entre todos los agentes políticos, económicos, sociales y culturales que permitan hacer uso de estos recursos para beneficio de la comunidad bajo un criterio de sostenibilidad. Las etapas para la elaboración de este inventario contempla un recorrido a los sitios donde se localizan los recursos, un registro detallado de las características relevantes de los recursos, la respectiva documentación de las actividades turísticas susceptibles de desarrollar, la identificación de actividades con posibilidades reales de desarrollo y por último la jerarquización de las actividades identificadas de acuerdo con los criterios establecidos para la consolidación de los productos existentes.

Finalmente los servicios turísticos son el tercer elemento que permite la conformación de un producto turístico, al conformarse con los recursos y la infraestructura, que a su vez hacen posible el establecimiento de redes de integración empresarial para fortalecer el sector. Las principales áreas de servicios turísticos son: el alojamiento, la alimentación, el transporte, las agencias de viajes, las guías de turistas, los tours de operadores, los servicios bancarios y otros servicios asociados al turismo.

METODOLOGÍA

La metodología que se viene aplicando para el análisis de la oferta turística en el municipio de Playas de Rosarito y específicamente en el poblado de Popotla, sigue los lineamientos establecidos en la metodología diseñada por la SECTUR para determinar productos turísticos competitivos. Actualmente se encuentra en la fase de diseño, definición de instrumentos de recolección de información con sus respectivos factores, indicadores y variables. Los resultados que se analizan en esta oportunidad, son parciales a la investigación y obedecen estrictamente a la percepción del grupo de investigadores.

ALGUNOS RESULTADOS PREVIOS

El análisis de la oferta turística en un municipio debe ser un proceso que integre diversas fases para la búsqueda y el análisis de la información. Requiere que paralelamente se haga un contraste de diversos puntos de vista para la definición de un producto turístico y que se establezcan comparativos con productos turísticos similares para definir puntos críticos. Sólo con una política sostenida de apoyo al turismo y a la industria que agrupa todas las empresas del sector, se podrá trabajar coordinadamente para el desarrollo de ventajas competitivas en los destinos estudiados. Como punto de partida, se hizo un análisis FODA del poblado de Popotla (Tabla 2), mismo que relaciona detalladamente algunos elementos que se tienen a favor y en contra para lograr una consolidación turística.

Tabla 2. FODA Del Poblado De Popotla

FORTALEZAS	OPORTUNIDADES
<ol style="list-style-type: none"> 1. Línea costera atractiva 2. Hospedaje cercano 3. Restaurantes/Gastronomía 4. Mariscos/Pescado 5. Playa 6. Compras/Artesanía 7. Estratégicamente ubicado a un lado de Foxploration/Estudios 8. Desarrollos inmobiliarios cercanos 9. Clima mediterráneo 10. Estructura hotelera frente al mar 11. Variedad y calidad de productos pesqueros frescos 12. Pesca directa (son sus propios proveedores) 	<ol style="list-style-type: none"> 1. Empresarios de Popotla participen en grupos de negocios/Pequeñas convenciones regionales 2. Organizar convenciones estudiantiles 3. Integrarse en un Tour de operadores y grupos directos 4. Ofrecer platillos para adultos mayores 5. Proveer platillos especiales con precios competitivos para las organizadoras de bodas celebradas frente al mar 6. Ecoturismo 7. Política de precios 8. Aprovechar la cercanía a Foxploration para promoverse como destino gastronómico 9. Pesca Deportiva/Muelle 10. Restaurante rupestre
DEBILIDADES	AMENAZAS
<ol style="list-style-type: none"> 1. Falta de creatividad para renovar los atractivos turísticos y platillos 2. Comercio deshonesto 3. Destino visual poco atractivo (imagen pobre) 4. Acceso vial en mal estado (sin asfalto) 5. Acceso vial estrecho que en ocasiones es intransitable 6. Falta de estacionamiento 7. Falta de información de ofertas turísticas de este destino 8. Falta de transportación organizada 9. La mayoría de los empresarios no hablan inglés 10. Sin imagen corporativa 11. Ausencia de anuncio de identificación visual para los visitantes 	<ol style="list-style-type: none"> 1. Crisis económica mundial 2. Ensenada como competencia 3. Uso de tierra/Tenencia de la tierra desarticulando o impidiendo nuevas ofertas 4. Falta de agua 5. Nueva mala imagen de inseguridad en Rosarito 6. Falta de atractivos/Productos turísticos integrados 7. Playas contaminadas 8. Tarifas altas de taxis

Fuente: Elaboración propia a partir de resultados del estudio de campo (2008).

CONCLUSIONES

El país, el estado, y particularmente el municipio de Playas de Rosarito, deben hacer frente a las grandes expectativas que se plantea el mercado turístico. Son innumerables las limitaciones que tiene Popotla como producto turístico competitivo, pero así mismo tiene oportunidades que de no aprovecharse bajo el marco de un plan estratégico de desarrollo turístico, estará muy distante de llegar a constituirse como un centro turísticamente planeado tal y como lo define la SECTUR.

Por otro lado, se deben aprovechar los programas de apoyo a las micro, pequeñas y medianas empresas asociadas a servicios turísticos que promueve el gobierno federal y estatal con ocasión de la crisis económica y mundial que se vive actualmente, para darle a éstas, la posibilidad de mantenerse en el mercado y seguir garantizando el nivel de empleo que generan.

BIBLIOGRAFIA

Galindo Cáceres, Jesús (coord.). *Técnicas de investigación en sociedad, cultura y comunicación*. México: Addison Wesley Longman, 1998, pp. 523.

Ruiz Andrade, José G. y Martínez Moreno, Omaira C. *Experiencias universitarias de acercamiento e involucramiento con las organizaciones*. México: Ediciones ILCSA, 2008. pp. 218.

Secretaría de Turismo del Estado de Baja California. *Plan de Marketing 2007-2013*. México: SECTUR, 2008, pp. 52.

Secretaría de Turismo (2002). *Competitividad y desarrollo de productos turísticos exitosos*. México: SECTUR, Serie de documentos técnicos: Competitividad, Vol. 1, pp. 19.

Secretaría de Turismo (2002). *Agrupamientos turísticos competitivos en México (Clusters Turísticos)*. México: SECTUR, Serie de documentos técnicos: Competitividad, Vol. 5, pp. 116.

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ANÁLISIS DE LAS ESTRATEGIAS DE APOYO A LAS MICROEMPRESAS EN TIEMPOS DE CRISIS. CASO DE ESTUDIO: POLÍTICAS PÚBLICAS DEL GOBIERNO DEL ESTADO DE BAJA CALIFORNIA, MÉXICO

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RESUMEN

Indudablemente uno de los principales problemas que enfrentan las microempresas es el crédito. Muchos de esos aspectos tienen que ver con el acceso a fuentes institucionales, a los propios créditos y a muchas otras barreras impuestas a ese sector de microempresas. Al respecto, las políticas macroeconómicas adoptadas en los países subdesarrollados, tratan de crear un marco adecuado para enfrentar los retos y aprovechar las oportunidades de la globalización de la economía mundial. En los últimos años los desajustes económicos que ocurren en los mercados, la apertura de los mismos y la reinserción en el mundo financiero, generan oportunidades para que las políticas públicas tengan un principio básico que promueva y ayude a solventar algunos de los problemas que el mismo entorno económico genera. El reto de los gobiernos por tanto, es diseñar políticas explícitas que permitan el desarrollo de estrategias sostenidas en el corto, mediano y largo plazo, intervenciones precisas y coordinadas, que permitan potenciar el desarrollo de este importante sector, y básicamente en la parte financiera, ya que es su principal motor de crecimiento. Dentro de este contexto, el Estado de Baja California ha procurado formular instrumentos, leyes y procedimientos que busquen y consoliden el sector de microempresas en el campo financiero y así tratar de igualar las condiciones de su acceso al mercado.

INTRODUCCIÓN

Indudablemente uno de los principales problemas que enfrentan las microempresas es el crédito. Muchos de esos aspectos tienen que ver con el acceso a fuentes institucionales, a los propios créditos y a muchas otras barreras impuestas a ese sector de microempresas. Los países desarrollados han logrado importantes avances para crear un ambiente favorable, teniendo la idea de generar intervenciones selectivas, mientras que en los países en vías de desarrollo se realizan esfuerzos permanentes para enfrentar dicha situación, buscando alternativas viables y efectivas que vayan acordes a la realidad de los recursos económicos limitados.

Las políticas macroeconómicas adoptadas en los países subdesarrollados, tratan de crear un marco adecuado para enfrentar los retos y aprovechar las oportunidades de la globalización de la economía mundial. En los últimos años los desajustes económicos que ocurren en los mercados, la apertura de los mismos y la reinserción en el mundo financiero, generan oportunidades para que las políticas públicas tengan un principio básico que promueva y ayude a solventar algunos de los problemas que el mismo entorno económico genera. Dentro de este nuevo entorno de crisis económica, el desafío que enfrentan los gobiernos en la actualidad, es la búsqueda del desarrollo sostenible y exitoso, el cual puede ser posible si se atienden los grandes problemas sociales que aquejan a los países y a sus microempresas, y se busque un crecimiento económico sostenido, equilibrado y justo, componentes básicos para concebir una estrategia de intervención cuyos componentes hagan posible conformar un diseño integral de políticas públicas (Ordoñez, 2002:280).

Las microempresas han empezado a ser consideradas como objeto importante de programas de generación de empleos y de mejora de ingresos en sectores de bajos recursos (González, 2004:127), lo

que hace necesario que el gobierno cree condiciones y eslabonamientos donde sus políticas públicas procuren el apoyo a esas microempresas como elemento fundamental para impulsar el desarrollo regional y así enfrentar los problemas de desempleo o subempleo, impulsando la producción y promoviendo la búsqueda de ventajas comparativas y competitivas regionales, sin olvidar la capacitación y especialización de los recursos humanos.

Para superar la problemática de las microempresas, se requieren políticas económicas de apoyo a su desarrollo en el que las instituciones públicas contribuyan en el mejoramiento de estos sectores productivos marginados (Alcalá, 2006:62). En este sentido, el Gobierno del Estado de Baja California como respuesta a la crisis económica mundial y como una estrategia de anticipación y prevención a los insoslayables efectos de la recesión económica de los Estados Unidos sobre la economía mexicana y especialmente en Baja California, ha elaborado un primer programa *emergente* que representan acciones para enfrentar las consecuencias de las crisis económica.

Dicho programa se derivó de una serie de iniciativas presentadas por: especialistas en materia de microempresas, por representantes de la sociedad y por académicos; quienes aportaron sus ideas y experiencias profesionales para colaborar con el Gobierno en la búsqueda de soluciones viables, prácticas y eficaces, en apoyo al sector empresarial de mayor vulnerabilidad: las microempresas; que según Saraví (1998:252) son un sector de suma importancia en la estructura productiva y económica en el mercado laboral de las regiones.

El primer programa piloto denominado: Programa para Sostener e Impulsar el Crecimiento Económico del Estado de Baja California (PSICE), compuesto por una serie de 22 acciones que fueron diseñadas a partir de octubre de 2008, fue planteado para cumplir dos objetivos primordiales: 1) Estimular la generación de empleo a través del gasto público; y 2) Proteger a los sectores vulnerables de la población, entre ellos el sector de las microempresas.

Adicionalmente el Gobierno del Estado consideró importante realizar un seguimiento riguroso, puntual y específico del programa en tres áreas fundamentales: 1) Comportamiento de las principales variables económicas; 2) Estimar una dimensión de la crisis económica actual y futura a corto plazo; 3) Analizar los programas e iniciativas institucionales desarrolladas y aplicadas principalmente por autoridades económicas de México y Estados Unidos.

Se planteó dicho seguimiento con la intención de revisar y adaptar estrategias que impulsen nuevas acciones que disminuyan el efecto regional de la crisis, de manera que pudieran establecer condiciones que impulsaran la actividad productiva y el crecimiento económico. Bajo este escenario y como parte de una estrategia de planeación con base a la retroalimentación del PSICE, se elaboraron ajustes a los planes y programas oficiales existentes, lo que representó la base para que el Gobierno del Estado de Baja California elaborara y presentara el actual Programa de Protección a la Economía Familiar y de Generación de Empleo (PROTEGE), que a decir del Gobierno, persigue: cuidar la planta productiva y sus empleos, proteger la economía familiar, estimular el desarrollo de las micro empresas y de mejorar las condiciones de vida de los habitantes de la entidad.

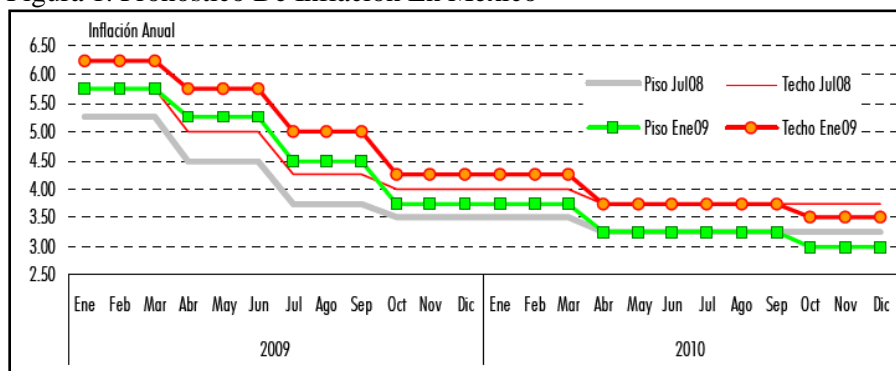
ENTORNO ECONÓMICO ACTUAL

Actualmente el entorno económico internacional mantiene una recesión con expectativas de crecimiento muy reducidas en el mercado internacional. Diversos organismos internacionales, como el Fondo Monetario Internacional (FMI), la Organización para la Cooperación y el Desarrollo Económico (OCDE) y el Banco Mundial (BM), estiman que durante el año 2009 la economía mundial sólo crecerá entre 0.9% y 2.2%. De igual forma, se espera una tasa de crecimiento negativa en el PIB de los Estados Unidos de

alrededor de -1.5% y para México de -0.6%, lo que complica los esfuerzos de crecimiento en México y por ende en Baja California.

Por otro lado, con base a los datos anteriores, se espera que en México la tasa de inflación que en el año 2008 fue de 6.53%, disminuya en el año 2009 derivado principalmente por la reducción del precio del petróleo y por la disminución de la riqueza monetaria (ver Figura 1).

Figura 1. Pronóstico De Inflación En México



Fuente: Banco de México (2009)

Asimismo, el Banco de México ha anunciado su decisión de reducir la tasa de fondeo bancario situándola en 5.5%, lo que implica que los diferenciales de tasas de interés tanto interna como externa, se verán ajustados a la baja en los próximos meses del año 2009.

En lo que respecta al tipo de cambio del peso mexicano respecto al dólar estadounidense, la mayoría de los organismos que generan pronósticos para este indicador, coinciden en que actualmente el dólar está sobrevaluado pero regresará a un valor de equilibrio más bajo cuando se desvanezca la incertidumbre financiera actual.

Baja California Ante La Crisis Económica Mundial

El gobierno federal mexicano dio a conocer en enero de 2009, el Acuerdo Nacional en Favor de la Economía Familiar y el Empleo con el fin de enfrentar la difícil situación económica mundial por la que atraviesa el mundo y específicamente México, el cual tiene como objetivo fundamental apoyar el ingreso y proteger el empleo de las familias mexicanas.

En concordancia con la estrategia del poder ejecutivo federal y su Acuerdo nacional, la gobernación del Estado de Baja California, conjuntamente con los principales actores de la economía estatal, han buscado reforzar el plan de acciones incluidas en el PSICE con el fin de atender en forma prioritaria diez ejes que soportan la actividad económica del Estado: 1) Impulso y sostenimiento del empleo; 2) Soporte a la economía de las familias; 3) Impulso a las empresas y a la competitividad; 4) Adelanto del programa de construcción de infraestructura y de vivienda de interés social; 5) Ampliación a la cobertura educativa; 6) Impulso y promoción de la actividad turística; 7) Fortalecimiento del sector agropecuario; 8) Ordenamiento e impulso de la actividad pesquera y acuícola; 9) Mejor atención a la salud; 10) Transparencia y eficiencia en el gasto público.

CONCLUSIONES Y RECOMENDACIONES.

La mayoría de los países de América Latina han emprendido reformas financieras a lo largo de las crisis económicas mundiales. Esas reformas abarcan áreas como por ejemplo la adopción de nuevas leyes bancarias y de mercado de capitales, la eliminación de controles de las tasas de interés y programas de crédito subsidiados. Aunque estas reformas han incrementado de alguna manera la competencia y han buscado mejorar la asignación de recursos en los mercados financieros, aún resta mucho por hacer en materia de supervisión, regulación y generación de políticas públicas que estimulen el sector de la microempresa (BID, 1998:13).

Al sector de microempresas se le ha prestado poca atención y prácticamente las políticas implementadas influyen básicamente en su acceso al financiamiento, lo cual es ineludible que tiene un efecto positivo en su desarrollo, sin embargo, es necesario implementar políticas estratégicas que les brinden un apoyo integral que incluya crédito accesible, asesoría, capacitación y seguimiento; estrategia que contempla aplicar el Programa PROTEGE del gobierno del Estado de Baja California, lo cual podría resultar de mayor impacto en el desarrollo de las microempresas y que en su momento se intentará medir dicho impacto.

Lo realmente importante es que la perspectiva de toda política pública encaminada a apoyar microempresas, se rija por el deseo de impactar en su consolidación y progreso, pero no sólo a corto plazo con el fin de obtener créditos electorales inmediatos, sino siguiendo un plan a largo plazo en el que las empresas perduren y se consoliden en el mercado de competencia, que garantice su permanencia. Al respecto, Puyana (2003:172) considera que en realidad, para disminuir el desempleo y la desigualdad es indispensable que las tasas de crecimiento de las microempresas sean elevadas y estables.

El Programa PROTEGE del gobierno del Estado de Baja California contempla varios años de operación mientras dure su gestión, sin embargo, no presenta oficialmente una ley o proyecto de ley que garantice su permanencia cuando cambie la administración actual, lo cual sería un pena perder los avances de este ambicioso proyecto. Se sugiere por tanto, promover y definir una ley de política pública que dé continuidad al programa, estimando el beneficio a corto, mediano y largo plazo.

Dado que el pilar principal del programa PROTEGE es el incentivo económico para las microempresas, se recomienda tener una adecuada regulación normativa de los créditos a otorgar, una supervisión y control de los intermediarios financieros que coadyuven a mantener un mercado eficaz y solvente que sea capaz de atender las necesidades reales de las microempresas. Son instrumentos necesarios que al ponerlos en práctica en forma adecuada, podría beneficiar al sector destino por parte del gobierno a través de sus órganos principales de elaboración y ejecución de políticas públicas.

Una de las tareas de las políticas públicas encaminadas a mejorar el financiamiento del sector de las microempresas, consiste en obtener información de diagnóstico de financiamiento de operaciones de capital de trabajo y de inversión para ellas. Dentro de las etapas de planeación de políticas públicas es necesario contar con estadísticas confiables que conduzcan al diagnóstico, al pronóstico y a la evaluación (ANUIES, 1982:10). En el caso particular del Programa PROTEGE apoyado por una Institución Pública de Educación Superior, se está llevando a cabo el diagnóstico de todas las microempresas analizadas (ver Figura 2) lo que hace suponer que el Programa está haciendo lo correcto, según la Asociación Nacional de Universidades e Institutos de Enseñanza Superior (ANUIES).

Figura 2. Muestra De Ficha De Diagnóstico Para Microempresarios

Asistencia Microempresarial en apoyo al empleo en Baja California		GobBC GOBIERNO DEL ESTADO DE BAJA CALIFORNIA Secretaría de Desarrollo Económico	
DIAGNÓSTICO DE MICROEMPRESAS			
Folio: <input type="text"/>			
I. PERFIL DEL EMPRESARIO Y LOS EMPLEADOS			
1. Principal razón para iniciar el negocio:	2. Experiencia laboral		2.4. Ocupación anterior:
realización personal..... 1	2.1. Antes de ser microempresario era:	2.2. Adquirió la habilidad sobre el negocio mediante: <input type="checkbox"/>	2.5. Tiempo que permaneció en su trabajo anterior
estaba desempleado..... 2	empleado..... 1	escuela..... 1	2.6. Número de hijos vivos:
incrementar ingresos..... 3	microempresario..... 2	trabajo anterior..... 2	2.7. Número de dependientes económicos:
continuar con empresa..... 4	estudiante..... 3	parientes/amigos..... 3	2.8. Cuántos de ellos trabajan:
familiar..... 5	actividades en el hogar..... 4	autoaprendizaje..... 4	
tradición familiar..... 6	otro..... 5	2.3. Tiempo que le llevó aprender:	
ser su propio jefe..... 7		<input type="checkbox"/> años	
flexibilidad..... 8		<input type="checkbox"/> meses	
otra..... 9			
Especificar: <input type="checkbox"/>	Especificar: <input type="checkbox"/>		

Fuente: Tomado de la Ficha de Diagnóstico del Programa de Asistencia Microempresarial del Gobierno de Baja California.

Por otro lado, las microempresas beneficiadas con el Programa en estudio deben comprometerse a cumplir con cabalidad con la parte que les corresponda, facilitando el acceso a la información, colaborando con ideas y planteamientos de acuerdo a su experiencia laboral, de manera que exista una combinación entre el orden, la especialización y control con la visión a largo plazo del microempresario, aprovechando sus valores, la integración y compartir una visión de conjunto (Martínez, 2008:139) que promueva el Gobierno a través de sus políticas públicas.

BIBLIOGRAFÍA

Alcalá Álvarez, María del Carmen (2006). *Sistema universitario de innovación en apoyo a la microempresa marginada de la industria de alimentos en Baja California*. Consorcio de universidades mexicanas, Universidad Autónoma de Baja California, México: UABC, pp. 267.

Banco Interamericano de Desarrollo (1998). *Promoviendo Crecimiento con Equidad*. Departamento de Desarrollo Sostenible, Estados Unidos: BID, pp. 27.

Centro de Investigación, Asistencia y Docencia de la Micro y Pequeña Empresa (CIADMYPE) (2008). En: <http://feyri.tij.uabc.mx/ciadmype/Principal.html>

Coordinación Nacional para la Planeación de la Educación Superior (1982). *Información para la educación superior*. México: Asociación Nacional de Universidades e Institutos de Enseñanza Superior (ANUIES), pp. 169.

Doménech, Carlos; Machacuay, Samuel y Menjívar, Rafael (1998). *Microempresa, servicios financieros y equidad*. Costa Rica: FLACSO, pp. 122.

González Bombal, Carlos H. (2004). *Organizaciones de la sociedad civil e incidencia en políticas públicas*. Centro de Estudios de Estado y Sociedad, Universidad de San Andrés, Argentina: Libros del Zorzal, pp. 362.

Martínez Moreno, Omaira Cecilia; Alcalá Álvarez, María del Carmen y Ruiz Andrade, José Gabriel (2008). *Experiencias universitarias de acercamiento e involucramiento con las organizaciones: El liderazgo en las micro, pequeñas y medianas empresas (mipymes) como pilar estratégico fundamental en el éxito empresarial*. México: ILCSA, pp. 218.

North, Douglas (1993). *Instituciones, cambio institucional y desempeño económico*. México: Fondo de Cultura Económica.

Ordóñez Barba, Gerardo Manuel (2002). *La política social y el combate a la pobreza en México*. Centro de Investigaciones Interdisciplinarias en Ciencias y Humanidades, México: UNAM, pp. 401.

Puyana de Palacios, Alicia (2003). *Desarrollo, equidad y ciudadanía: las políticas sociales en América Latina*. México: FLACSO, pp. 352.

BIOGRAFIA

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SIMULADORES DE NEGOCIOS: APLICACIÓN A LA EVALUACIÓN DE ALUMNOS DEL NIVEL SUPERIOR EN ENTORNOS COMPETITIVOS

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RESUMEN

El objetivo de la evaluación es la medición del alumno en cuanto a que satisfaga el perfil de su profesión para poner en práctica sus conocimientos y llevar a cabo las tareas actuales propias de su disciplina. La evaluación debe considerar el desempeño en ambientes de competencia simulados.

Palabras clave: evaluación, simuladores, evaluación en entornos competitivos

INTRODUCCION

La Evaluación a Nivel Superior y El Perfil

Una de las actividades que generan mayor preocupación y dedicación en la enseñanza a nivel superior es la evaluación. Según la interpretación constructivista, la evaluación se debe realizar tomando en cuenta no solo el aprendizaje alcanzado por los alumnos, sino también las actividades de enseñanza que realiza el docente y su relación con las primeras, culminando en la reflexión y mejora desde el mismo proceso de aprendizaje (Coll y Martín, citado por Díaz-Barriga y Hernández, 2002).

¿Cuál es el objeto de la evaluación del estudiante?, las opciones son: el producto alcanzado o alumno egresado, el proceso mismo, o el progreso observado por el estudiante durante el proceso; la respuesta en definitiva es que se evalúa todo, según Kovas (1993) (citado por Guskey, 1996).

Este enfoque pareciera centrarse en el resultado del proceso en sí y de su eficacia en cuanto a la relación actividades-aprendizaje; sin embargo de manera intrínseca se encuentra la corroboración de haber alcanzado con esas actividades el objetivo previamente definido.

El conjunto de características como resultados del aprendizaje que deben alcanzar los individuos representa el perfil, el cual debe de ser establecido claramente y contener los conocimientos y habilidades suficientes e indispensables y destacar las características académico-sociales más relevantes de los alumnos en formación según el CENEVAL.

Los conocimientos en su definición más tradicional son considerados como el principal elemento en el perfil de referencia. Los conocimientos entonces se componen de conceptos, principios, procedimientos y métodos que el alumno obtiene mediante las operaciones mentales de recordar o comprender (Haladyna, Haladyna y Merino, 2004); sin embargo, este concepto se perfecciona en la actualidad para aplicarse a los egresados de la educación superior, considerándose como Conocimientos Básicos y que incluyen al mismo tiempo requerimientos de desempeño y aplicación en áreas específicas.

Es así que la definición del perfil de referencia, incluye en su sección de Conocimientos Básicos y Dominio de su disciplina los elementos de Conocimientos, habilidades, aptitudes y actitudes (requerida por los negocios).

El objetivo fundamental de la evaluación a nivel superior consiste en medir los conocimientos y habilidades necesarias para la actividad profesional del alumno o egresado.

REVISION LITERARIA

Medición de Habilidades, Aptitudes y Actitudes

Tal como lo manifiesta el CENEVAL, se espera que el egresado de la educación superior pueda desenvolverse aplicando los conocimientos del área. Ese desempeño es formado por su habilidad, entendiéndola como la capacidad de los individuos en convertir en actividades los conocimientos que posee (utilizarlos para reaccionar); aptitudes, es lograr un buen desempeño en alguna actividad (rendimiento en las tareas); y actitudes, esas características que sustenta e impulsan al individuo (personalidad).

Para la valoración de las características del egresado en las áreas económico-administrativas, es posible entonces aplicar métodos diferenciados, desde revisiones informales de entendimiento, observaciones, pruebas y exámenes e inclusive proyectos de rendimiento (Wiggins y McTighe adaptado por Tokuhamas-Espinosa, 2005).

Sin restarle importancia a los demás métodos de evaluación, enfocaré el discernimiento sobre las pruebas o exámenes el cual es el actualmente utilizado de manera estándar inclusive por Ceneval, y el método de proyectos de rendimiento.

La percepción de los exámenes de opción múltiple ha cambiado con el tiempo, encontrándose ahora sustento para la evaluación no solo de conocimientos, sino que permiten la medición de la capacidad del alumno de realizar procesos psicológicos complejos para su resolución (Moreno, Martínez y Muñiz, 2004)

Goeffrey (2004) concluye que dentro de los métodos de evaluación que si funcionan, se encuentra el de preguntas de opción múltiple, basándose en que “el dominio del conocimiento es lo más determinante en los expertos, y las pruebas de opción múltiple miden el conocimiento con gran eficiencia”.

Con el uso de sistemas informáticos, se da la posibilidad de los “test adaptivos” (Olea, Ponsoda y Prieto, 1999) sin embargo están sujetos a que haya un banco de preguntas correspondientes a las variaciones determinadas en cada caso particular.

En este caso el alumno, al resolver su examen, es cuestionado con preguntas enfocadas y derivadas de las respuestas previas que ha ido dando. Esto representa un requerimiento de previsión extrema y profunda de todas y cada una de las posibles direcciones que tomará el examen.

Aun cuando el alumno pueda ser cuestionado en base a sus propias respuestas, sigue estando en un ambiente completamente controlado por él, y en enfrentándose al examen solamente.

El método de proyectos de rendimiento, según Takuhamas-Espinosa (2004) permite que el alumno se enfrente a un ambiente real o simulado que incluye relación con otros individuos y su resultado se mide en base al logro de objetivos específicos.

La participación de mas de un alumno confrontándose a sus pares en la evaluación, representa un escenario que exigirá un nivel de desempeño esperado. Este método pudiera confundirse con el aprendizaje colaborativo, sin embargo, el objetivo no es la participación en el proyecto de rendimiento como actividad de aprendizaje dirigida, sino como herramienta de evaluación, aun cuando el proceso de aprendizaje incluye su medición misma.

La Evaluación en Ambientes Competitivos

En la actualidad la competitividad es una realidad que ocupa a las instituciones de educación superior en las áreas económico-administrativas, sus egresados compiten y competirán por el mercado laboral con los egresados de las demás instituciones.

Ante tal realidad, surgen las siguientes preguntas: ¿Es suficiente que el alumno sea capaz de aplicar sus conocimientos?; ¿Capaz? ¿Comparado con quien? En el área económico-administrativa la respuesta es: comparado con sus competidores.

Esto puede interpretarse como una evaluación discriminatoria si pensamos que no existen dos alumnos idénticos, ni con las mismas facilidades o capacidades, y se debe de adecuar hacia esas necesidades. Sin embargo, la evaluación es entorno a alcanzar el perfil de referencia y no al proceso de educación.

Santiago Hernández Ruiz (1972), considera que no es objetivo la aplicación de un patrón para medir a otra persona, sin embargo, Miriam González Pérez (2000) sugiere que no se pierda de vista la relación del estudiante con el objeto del estudio, pero que la evaluación a final de cuentas es la formulación de un juicio de valor; es decir, aun cuando cada individuo tenga características diferentes, la evaluación objetiva será desde el punto de vista del cumplimiento o incumplimiento del perfil de referencia.

Los Simuladores y Su Uso en La Educación Superior

Una opción práctica y actual es el uso de programas informáticos (software) para generar un escenario mas o menos realista del comportamiento de sistema existente.

En la actualidad el uso de los simuladores solo es en el proceso de enseñanza, y no de la evaluación. Zornoza (2006) describe el uso de simuladores como una herramienta eficaz con un enfoque constructivista en el aprendizaje, colocando al alumno en situaciones próximas a la realidad, sin exponerlo a situaciones peligrosas.

Reconoce Zornoza que si el simulador es limitado, probablemente llegue a frustrar a los alumnos por sus ganas de experimentar otras situaciones.

Por lo tanto, si no se cuentan con simuladores que ofrezcan un mayor acercamiento a la realidad, o mayor grado de profundidad, se podrían utilizar dichos simuladores para la medición de actividades acotadas.

CONCLUSION

En la educación superior de las áreas económico-administrativas se ha integrado al perfil la característica de ser generadores de cambio, cambio que será notorio solo en ambientes de competencia, cuando los resultados que se obtengan por unos sean superiores a otros.

Aun cuando la evaluación mediante las técnicas actuales proporcionan un grado de certidumbre en el cumplimiento y alcance de los perfiles de referencia en la educación superior, el uso de los simuladores como método de evaluación, puede dar la oportunidad de corroborar las habilidades, aptitudes y actitudes de los egresados para poner en práctica sus conocimientos, obteniendo resultados y posiciones diferenciadas por sus características particulares de desempeño y personalidad.

No solo se obtendría el grado de cumplimiento del perfil definido, sino que permitiría conocer la posición de cada uno de los alumnos en comparación a los demás, quienes a final de cuentas serán sus competidores en la práctica profesional.

REFERENCIAS

CENEVAL Perfil Referencial de Validez. Recuperado el 14 de Septiembre de 2008, de www.anidie.edu.mx/nueva/prv.PDF

Díaz-Barriga, F., Hernández, G. (2002). Estrategias docentes para un aprendizaje constructivista. México: McGraw-Hill

Geoffrey, Norman. (2004) Métodos para evaluar a los estudiantes: Una revisión crítica. Recuperado el 20 de septiembre de 2008, de <http://www.uag.mx/secs/metodos.pdf>

González, Miriam. (2000). Evaluación del aprendizaje en la enseñanza universitaria. Revista Pedagogía Universitaria. Vol. 5. Núm. 2. Cuba. Universidad de la Habana.

Guskey (1996). "Reporting on Student Learning: Lessons from the Past, Prescriptions for the future" in Communicating Student Learning, Chapter 3.

Haladyna, T., Haladyna, R., Merino, C., (2004). Preparación de preguntas de opción múltiple para medir el aprendizaje de los estudiantes. Recuperado el: 24 de septiembre de 2008, de: <http://www.rieoei.org/deloslectores/267Haladyna.PDF>

Hernández, Santiago. (1972). Didáctica General. México. Fernández Editores.

Moreno, R., Martínez, R., Muñoz, J., (2004). Directrices para la construcción de ítems de elección múltiple. Psicothema. vol. 16. Núm. 003. España. Universidad de Oviedo.

Olea, J., Ponsoda, V. y Prieto, G. (1999). Tests informatizados. Fundamentos y aplicaciones. Madrid: Pirámide.

Tokuhamá-Espinosa, Tracey, (2004). Evaluación del aprendizaje. Recuperado el: 20 de septiembre de 2008, de: <http://www.educacionparatodos.com/pdf/10.pdf>

Zornoza, Eduardo. (2006) Aprendizaje con Simuladores. Aplicación a las redes de comunicaciones. Recuperado el 24 de Septiembre de 2008, de: <http://ddaportal.googlepages.com/APRENDIZAJECONSIMULADORES.pdf>

BIOGRAFIA

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LAS EMPRESAS FAMILIARES Y EL PROCESO DE SUCESIÓN

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ABSTRACT

La empresa familiar conforma un ambiente propicio para adquirir hábitos, valores, actitudes y conocimientos, así como para desarrollar el espíritu emprendedor en el mundo de los negocios, ya que las empresas buscan propiciar un producto o servicio, generar un rendimiento económico, lograr el desarrollo integral de sus miembros y lograr su permanencia. La familia es el núcleo de la sociedad y, sin duda, es su institución más importante; se basa en el amor, la comprensión el apoyo, la educación, los valores el respeto y la libertad. Ante el conflicto hay que tomar decisiones y actuar en consecuencia, si lo que está en juego es la empresa, esta tiene reglas y principios que hay que respetar independientemente de sus repercusiones familiares. No hacerlo lleva consigo una afectación mayor o menor que la empresa resentirá. El fenómeno de la sucesión, se inicia desde el momento de la concepción de los hijos del fundador. De hecho, varios de ellos, antes de tener descendientes, se han imaginado que sus futuros hijos podrían dar continuidad a su negocio. La sucesión involucra a los tres subsistemas de la empresa familiar (propiedad, familia y empresa) y durante este proceso cada uno de éstos experimentará cambios importantes.

INTRODUCCIÓN

Generalmente las empresas nacen con pocos recursos, y en su generalidad con escasos recursos ya que se mueven en un ambiente de incertidumbre, ya que inician debido a la consecución de una idea, pero con una visión fuerte de lograr sus ideales, superando la mayoría de los obstáculos por el trabajo incansable de sus fundadores y el aprovechamiento de los recursos con los que disponen; es así como nacen la mayoría de las empresas familiares.

Las empresas familiares constituyen un campo nuevo, surgen como aplicaciones de expresiones y se basan en actividades profesionales, sobre experiencias subjetivas, las cuales tienen en su identidad como empresa, las mismas características que cualquier otra empresa; la diferencia es su conexión con una familia o grupo familiar que posee una influencia directa en la dirección y control de la misma.

Las empresas familiares tienen la posibilidad de sumar potencialidades, porque la familia proporciona a la empresa una entidad, una pertenencia, una fidelidad, un camino para seguir influyendo en la transformación de las estructuras sociales, ya que aporta una activa visión del mundo exterior con dificultades, crisis, competencia, pero también con trabajo, logros y éxitos.

REVISIÓN LITERARIA

Definición De Empresa Familiar

En el mundo de los negocios es muy común escuchar de las empresas familiares, de hecho se considera que esta es una de las principales fuentes de creación de empresas. La empresa familiar es aquella cuya propiedad, dirección y control de las operaciones está en manos de una familia. Sus miembros toman las decisiones básicas (estratégicas y operativas) asumiendo por completo la responsabilidad de sus acciones. (Soto Figueroa)

Una empresa familiar es aquella en la que el capital y, en su caso, la gestión y/o el gobierno están en manos de una o mas familias, que tienen la capacidad de ejercer sobre ella una influencia suficiente para controlarla, y cuya visión estratégica incluye el propósito de darle continuidad en manos de la siguiente generación familiar. (Sánchez-Crespo) Para Longenecker, Moore y Petty, “una empresa familiar se caracteriza porque los miembros de la familia participan directamente en la propiedad u operación, en su vida y funcionamiento”. También se reconoce que la empresa es un negocio familiar cuando pasa de una generación a otra. Aunque no existen datos exactos que proporcionen información precisa de la proporción que guardan las empresas familiares con las que no lo son, debido a que los censos no clasifican a las empresas como familiares y no familiares algunos autores mencionan que a nivel mundial, de 65 a 80 por ciento de las empresas son manejadas o pertenecen a una familia (Family Business Review III. 1990). De ahí, la importancia en ocuparse de este tema.

Características De Las Empresas Familiares

Aunque cada organización tiene sus propios miembros, metas y valores, se ha encontrado que es posible establecer similitudes entre las empresas familiares y las que no lo son. A continuación se mencionan algunas de ellas:

- 1º *Tienden a sobrecapitalizarse y a contraer pocas deudas (o ninguna) y suelen tener alta liquidez.* Con frecuencia sus márgenes de operación y su retorno sobre activos exceden a los de sus competidores. Los negocios familiares suelen estar económicamente subdesarrollados, en el sentido de que no son tan grandes como podrían ser.
- 2º Los negocios familiares tienen una gran ventaja estratégica, ya que no es necesario que produzcan utilidades en el corto plazo para mantener contentos a sus accionistas, por lo que se pueden orientar al largo plazo.
- 3º Las empresas familiares normalmente operan sin un sistema burocrático, por lo que las decisiones son tomadas con rapidez; así mismo, son capaces de ajustarse con prontitud a los cambios de su entorno.
- 4º Dado que en estas empresas, los subsistemas de empresa y la familia interactúan, no se suelen tomar decisiones puramente racionales que afecten a la empresa, sino que los intereses de la familia también juegan un papel importante.
- 5º Muchos negocios familiares tienden a orientarse hacia las ventas y la producción, dejando las finanzas, la mercadotecnia y la planeación en un segundo plano.

El Modelo de los Tres Círculos

Para que una empresa se considere familiar, debe existir relación entre la empresa, la familia y la propiedad. El modelo de los tres círculos de Tagiuri y Davis (1982), representa la unión que existe entre estos tres subsistemas. El desarrollo del modelo de los tres círculos permite analizar mejor la problemática de las relaciones familiares y empresariales, ya que los individuos que participan directa o indirectamente en un negocio familiar tienen intereses y puntos de vista que difieren de acuerdo con sus situaciones particulares. Por ejemplo, un miembro de la familia que trabaje en la empresa, pero que no tenga participación en la propiedad (sector 6) podría favorecer oportunidades de empleo y avance más generosas para los miembros de la familia que aquél que es, digamos, un miembro de la familia que tiene parte de la propiedad, pero que trabaje en algún otro lado (sector 4) o un empleado que no tiene intereses familiares ni en la propiedad.

Figura 1:Modelo de Tres Círculos

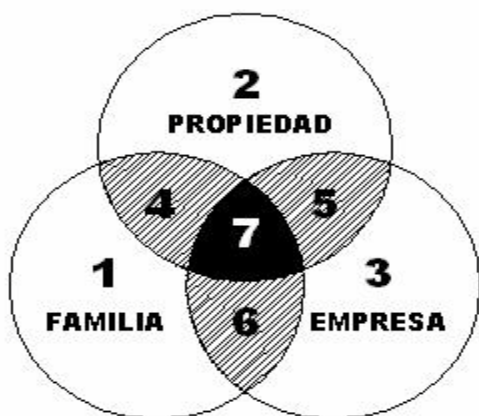


Figura 1. Modelo de tres círculos desarrollado por Renato Tagiuri y John A. Davis. Se encuentra en "Bivalent Attributes of the Family Firm", ensayo de 1982, Harvard Business School, Cambridge MA. Reimpreso en 1996, Family Business Review, vol IX num.2 pp.199-208.

El ámbito de la propiedad persigue el mantenimiento de la armonía accionaria, la gestión del patrimonio familiar con el fin de mantenerlo y aumentarlo, y el mantenimiento y mejora de la rentabilidad y la posición competitiva. Entre sus actividades críticas destacan la definición del plan estratégico de la empresa, el diseño y gestión eficaz de los órganos de gobierno accionarial y la elección de los miembros del consejo de administración, la gestión de los conflictos entre accionistas, y la selección del sucesor. El órgano de gobierno suele ser el consejo de administración.

El ámbito de la familia persigue el mantenimiento de la armonía familiar y el desarrollo personal de sus miembros. Entre sus actividades críticas destacan la definición de la misión familiar y del protocolo familiar, el diseño y gestión eficaz de los órganos de gobierno familiar, y la gestión de los conflictos familiares. El órgano de gobierno es el consejo familiar.

En tercer lugar, *el ámbito de la empresa* persigue la máxima eficacia, la mejora del clima organizacional y el continuo desarrollo organizativo. Entre sus actividades críticas destacan el diseño de la estructura organizacional, la gestión del cambio y de la innovación, y el establecimiento de la política de recursos humanos: selección, desarrollo, identificación y compromiso del personal. El órgano de gobierno es el comité de dirección.

La empresa familiar tiene tres dimensiones claramente diferenciadas pero que entre ellas puede haber una elevada probabilidad de superposición de roles.

Igualmente, el modelo de los tres círculos permite clarificar uno de los puntos centrales en la comprensión de la problemática de la empresa familiar: la existencia de diferentes grupos de interés. Una parte importante de las dificultades que aparecen en las empresas familiares están relacionadas con la existencia de diversos grupos con intereses diferentes.

Para crecer, los negocios familiares deben reconocer la necesidad de una administración profesional y el hecho de que en ocasiones los intereses familiares deben ser subordinados.

Particularidades De Las Empresas Familiares Mexicanas, Sus Fortalezas Y Debilidades.

La empresa familiar es una figura empresarial dominante en la estructura económica de nuestro país. Existen estudios en los que se señalan que las empresas familiares representan aproximadamente entre el 80 y el 90% del total de las empresas en México (Soto Figueroa). La creación de empleos y derrama

económica que generan es tan importante que no solamente se debe trabajar buscando conseguir su permanencia, sino que también se debe intensificar esfuerzos con el propósito de que logren su continuidad, ya que se consideran negocios exitosos.

El valor que se da a la familia en México es una característica cultural relevante, e incluso una de las más importantes. El apego a la familia es una conducta que suele transmitirse hacia la empresa, en la que se prefiere contratar a miembros de la familia y amigos cercanos.

Las empresas familiares mexicanas tienen atributos particulares que las distinguen de las de otros países, en gran medida debido a las características que poseen sus familias, dentro de los cuales podemos encontrar:

La Cultura Organizacional

La cultura de la empresa familiar juega un papel importante en la determinación del éxito del negocio, y dado que los líderes de las organizaciones son los que principalmente le dan forma a la cultura de estas, es importante que entiendan los efectos de sus culturas y, si lo consideran oportuno, que emprendan acciones asociadas a la cultura, las cuales deben asegurar la buena marcha de los negocios y de las familias.

El Crecimiento y la Internacionalización

La mayoría de las pequeñas y medianas empresas familiares adoptan estrategias conservadoras, por lo que son vistas como entidades estables, más que progresistas. Para las empresas familiares la innovación supone un gran riesgo, en el sentido de que ésta constituye un reto a lo establecido y tradicional, mientras que para las empresas no familiares la innovación se toma como algo menos peligroso. Respecto a la internacionalización, si bien esta significa una gran oportunidad de crecimiento también constituye un gran reto que se asocia a la incertidumbre, en virtud de que este tipo de empresas son, en su mayoría, resistentes al cambio e internacionalizarse significa reorientar su vocación y su actitud.

Fortalezas y Debilidades

Al igual que las empresas no familiares, las organizaciones familiares cuentan con fortalezas y debilidades propias e inherentes a ellas, entre las que se pueden encontrar:

Fortalezas

1º Las relaciones de afecto. Es evidente que las organizaciones funcionan mejor cuando los individuos interactúan en forma afectuosa que cuando se comportan de manera hostil. Aunque en las empresas familiares se acumulen emociones destructivas, las relaciones de afecto pueden actuar a favor de la relación empresa-familiar.

2º El compromiso. El involucramiento de los miembros de las empresas familiares con sus organizaciones es mayor que en el caso de las empresas no familiares.

3º El servicio. En las empresas familiares existe una diferencia significativa en diversos aspectos relacionados con el servicio al cliente, ya que estudios han confirmado que las empresas familiares tienen una verdadera vocación hacia el servicio, a diferencia de aquellas empresas no familiares.

4º La visión a largo plazo. Los fundadores desean que sus empresas continúen en el tiempo. Esto les exige que la planeación sea de mayor plazo, lo cual evita que los planes de largo plazo queden afectados a cambio de buenos resultados en el corto plazo.

5º La vocación. Las nuevas generaciones aprenden sobre el negocio de los padres desde la infancia. Desde pequeños escuchan comentarios sobre el negocio y lo visitan. Esto permite que desde chicos aprendan el oficio y desarrollen la vocación que la organización requiere.

6° La rapidez en la toma de decisiones. En las empresas familiares es posible tomar decisiones relevantes en poco tiempo y sin tantas formalidades.

7° La estabilidad de los ejecutivos. Es difícil que un ejecutivo de la familia sea removido, lo cual no ocurre en el caso de los ejecutivos ajenos a ella. Un director de una empresa familiar puede permanecer cinco veces más que el director de una empresa no familiar. Dada esta situación, existe mayor continuidad en los planos de la empresa, y los empleados, proveedores y clientes experimentan un mayor nivel de certidumbre.

Debilidades

1° El nepotismo. Algunos familiares están dentro de las organizaciones más por responder a una necesidad de familia que por beneficiar a la empresa.

2° El “enfudamiento”. Algunos responsables de áreas de las empresas pueden considerar sus departamentos como feudos, y actuar como si fueran de su propiedad, impidiendo así la participación de cualquier colaborador.

3° La autocracia y el paternalismo. Son fenómenos que se originan por llevar de manera inadecuada el sistema familiar al sistema de empresa, ejerciendo un estilo de liderazgo basado en el poder. Las empresas que padecen estos problemas no suelen contar con elementos participativos dado que el entorno es poco propicio para la colaboración; las organizaciones que sufren este problema rara vez logran su profesionalización.

4° La parálisis directiva y la resistencia al cambio. El director general de una empresa familiar permanece en ese cargo aproximadamente cinco veces más que el de una empresa no familiar. Ciertamente esto puede generar estabilidad, pero también puede provocar un desastre directivo.

5° La manipulación familiar. La influencia del sistema familiar en el de la empresa puede ser negativa, y es común que se presenten situaciones de chantaje que pueden afectar el desempeño de la organización. Por ejemplo, cuando la madre o esposa del dueño dispone que todos los hijos trabajen en la empresa con los mismos sueldos y privilegios, sin tener en cuenta sus capacidades y aptitudes.

6° La contratación de profesionales poco calificados. Muchas empresas no contratan a buenos ejecutivos porque no tienen los recursos necesarios. En cambio, existen otras que aunque si cuentan con la solvencia necesaria no contratan personal calificado por temor de que los miembros de la familia se vean opacados por profesionales más capaces.

7° La falsa seguridad. Algunos miembros de la empresa, por ser parte de la familia, tienen la seguridad de que no serán despedidos, independientemente de su desempeño. Esto provoca que el rendimiento baje y que los procesos se demoren demasiado.

La reflexión de estas fortalezas y debilidades permite desarrollar mecanismos para tratar de reducir las consecuencias negativas y estimulen las positivas. Su análisis genera una guía útil que sirve como alerta para evitar consecuencias indeseables.

LA SUCESIÓN EN LAS EMPRESAS FAMILIARES

El fundador de una empresa tiene en su haber muchos años de esfuerzo constante, dedicación sin límites, graves conflictos resueltos, orgullo por el crecimiento de su organización, una agenda llena de ocupaciones, sin embargo existe la pregunta de ¿cómo pedirle pensar en dejar el negocio?, no obstante, es indispensable conocer si se desea continuar aportando al patrimonio familiar con proyección a muchos años mas. Es obvio que si la sucesión del Presidente del Consejo o del Director General se ubica en su mente a los 75 años de edad o tres años antes de la fecha propuesta para el retiro, no se llevará a buen término.

Los expertos aconsejan que la sucesión se prevea diez o quince años antes de presentarse, imaginen la capacidad y experiencia que un puesto de ese nivel requiere, lo cual no se transmite en un periodo corto ni

contando con los mejores asesores. Por otro lado, esta adecuada anticipación permitirá por una parte, que el tema de la sucesión no sea motivo de rechazo para el dueño-empresario, y por otro lado, que tampoco sea la respuesta a una contingencia.

Si los dueños tienen definido un perfil específico para director u otro puesto similar, que no cubra algún candidato de la familia, pueden optar por algunos de sus ejecutivos con capacidad y ambición.

El proceso de Sucesión:

La gran mayoría de los negocios que se inician fracasan. Se estima que tan solo uno de cada tres negocios continúan después de seis años de iniciadas sus operaciones (Timmons, 2000) y las principales causas de su desaparición son los factores económicos, financieros y la inexperiencia.

Existen estudios, de que en México una gran parte de los negocios son jóvenes ya que tienen 12 años o menos. Si seguimos la tendencia, podemos inferir que muchos de estos negocios no lograran sobrevivir a largo plazo. Con este panorama desolador, todos aquellos empresarios que logran que sus organizaciones “lleguen a la adolescencia”, pueden considerarse grandes triunfadores.

Aunado a esto, aproximadamente una de cada tres empresas familiares logran pasar exitosamente a la siguiente generación, por lo que también para ellas las posibilidades de supervivencia son escasas.

La sucesión representa la verdadera prueba de fuego para las empresas familiares, así que deben enfrentarla con plena conciencia. Por desgracia, muchos empresarios no la planifican y ni siquiera eligen con tiempo a sus sucesores. En un estudio realizado por el Raymond Institute (2003), se determinó que sólo 42 por ciento de los propietarios que dejaron el negocio en los siguientes cinco años, habían elegido a su sucesor. Esta situación es absurda, ya que en muchos de los casos la elección del nuevo líder se hace de un modo poco planeado y en forma precipitada.

La sucesión debe ser planificada para evitar improvisaciones de última hora. Ésta se define como “el cambio de mando, tanto en lo administrativo como en la propiedad, dentro de una empresa por parte del fundador a su sucesor.” (Guinjoan, M., Llauradó, J. El empresario familiar y su plan de sucesión). Y, la mayoría de los empresarios familiares esperan que la empresa por la que tanto han trabajado y luchado siga en manos de su familia anhelando que el sucesor un familiar, especialmente un hijo o hija.

El reemplazo de un gran líder familiar no debe ser una cuestión ni de azar ni de democracia. El sucedido tiene todo el poder en sus manos para elegir meticulosamente quien lo reemplace. La sucesión no es un proceso que debe iniciarse apenas el líder sienta la necesidad y la voluntad de retirarse, o peor aún cuando algún otro miembro de la familia decida que ya es tiempo de que el líder se retire. La sucesión debe iniciarse paso a paso con suficiente tiempo antes del verdadero retiro. Además, se requiere el compromiso y la dedicación de los sucesores cuando reciban la dirección de la empresa. En la medida en que el proceso de sucesión sea bien planeado y ejecutado, será menos traumático y más beneficioso para la empresa.

Etapas Del Proceso De Sucesión

La tarea de preparar a los miembros de la familia para que tengan una carrera dentro de la empresa y, finalmente, ocupen su liderazgo, es difícil y a veces frustrante. Los hijos o hijas no suelen asumir el liderazgo de un negocio familiar en una fecha específica. En ocasiones existe un largo un proceso de preparación y transición, que generalmente se extiende por años. El proceso de “entregar la estafeta” de padre a hijo en un negocio familiar atraviesa por siete etapas, las que a continuación se mencionan:

- I.** Etapa Previa. En esta etapa, un sucesor potencial –llámese hijo o hija del fundador- se familiariza con el negocio como parte de su crecimiento. Esta persona acostumbra acompañar al fundador a la oficina, tienda o almacén, o juega con el equipo relacionado con el negocio. No hay planeación formal en su preparación para que ingrese al negocio en esta etapa temprana. Simplemente forma la base para las etapas más deliberadas del proceso que tienen lugar en años posteriores.
- II.** Etapa Introdutoria. Aquí se incluyen experiencias que ocurren antes de que el sucesor tenga la suficiente edad para comenzar a trabajar de manera parcial en el negocio familiar. Los miembros de la familia presenta al sucesor potencial con ciertas personas asociadas directa o indirectamente a la compañía y otros aspectos del negocio.
- III.** Etapa Introdutoria Funcional. En esta etapa, el sucesor potencial comienza a funcionar como empleado de medio tiempo, con frecuencia durante las vacaciones o después de salir de la escuela. El sucesor potencial se hace amigo de los individuos claves de la empresa. Este trabajo frecuentemente comienza en el almacén o en la oficina, y puede significar tareas en diversas áreas funcionales de la empresa. Esta etapa incluye la educación formal del sucesor, así como la experiencia que pudiera obtener en otras organizaciones.
- IV.** Etapa Funcional. Esta fase inicia cuando el sucesor potencial comienza en un empleo de tiempo completo, que suele seguir a la conclusión de su educación formal. Antes de pasar a un puesto gerencial, el hijo o hija puede trabajar como contador, vendedor o empleado de inventarios, lo que traerá consigo la experiencia y conocimiento de las actividades llevadas a cabo en estos puestos.
- V.** Etapa Funcional Avanzada. En la medida en que el sucesor potencial asume tareas de supervisión, entra en esta etapa. Los puestos gerenciales en esta etapa significan dirigir el trabajo de otros, pero no manejar toda la empresa.
- VI.** Etapa Temprana de Sucesión. Aquí se nombra al hijo o hija del fundador, presidente o director general del negocio. Como cabeza del negocio se supone que ejerce la dirección global, pero el padre todavía está tras bambalinas. El papel del liderazgo no se transfiere de manera tan fácil o absoluta como el puesto de liderazgo. El sucesor todavía no ha dominado necesariamente las complejidades de su puesto, y el predecesor puede estar renuente a ceder toda la toma de decisiones.
- VII.** Etapa Madura de Sucesión. Se alcanza esta última etapa, cuando el proceso de transición ha terminado. El sucesor es el líder de hecho, lo mismo que de nombre. En algunos casos, esto no ocurre sino hasta la muerte del predecesor. En el mejor de los escenarios, esta etapa comienza dos o tres años después de que el sucesor asume el puesto de líder.

El Plan de Sucesión

El proceso de sucesión en las empresas familiares suele estar impregnado de muchas emociones que pueden provocar enfrentamientos de la empresa y en la familia, lo cual puede propiciar la creación de bandos o grupos. Para mantener la unidad, es importante realizar un plan detallado de sucesión en el que participen en distintos niveles las personas involucradas. Al ubicar el proceso de sucesión dentro del mando de un plan donde posiblemente varios elementos han participado en él, no solo se gana legitimidad sino también la aceptación de las personas que se hallan involucradas en el proceso. Con esto no se quiere decir que el proceso de planeación sea democrático, sino simplemente que si se realiza en forma adecuada y se invita a que otros opinen, éste tendrá mayor aceptación.

Un plan de sucesión debe contemplar los siguientes puntos para que realmente pueda incrementar sus posibilidades de éxito.

- a) **Compromiso de la dirección hacia el plan**
Los directores de las empresas familiares que por lo general son sus propietarios y fundadores suele estar enfocados en las acciones, gracias a ello sus empresas prosperan. Su preocupación fundamental radica en el día a día, y para muchos no tiene sentido invertir su tiempo en la elaboración de planes que quizá nunca lleguen a realizarse.
- b) **Diseño de la organización deseada**
Quizás la organización haya llevado a cabo planeación estratégica y tenga bastante claro hacia se dirige y cómo lo hace, lo cual aporta información valiosa para elaborar el plan de sucesión. Si no cuenta con este elemento es necesario plantear los diversos caminos que dicha empresa puede seguir. Una vez trazados éstos, se puede diseñar finalmente el futuro deseado. De igual manera, este diseño puede ayudar a precisar los perfiles de los futuros sucesores.
- c) **Definición de los perfiles de los futuros directores**
Con la información recabada en el punto anterior, se puede clarificar el perfil que el sucesor debe tener. En el caso de empresas familiares, suele existir cierta flexibilidad en dicho perfil, al grado que los posibles sucesores pueden ser moldeados para que se acerquen el perfil deseado. Sin embargo, sería peligroso para la empresa modificar el perfil y adoptar uno que no corresponda a los intereses de ésta, sólo para que el candidato de la familia se quede en el puesto.
- d) **Entrenamiento de los futuros sucesores**
Conociendo las habilidades actuales de los sucesores y sabiendo cuáles son las que se deben tener al momento de asumir el mando, es posible trazar un plan que incluya tomar cursos, realizar estudios de postgrado, desarrollarse en diversos puestos y llevar a cabo múltiples actividades. Así, al final del periodo de entrenamiento, los sucesores se encontrarán a la altura de los puestos que van a asumir.
- e) **Transferencia dosificada del mando**
Puede llegar a existir un período en el que ambas generaciones compartan las decisiones en torno a la organización, aunque formalmente sólo uno de ellos sea el que ostente el cargo de director general. El cambio de estafeta debe ser de manera gradual, ya que es el control de la dirección de la empresa el que se está entregando. Ésta es una fase complicada, pues genera tensiones entre todos aquellos que se relacionan de alguna manera con la empresa. Por ello, esta fase debe contemplar un plan de comunicación que aclare el panorama de todos los involucrados con la compañía, especialmente de los trabajadores, los accionistas, los clientes y los proveedores.
- f) **Culminación del proceso**
No se debe cantar victoria hasta concluir con éxito el proceso de sucesión y éste, muchas veces no termina el día en que el fundador “entrega las llaves”. Hay ocasiones en que todo parece controlado y sobrevienen problemas que hacen fracasar la sucesión. Uno de los ejemplos más comunes es el regreso del fundador, quien por no sentirse bien fuera de la compañía en la que ha trabajado toda su vida, desea regresar, afectando todo el proceso. Por otro lado, también el sucesor puede experimentar algunos problemas de adaptación ante la nueva responsabilidad, produciéndose así cambios de última hora.

¿En Quién Debe Recaer La Elaboración Del Plan De Sucesión?

Según Price Waterhouse sólo el 25% de las empresas familiares realizan una planificación de la sucesión por escrito y el 41% no lo hacen de ningún modo. Estos datos, son bastante elocuentes. Los líderes que se mantienen en la dirección justifican retrasar la sucesión por diferentes tipos de temores: a quedarse sin ingresos para vivir, a quedarse sin ninguna actividad que realizar, a perder su status social, a que los hijos hundan la empresa por no estar preparados o a que se produzca un enfrentamiento entre ellos y sus hijos. Sin embargo, estos temores son muchas veces el reflejo de su resistencia para retirarse.

El proceso de sucesión en las empresas familiares suele estar impregnado de muchas emociones que pueden provocar enfrentamientos en la empresa y en la familia, lo cual propicia la creación de bandos o grupos. Independientemente del órgano que gobierne en la empresa y para mantener la unidad tanto en la empresa como en la familia, es importante realizar un plan detallado de sucesión donde participen en distintos niveles las personas involucradas. Al ubicar el proceso de sucesión dentro del marco de un plan donde posiblemente varios elementos han participado, no sólo se gana legitimidad sino también la aceptación de las personas que se hallan involucradas en el proceso.

Si dentro de la organización existe un órgano de gobierno “formal”, (llámese asamblea de accionistas o consejo de administración) este será el encargado de formular, revisar, aprobar y ejecutar el plan de sucesión. En cambio, si la empresa es manejada por una sola persona, es conveniente que se cree el consejo familiar, para que sea éste y no el propietario únicamente, quien elabore y lleve a cabo dicho plan.

Como ya se menciono anteriormente, con esto no se sugiere que el proceso de planeación sea democrático, sino simplemente que se realice en forma adecuada y si se invita a que otros opinen, éste tendrá mayor aceptación.

Dificultades Que Pueden Aparecer Durante El Proceso De Sucesión

El proceso de sucesión está muy ligado al adecuado funcionamiento de los tres ámbitos que se han ido señalando como los más relevantes en la comprensión de la empresa familiar: propiedad, familia y empresa. Cualquier deficiencia en alguno de estos ámbitos repercute negativamente en el proceso de sucesión.

Si dentro de la empresa familiar, la interrelación de los tres círculos (de propiedad, familia y empresa) está siendo empañada por algún tipo de gestión ineficiente, la vulnerabilidad de la empresa y el riesgo de que se presenten problemas en la sucesión son mucho mayor.

Los problemas familiares, accionariales, estratégicos u organizativos que están latentes sin manifestarse suelen emerger en instantes críticos como la sucesión. Los problemas familiares y/o accionariales suelen aparecer con mayor fuerza cuando hay una elevada dispersión de la propiedad sin que exista una persona que sea mayoritaria, ni la armonía y estructura de gobierno familiar necesarias para evitar tensiones. Los problemas estratégicos u organizativos surgen o se agravan en un proceso de sucesión. El posible enfrentamiento entre los hijos y el equipo de confianza del padre o las resistencias de este equipo para aceptar la llegada de los hijos también se producen en bastantes ocasiones. En momentos en que se produce la ausencia del líder o una transición en el liderazgo es bastante probable que exploten estas tensiones reprimidas.

Asimismo, el deseo de mantener la continuidad familiar y la preferencia por elegir un familiar como sucesor puede conducir en algunos casos que la elección del sucesor no sea la más adecuada. O, en otros

casos, la dificultad del fundador para no crear afrentas comparativas puede retrasar permanentemente la decisión final sobre el sucesor o promover una codirección de hecho con hijos o familiares de diferente preparación y predisposición, pero similar retribución y/o participación accionaria.

Por otra parte, y como ya se ha mencionado, los principales problemas relacionados con la sucesión de una empresa familiar se deben tanto a las resistencias de los fundadores a su retirada, a ceder su poder y autoridad y, por consiguiente, a preparar la planificación de su marcha, como a los problemas de gestionar la sucesión. La elevada necesidad de control, autonomía y poder que suelen tener los fundadores (en menor medida los fundadores que han compartido con otros familiares la propiedad y la gestión) y la dependencia psicológica respecto a su actividad y posición para satisfacer sus necesidades de seguridad y autoestima no hacen más que retrasar la decisión del traspaso del bastón de mando.

Sin embargo, cuando el proceso de transferir el mando se va asumiendo progresivamente, el fundador va desarrollando una idea más positiva de la situación, al entender que a través de los sucesores se asegura la continuidad de la empresa y del espíritu familiar. De igual manera, su adaptación al nuevo estado y la evolución de su salida también ayudan a facilitar este cambio.

La resistencia a la sucesión se produce, especialmente, cuando el líder es el propietario único y gerente de la empresa y, sobretodo, si además ha sido el fundador de la misma lo cual sucede en una gran parte de las empresas familiares.

CONCLUSIONES

Los principales problemas relacionados con la sucesión de una empresa familiar se deben tanto a las resistencias de los fundadores a su retirada, a ceder su poder y autoridad y, por consiguiente, a preparar la planificación de su marcha, como a los problemas de gestionar la sucesión.

La sucesión involucra a los tres subsistemas de la empresa familiar (propiedad, familia y empresa) y durante este proceso cada uno de éstos experimentará cambios importantes.

Con relación a la familia, la sucesión, en ocasiones, puede ser traumática, comenzando por el sucedido, quien deberá buscar otras ocupaciones y motivaciones en la vida.

Cuando el fundador de un negocio está preparando a su hijo o hija para que se haga cargo de la empresa, deben considerarse ciertos aspectos que, de no hacerlo, en algún momento llevarán al sucesor a no cumplir con las perspectivas que se tenían sobre ellos. Estos aspectos son: *las expectativas de los hijos, las relaciones de los hijos con la empresa, las fases vitales padre-hijo, el estilo de liderazgo del sucedido.*

La continuidad de la empresa familiar también depende, de educar adecuadamente a los sucesores, principalmente en aquellos valores y actitudes, es fundamental promover la transmisión de los valores empresariales a los hijos así como ilusionarlos con la empresa familiar y con su futura involucración en ella.

Es fundamental que se identifique en que etapa se encuentran los protagonistas de la sucesión, para que puedan llegar a conocer, mutuamente, sus prioridades en cuanto a sus vidas e identificar sus intereses en relación con el futuro del negocio.

Otro aspecto que no debe echarse en saco roto al momento de planear la sucesión y que de no hacerlo pudiera añadirse un grado de complejidad y tensión al proceso de retiro, es el estilo que en ocasiones adoptan los fundadores.

REFERENCIAS

Amat, Joan María (2000), “LA CONTINUIDAD DE LA EMPRESA FAMILIAR”
Ediciones Gestión 2000. Barcelona. 2ª Edición.

Belausteguigoitia Rius, Imanol (2004), “EMPRESAS FAMILIARES. Su dinámica, equilibrio y consolidación”
Mc Graw Hill. México. 1ª Edición.

Guinjoan, M. y Llauradó, J. (2000). “El Empresario Familiar y su Plan de Sucesión”
Editorial Díaz de Santos. España. 2ª Edición.

Kajihara, Kiyo (1998). “Las Empresas Familiares: La Realidad Empresarial Mexicana”
Tesina ITAM, México, DF.

Lansberg, Iván (1988), “The Succession Conspiracy”
Family Business Review. Vol. I N°2

Rodríguez Valencia, Joaquín (2002) “Administración de Pequeñas y Medianas Empresas”
Thomson Editores. México. 5ª Edición.

Sanchez-Crespo, Antonio J. (2004). Empresa Familiar: Guía básica para empresarios y directivos, La empresa Familiar Hoy.

Sonnenfeld, J. A. y Spence P. L. (1988), “The Parting Patriarch of a Family Firm”
Family Business Review. Vol. II N°4

Soto Figueroa Mario, Conferencia “Empresas Familiares”
UABC-EIN-GV, 11 de Octubre de 2007.

<http://www.gestiopolis.com/recursos/documentos/fulldocs/emp1/emprfamestra.htm>
La empresa familiar desde un punto de vista estratégico

<http://www.dinero.com:8080/empresasfamiliares/default.asp?id=18112003164148.htm>
Retrasar innecesariamente la sucesión

<http://www.dinero.com:8080/empresasfamiliares/default.asp?id=2612004103430.htm>
La sucesión es la función más importante de un líder familiar

http://www.contactopyme.gob.mx/semanapyme/memorias/consultoria_grupal.ppt-2
Consultoría Grupal: El secreto de trabajar juntos

ESTRATEGIAS DE ADMINISTRACIÓN DE RECURSOS HIDROLÓGICOS: SU IMPORTANCIA BINACIONAL

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RESUMEN

Este estudio analiza la administración de los recursos hidrológicos binacionales en la frontera de Estados Unidos y México. El propósito fundamental de ésta investigación fue identificar las perspectivas sobre las políticas y prácticas que influyen la habilidad de los organismos internacionales de México y Estados Unidos para proveer agua para beber de acuerdo a los estándares internacionales en la frontera de Ciudad Juárez, México y El Paso, Estados Unidos. Mientras las agencias gubernamentales se han enfocado en el problema de aumentar el acceso de millones de gente al agua para consumo humano, en algunas partes urbanas de este mundo desarrollado se ha experimentado un crecimiento sin precedentes en población e ingreso. A medida que las ciudades crecen, los retos también se incrementan. Esta investigación intenta direccionar la pregunta de investigación de cómo debería ser un sistema de suministro de agua eficiente, sostenible y productivo que permita el crecimiento. Ofrecemos un marco teórico que permite cubrir los vacíos identificados en el análisis. La teoría es aplicada a desarrollar un modelo y simular el estado del suministro del agua en estas ciudades fronterizas. Los resultados cuantitativos de la investigación permiten analizar a mayor profundidad el conflicto del agua con relación a las tensiones económicas y diplomáticas.

INTRODUCCIÓN

Para el año 2050, dos billones de personas más vivirán en áreas urbanas de las que vivían en el año 2000. De acuerdo a las Naciones Unidas (2001), una gran parte de este crecimiento se presentará en el mundo desarrollado. Entre los más grandes retos asociados con el crecimiento, está el de proporcionar agua limpia y segura a un precio razonable. Esta investigación ofrece un modelo innovador que permita analizar y establecer políticas que direccionen la inminente crisis del agua en las ciudades desarrolladas del mundo. El consenso global sobre la necesidad de proveer acceso universal a los servicios básicos a toda la humanidad fueron consagrados en las Metas del Desarrollo del Milenio de las Naciones Unidas. De acuerdo con la Organización Mundial de la Salud en el 2004, más de un billón de gente alrededor del mundo no tenía acceso a agua limpia y casi dos billones a agua potable.

Incluso mientras las agencias para el desarrollo se han enfocado en el problema de incrementar el acceso a agua segura para beber para millones de gente, las áreas urbanas del mundo desarrollado han experimentado un crecimiento sin precedentes en población e ingreso. Las ciudades existen, crecen o declinan a través de un sinnúmero de decisiones individuales y múltiples decisiones de grupo. Lo que hace a una ciudad única es la concentración espacial. A causa de ésta concentración espacial de población y actividades económicas, las ciudades tienen problemas especiales. Una ciudad se organiza para resolver sus problemas, para obtener el flujo de recursos en cantidad suficiente para mantener su organización o crecer.

Dentro de las ciudades existen individuos y grupos que tienen como función resolver estos problemas. Para existir la ciudad debe tomar materiales y energía de su medio ambiente, el cual es siempre un lugar incierto. Los recursos hidrológicos sirven para el propósito de que la ciudad continúe su existencia proporcionando agua a sus habitantes, industria, comercio e instituciones. Los sistemas de administración

del agua sirven para elaborar los planes de manejo de agua o elaborar planes maestros de agua potable, alcantarillado y saneamiento. Los recursos hidrológicos en la región Paso del Norte, esto es, la frontera entre Ciudad Juárez, México y El Paso, Estados Unidos, se encuentran conformados por los Bolsones del Hueco y Mesilla, así como por el Río Bravo y el Río Grande. Estas fuentes de aguas subterráneas y superficiales son compartidas por ambos países y por los estados de Texas, Nuevo México y Chihuahua.

La distribución de las aguas en esta región ha sido factor de controversia debido a la inexistencia de una planeación regional para un buen manejo de las aguas de los mantos freáticos y de las aguas superficiales. A lo largo de la historia de la región Paso del Norte, una serie de eventos en la evolución de la gestión del agua por parte de México y Estados Unidos se han dado a través de acuerdos, tratados y convenios en los últimos 150 años, iniciando con el Tratado de Guadalupe Hidalgo y finalizando, hasta nuestros días con el Programa Ambiental Frontera 2012.

REVISIÓN DE LITERATURA

El análisis de los problemas del agua y los conflictos basados en una escala global son relativamente escasos. La mayoría de las investigaciones son regionales y los resultados surgen de casos de estudio. Muchos de los estudios se concentran en el análisis de los sistemas de agua entre países del Medio Este. El desarrollo sostenible confronta a la sociedad en dos problemas fundamentales. El primero es alcanzar las características sociales deseables. Un ejemplo de ello, es la provisión de agua para riego y consumo humano. El segundo problema es la sustentabilidad. Este es el problema de lograr satisfacer las necesidades en el largo plazo a pesar de que las condiciones cambien. En el caso de la sociedad mundial, esto incluye cambios en el medio ambiente, la disponibilidad de recursos. Los dos problemas básicos, alcanzar los objetivos de la sociedad y sostenerlos, son interdependientes. Los esfuerzos para la sustentabilidad dentro de las ciudades, establecen barreras para el desarrollo. El problema es que entre los retos del corto plazo y el largo plazo existe una línea muy delgada que la mayoría de las veces no son congruentes. Wallerstein (1991), llamó a este tipo de situación una contradicción.

Una ciudad puede ser descrita de varias maneras. Una descripción adecuada para tratar con el agua como un servicio básico podría ser que una sociedad sea considerada como un sistema económico la cual tiene un sistema especializado de elementos controlando el consumo de agua y la salida de aguas residuales; sin embargo tales elementos son más que económicos. Considerando que estos elementos se encuadran en los elementos de la ciudad y un medio ambiente no económico, se debe considerar también, el carácter ecológico. El comportamiento del sistema socioeconómico y los sistemas ecológicos, por ejemplo, su comportamiento dinámico, tienen mucho en común. Los sistemas socioeconómicos y los ecológicos son flujos abiertos de materia y energía, tienen una estructura jerárquica y ambos tipos de estructuras de sistemas es creada y mantenida a través de la disipación de energía disponible (Giampietro, 1997).

El comportamiento de tales sistemas es caracterizado por el surgimiento de nuevas estructuras y procesos. Dicho comportamiento del sistema puede ser a veces determinístico, a veces determinístico sin variabilidad estocástica y a veces impredecible y sujeto a cambios repentinos, que pueden llevar a una catástrofe. Catástrofe, en el estricto sentido de la palabra como es usada en la teoría de la catástrofe, se refiere a un cambio discontinuo en algunos sistemas de variables en respuesta a cambios continuos en otras variables. La teoría del Caos ha mostrado que tales discontinuidades son impredecibles, sin restricciones. De acuerdo con Simmon (1990), las implicaciones de la teoría del Caos para los sistemas económicos y ecológicos “ha empezado duramente a ser digerida”. Tales sistemas han sido llamados “sistemas disipados, auto organizados” (Kay, 1999), o simplemente sistemas complejos (Wicken, 1986).

El agua como un servicio es utilizado de diferentes maneras en las ciudades y es necesaria para el desarrollo económico de la ciudad. Económicamente, establecer estrategias de administración de la demanda ayuda a que las demandas de agua sean alcanzadas. Tales estrategias sirven para el desarrollo económico de la ciudad. A la vez, estas estrategias reducen el uso del agua y el uso de otros recursos. La reducción en el uso del agua reduce el impacto de la ciudad sobre los recursos naturales, permitiendo alcanzar la sustentabilidad. Debido a que la escasez de agua restringe el desarrollo económico y social a medida que la población mundial crece, este es probablemente la base de un conflicto entre países, cuando ellos comparten el recurso común como es el agua.

A pesar de la reciente cooperación en materia económica, con la firma del tratado de libre comercio (TLC), Los Estados Unidos y México tienen dificultades sobre el Río Bravo. El Río Bravo suministra agua tanto a agricultores de Texas y varios estados en México. Ambas partes estuvieron de acuerdo en compartir el agua en el Tratado de Aguas firmado en 1944. La frontera norte de México ha consolidado su posición estratégica para la producción destinada principalmente al mercado de los Estados Unidos; por esta razón se incrementa la inversión extranjera, los sistemas de transporte se amplían y aumenta el comercio entre ambas naciones.

La Región Paso del Norte se ha convertido a lo largo de los últimos cincuenta años en una de las regiones fronterizas más importantes de Estados Unidos y México. El proceso de establecimiento de maquiladoras y el impulso de proyectos agrícolas de riego ha sido el eje dinamizador de la región al grado de que se ha incrementado considerablemente el movimiento transfronterizo de personas, bienes y servicios dando lugar a una transformación de los recursos naturales y del medio ambiente. La vecindad entre dos países, tres estados y el compartir fuentes de aguas superficiales y subterráneas han motivado a las diferentes agencias e instituciones gubernamentales a llevar a cabo estudios que sugieren un manejo más adecuado y equitativo de los recursos hidrológicos en la región debido al rápido agotamiento de los mismos.

El incremento en la actividad comercial aumenta el deterioro del medio ambiente; es por esto que un acuerdo ambiental entre los dos países fue incluido con el propósito de salvaguardar el ambiente y los recursos naturales. La Región Paso del Norte se ubica en el área comprendida por el municipio de Ciudad Juárez en México y los condados de Dona Ana, Nuevo México y El Paso, Texas en Estados Unidos, así como sus comunidades rurales.

La Región Paso del Norte se caracteriza por contar con un clima árido y la precipitación pluvial anual aproximada de 200 mm contribuye poco a los escurrimientos superficiales y a la recarga de los acuíferos del área. La población de esta región es de aproximadamente 2,100,000 habitantes y el mayor porcentaje se encuentra en Ciudad Juárez, Las Cruces y El Paso. En Ciudad Juárez radican aproximadamente 1,300,000 habitantes de acuerdo al último censo del INEGI (2005). Las fuentes de abastecimiento del agua en la región son el río Bravo/Grande y los mantos acuíferos del Bolsón del Hueco y el Bolsón de Mesilla. Ciudad Juárez depende en su totalidad del agua del Bolsón del Hueco para usos municipales y agrícolas. La ciudad de Las Cruces obtiene el 93% del agua del Bolsón de Mesilla y un 7% del acuífero Jornada del Muerto, ubicado al norte de la ciudad. La ciudad de El Paso se surte del 47% del agua del Bolsón del Hueco y 20% del Bolsón de Mesilla, el restante 33% proviene del Río Bravo.

METODOLOGÍA

Las investigaciones que analizan los conflictos con el agua se han centrado en un análisis cualitativo de casos de estudio siguiendo los siguientes dos modelos: 1) analizar las relaciones políticas entre los países que comparten el recurso 2) Dar posibles soluciones a la escasez. Las investigaciones previas han sido descriptivas y limitadas a trabajos comparativos y el análisis de los datos no se hace a gran escala. Esto nos indica la necesidad de una evaluación más comprensiva de la relación entre la posibilidad de conflicto

y compartir un recurso natural como lo es el agua. De esta manera, se presenta el modelo empleado, la operacionalización de las variables y el método implantado.

La medición del modelo es la siguiente:

Conflicto = C + Número + Cantidad de Recursos compartidos + Población + Vínculos económicos.

Donde:

Conflicto = al nivel de conflicto entre los países que comparten el suministro de agua;

C = Constante;

Número = Número de estados que comparten el suministro de agua;

Cantidad de Recursos compartidos = al porcentaje del área de ubicación del recurso;

Población = Cantidad de habitantes por estado que comparten el recurso

Vínculos económicos = La dependencia económica que una región tiene sobre la otra en términos de comercio.

La variable dependiente:

Conflicto: Tanto violento o no violento dependiendo de su intensidad.

La variable tiene tres valores básicos: (0)paz, (1) tensiones diplomáticas y (2) tensiones económicas. La variable fue medida analizando la posición de la política exterior de cada país hacia los estados vecinos que comparten el agua. Si uno de los valores diferentes a la paz es encontrado, un análisis de la situación sería llevado a cabo. Si el agua no es encontrada como una causa de conflicto, el valor de paz (0) será aplicado.

Las variables independientes:

Número, indicando los estados compartiendo el recurso. Para el presente análisis es el número a utilizar, ya que involucra a Texas y Nuevo México por Estados Unidos y Chihuahua por el lado de México.

La hipótesis planteada fue la siguiente:

H1: A medida que el número de estados compartiendo el recurso del agua es mayor, la probabilidad de un comportamiento conflictivo se incrementa.

El número de estados no ha sido utilizado en investigaciones previas para determinar el nivel de conflicto.

Cantidad de recursos compartidos,

H2: A medida que un estado posee una mayor área geográfica de la ubicación del recurso del agua, una mayor posibilidad de generar un conflicto por ese estado se incrementa.

Población,

H3: A mayor cantidad de población, la posibilidad de generar un conflicto se incrementa.

Vínculos económicos,

H4: A mayor dependencia económica de un estado, la posibilidad de generación de un conflicto disminuye.

Los estados que tienen economías más integradas, son menos propensos a tener relaciones conflictivas. La razón detrás de este argumento es que generar un conflicto con un estado o país del que se tiene una dependencia económica, afectaría a la propia economía.

RESULTADOS

La H1 establece: A medida que el número de estados compartiendo el recurso del agua es mayor, la probabilidad de un comportamiento conflictivo se incrementa.

El número de estados no ha sido utilizado como una posible causa o incremento en el conflicto en investigaciones anteriores. Agregando número a la ecuación, la teoría de Waltz (1979) sobre el número de estados es una razón para analizar las relaciones de estado. Con el incremento en autores viene el incremento en la incertidumbre. El costo será basado en el número de estados que existen. De esta manera, Waltz establece:

$$\frac{(n-1)n}{2}$$

Conforme el número de estados se incrementa, el número total de reacciones y complicaciones se acelera. Este incremento en número de acuerdo a Waltz (1979) podría incrementar la probabilidad de conflicto.

El liberalismo hipotetiza que a medida que la interdependencia económica aumenta debe haber una relación negativa hacia el conflicto. Considerando que la dependencia que cada país tiene con el otro, compartir los suministros de agua debe tener una carga directa en la posibilidad de conflicto, se planteó la siguiente hipótesis:

H4: A mayor dependencia económica de un estado, la posibilidad de generación de un conflicto disminuye.

Las economías que están mas integradas tienen una menor probabilidad de tener relaciones conflictivas. La razón detrás de tal argumento es que atacar una economía de la cual ésta depende, estaría dañando su propia economía. El actor racional debe lo ilógico de atacar a un socio comercial. La dependencia económica es analizada a través de las importaciones y exportaciones de cada uno de los estados que comparten el suministro de agua. De esta manera, se crea un porcentaje regional. El total de las exportaciones y las importaciones de cada estado son partidas para un análisis estado a estado. Encontrando el porcentaje que las importaciones y exportaciones regionales corresponden al total de comercio del país, el nivel de interdependencia se debe volver evidente.

La variable independiente conflicto, no es dividida de igual manera entre sus valores. Como se podrá ver en algunas variables del modelo, la distribución puede causar algún error de información, lo cual es discutido a medida que se presentan las variables. La variable dependiente fue separada en tres valores: (0) paz, (1) tensión diplomática y (2) tensión económica.

Tabla 1: Distribucion de frecuencias de la variable conflicto

Variable conflicto	Porcentaje
0- Paz	87%
1- Tensión diplomática	3%
2- Tensión económica	10%

De acuerdo con los realistas, entre más pequeño es el número de estados, es mejor la oportunidad de tener una relación que este llena de paz. El número optimo de estados puede variar desde la perspectiva realista desde dos países, como lo describe Waltz, hasta cinco países como lo discute Kissinger. No existe un argumento solido para escoger un número, la información no soporta la teoría.

DISCUSIÓN

Los tratados actúan como una guía para establecer acción. Las acciones de los gobiernos son limitadas si el status quo que es mantenido por el status quo, creado y mantenido por los regímenes, es mejor que lo desconocido. Los tratados necesitan ser controlados para el modelo. La existencia de un tratado podría explicar la ausencia de un conflicto. Si el estado viola continuamente los tratados, su reputación internacional disminuirá. Desde que ha quedado plenamente claro que no existe un país que pueda ser auto suficiente, la reputación de los países es un factor importante en su sobrevivencia.

Otro tipo de variables a ser controladas para futuras investigaciones es el nivel de población el área de los mantos acuíferos y la posibilidad de otros recursos de agua para la región. Los niveles de población, si se mantienen creciendo en la misma magnitud, afectará las reservas comprendidas. La influencia de la oferta y la demanda ha sido una guía por siglos. La cantidad de agua utilizable que se tiene disponible en una región, es crucial para entender su dependencia.

Una limitación importante de este estudio, lo representa el tiempo en que se realizó dicha investigación. Este fue un primer intento por analizar los temas del conflicto del agua. Para mejor analizar la variable de tensión económica un análisis de series de tiempo, o un mínimo de diez años, necesita ser realizado. Independientemente de las limitaciones, este estudio ha realizado contribuciones importantes para entender la relación entre el conflicto y el agua. Siendo uno de los primeros estudios regionales sobre el tema, este análisis abre las puertas para futuros análisis.

REFERENCIAS

Giampietro, M. (1997). "Using Hierarchy Theory to Explore the Concept of Sustainable Development", *Futures*, 26 (6), pp. 616-625.

Kay, J. (1999). "An Ecosystem approach for sustainability: addressing the challenge for complexity", *Futures*, 31: pp. 721-742.

Simmon, H. (1990). "Prediction and prescriptions in systems modeling", *Operations Research*, 38: pp. 7-14.

Wallerstein, I. (1991). "Unthinking Social Science", the Limits of nineteenth century paradigms", Polite Press.

Waltz, K. (1979). "Theory of International Politics", Reading, MA: Addison-Wesley.

Wicken, J. (1986). "Evolutionary self-organization and entropic dissipation in biological and economical systems", *Journal of Sociological and Biological Structures*, 9: pp. 261-273.

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DESARROLLO SOSTENIBLE DE LAS MICROINDUSTRIAS EN MEXICALI, BAJA CALIFORNIA

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RESUMEN

¿Qué es lo que le pasa a la microindustria? Existen apoyos para que la gente emprendedora inicie su propio negocio. Hay quienes piensan que un plan de negocios es la solución o en la utilización de las tecnologías o en la asesoría técnica, y...por supuesto hay quienes le culpan de los fracasos a la capacitación. Hace falta hacer más para que den buen resultado y tengan un desarrollo sostenible las microindustrias, éstas, regularmente inician con la familia. Las *micro industrias*, son las que corren mayor riesgo y están mas desprotegidas; para ellas es mas difícil mantenerse en economía informal. Son alarmantes las cifras de las empresas que cierran en el primer año a pesar de todos los apoyos que existen por parte de organismos públicos, provocando que las familias se queden sin empleo y por lo tanto se conviertan en un problema para la misma sociedad, por lo que no basta que el apoyo y la información esté disponible. El estar dentro de un modelo de desarrollo sostenible permitirá dar soporte a la estructura física, administrativa, de seguridad permitiendo el desarrollo de las mismas y por lo tanto, la disminución del porcentaje de cierre de las microindustrias. Este es el inicio de un trabajo de investigación, que se espera que si se logra aplicar este modelo, permita ayudar a la economía y al desarrollo principalmente de los países en vías de desarrollo

INTRODUCCIÓN

El microempresario es factor muy importante en la economía de un país, ya que produce empleos o autoemplea a la familia, además de que el producto de las ventas se queda en el país. Hasta hace pocos años se le ha dado algún tipo de apoyo e impulso como: cursos de capacitación. Financiamiento a tasas especiales, asesoría. Y aún así muchas microempresas cierran dentro de los dos primeros años; según datos del Instituto Panamericano de Alta Dirección de empresas el 90% de los negocios en México son familiares y únicamente dos de cada seis empresas de este tipo logran sobrevivir una generación. Las empresas familiares generan entre el 50% y el 70% del PIB en Latinoamérica, entre el 35% y 65% del PIB en la unión Europea, entre el 40% y 45% en América del Norte y entre el 65% y el 82% del PIB en Asia. A veces se argumenta que no hicieron un buen plan de negocios.

De acuerdo a EMPRESER el 85% de las empresas cierran antes de cumplir un año a nivel nacional a raíz de esta situación han surgido centros de asesoría, como por ejemplo EMPRESER, ActionCoach, u otros despachos de asesoría, así como la Secretaría de economía con programas para contribuir al éxito de estas personas que inician un negocio. Estos centros de asesoría también ofrecen ayuda técnica para obtener financiamiento. De acuerdo a EMPRESER, con su asesoría ha disminuido en un 10% las empresas de nueva creación que fracasan (Foro 2006) Si bien es cierto que ha disminuido el porcentaje de microempresas que cierran al poco tiempo de haber iniciado el negocio, aún sigue siendo muy alto. Hace falta hacer más para que den buen resultado la mayoría de las *micro empresas*, dedicadas al comercio o a la industria, ya que parece ser que un plan de negocios, no lo es todo. Las *micro industrias*, son las que corren mayor riesgo y están mas desprotegidas; por las siguientes razones:

Muchas de ellas no venden sus productos directamente al público consumidor por lo que fiscalmente no pueden acogerse al régimen de pequeños contribuyentes. A diferencia de las microempresas dedicadas al comercio ya que la mayoría son negocios familiares y si venden al publico consumidor directamente y

pueden acogerse a este régimen fiscal que les resulta económico. Además es más fácil estar en la economía informal dedicándose al comercio que dedicándose a la industria.

Por lo mismo que no venden directo al público, las microindustrias realizan un esfuerzo de ventas mayor, y al ser proveedores de una empresa mediana o grande están en total desventaja o les venden a través de intermediarios. Algo similar pasa con proveer al gobierno, no hacen los trámites administrativos para registrarse en su padrón de proveedores y les venden a través de intermediarios, mismos que a su vez son empresas mas grandes (no micro) y están también en desventaja contra ellas, les jinetean el dinero argumentando que el gobierno no les ha pagado, lo cual en muchas ocasiones es falso.

Muchas microindustrias, se ubican en la misma casa habitación de sus dueños, esto trae como consecuencia incomodidades para trabajar y también para vivir, ya que el uso de suelo es habitacional y no industrial. Al no contar con instalaciones adecuadas contaminan el área donde se ubican y perjudican a los vecinos generando problemas por inconformidades con riesgos por manejo de sustancias peligrosas como solventes y combustibles, basura, malos olores, ruido por uso de máquinas, falta de estacionamiento, tránsito de camiones pesados en áreas indebidas dañando el pavimento y banquetas, maniobras de camiones perturbando el tráfico normal de autos de los residentes en la zona.

El manejo de sustancias químicas, flamables, maquinaria, etc. Incrementa el riesgo de accidentes en zonas densamente pobladas que no tienen ninguna prevención contra estas posibilidades, y al presentarse causan mayores daños. Una característica general del mexicano, es la poca cultura del seguro, la gran mayoría de las personas no se aseguran y tampoco aseguran sus bienes, lo cual hace de los accidentes verdaderas tragedias acabando totalmente con las microindustrias y las familias.

Los objetivos de la investigación serán:

Proponer un modelo para que los inversionistas mexicanos creen empleos y aporten con la generación de riqueza en el país. Determinar la factibilidad de implementación del Modelo en Mexicali, Baja California.

La hipótesis es que el estar dentro del modelo de arropamiento permitirá dar soporte a la estructura física, administrativa, de seguridad a las microindustrias, permitiendo el desarrollo sostenible de las mismas y por lo tanto la disminución en el cierre de las microindustrias en un 90%

MARCO TEÓRICO

Hablar de permanencia de las micro empresas es hablar de la administración y de que ésta se lleva a cabo eficientemente para su continuidad en el mercado. Si una empresa permanece se espera que esta sea competitiva, pero para llegar a ser competitiva hay muchos elementos involucrados. Uno de ellos es la mejora continua “Supervivencia, rentabilidad y crecimientos. Tres variables omnipresentes en el pensamiento del administrador moderno” (Rodríguez, 2001).

“La primera obligación del administrador de una empresa, es asegurar la supervivencia de la organización de la cual es responsable” (Rodríguez, 2001). La premura con la que las microempresas deben lograr la competitividad, hace indispensable la identificación y aplicación de fórmulas o técnicas que propicien un cambio de actitud hacia el trabajo en la gente que actualmente inicia o se encuentra laborando. “Las microempresas juegan un papel relevante tanto en la generación de empleos como en la contribución del PIB Nacional. Sin embargo son de las empresas que menos apoyos reciben de las instituciones privadas y gubernamentales. Esta situación podría cambiar si se comprenden las características de este importante sector y se difunde entre los agentes participantes, que la microempresa requiere de un tratamiento que responda a esas características particulares y a sus

condiciones de desarrollo” (Skertchly. Murguía, 2000) Muchas de las microempresas son empresas familiares las cuales “difieren en una serie de aspectos importantes con respecto a las empresas institucionales. Estas tienen que ser capaces de evaluar las dinámicas que rigen las conductas de su fundador, la familia y la organización en su conjunto” (Ronquillo, 2000) “Debe desarrollar habilidades especiales que les permitan identificar y resolver los problemas que plantean estas dinámicas y adoptar estrategias ingeniosas para fomentar el crecimiento de la empresa” (Ronquillo, 2000) tomando en cuenta que para crecer, primero hay que sobrevivir, mantenerse en el mercado y luego hacer lo necesario para crecer.

Existe la necesidad de que México sea un país productivo de tal manera que se convierta en un país de “primer mundo” y que ofrezca a su población los medios para lograr un nivel y calidad de vida que dignifique a la persona; en este aspecto, Mexicali, se ha convertido en una ciudad atractiva para la inversión extranjera, por el impulso que se le ha dado a través del programa de Mexicali Industrial Inducido, el cual a través de la promoción que se le ha dado a la ciudad por parte de las autoridades, se espera que para el año 2020 sea una de las principales ciudades que se consideren para invertir. Por lo tanto, alcanzar esa competitividad es muy importante.

De acuerdo con Ackoff el concepto de empresa ha ido cambiando, hace poco mas de 100 años la empresa era considerada como un ente aislado de los demás, una máquina con un propósito esencial, el de producir utilidades y con piezas que podían ser cambiadas fácilmente, ya que estas piezas eran los trabajadores y en virtud de no necesitar de gran intelecto ni mucho menos toma de decisiones o preparación, el dueño de la empresa se consideraba casi amo y señor de los trabajadores, ya que en ese tiempo no existían garantías para los trabajadores, y el mal trato era común. De alguna manera las microempresas son muy similares a las empresas bajo este concepto.

Las diferentes teorías deben considerarse, ya que de alguna manera los estilos de administración de las microempresas están presentes en mayor o menor grado. El conocer el enfoque administrativo de la micro empresa, nos permite evaluar y determinar las estrategias para su permanencia. Muchas empresas mexicanas que estaban acostumbradas a tener mercados cautivos, han sido sorprendidas por compañías extranjeras, que tienen mejores niveles de eficiencia y que desde hace años iniciaron cambios profundos en su funcionamiento para fortalecer su competitividad. “parte de los cambios que se han venido dando desde hace varios años en las empresas extranjeras consiste en poner en práctica sistemas de calidad total (CTC), que las han llevado a mejorar continuamente la competitividad de sus productos y servicios” (Gutiérrez Pulido,1997).

La competitividad de una empresa está determinada por la calidad, en la que se incluye el precio y el tiempo de entrega de los productos o servicios. La calidad es: que el producto o servicio que se ofrezca cumpla con los requerimientos para los que fue creado y que además satisfaga las expectativas del cliente. “Calidad es que un producto sea adecuado para su uso. Así la calidad consiste en la ausencia de deficiencias y de aquellas características que satisfacen al cliente”, (Juran, 1990). Las microempresas no están exentas de la exigencia de la calidad ya que de otra forma tienden a desaparecer.

El entender la relación entre calidad, productividad y competitividad es relativamente rápido y sencillo. Ya que es fácil de entender que la clave para la permanencia y el éxito de las organizaciones está en la mejora continua de la calidad. Lo que no siempre se ha entendido es qué implica mejorar la calidad “Si se acepta el grado de complejidad de los negocios, concluiremos que su éxito es dependiente de los sistemas, y la organización que tenga el mejor sistema y apego a él, será el ganador”, (Adam, 1985).

El trabajo en equipo es muy importante ya que se requiere de difundir el nuevo método y promover la participación de más personas. “Todas la funciones influyen en el resultado del producto final, aunque algunas de ellas tienen un efecto mas directo. Las funciones de impacto directo suelen estar bajo

supervisión sistemática, por lo tanto, el resultado negativo en una empresa generalmente, se debe a que se dejan de hacer las funciones indirectas”, (Hernández, 1992).

“Hay que aclarar que, el procedimiento para corregir una empresa en operación es diferente al que se utiliza en una empresa nueva”, (Zuccolli, 1992). Existen síntomas inequívocos de que algo no está funcionando bien en la empresa como la alta rotación de personal y el que cuando algunos puestos requieren ser ocupados por personas especiales que sepan salir adelante en una empresa carente de orden. Cuando los líderes desconocen la contribución de cada puesto al trabajo en equipo de la organización, es factible que recurran a estilos democráticos y creen conflictos al propiciar que las personas con más energía asuman los roles vacíos, invadiendo áreas y creando centros de poder ilegítimos. Las empresas que están en operación es muy posible que tengan este tipo de situaciones., (Buenrostro, 1998):

La productividad, es la relación entre los productos o servicios generados por un sistema, sea éste una empresa, consorcio o nación, y los recursos utilizados para hacerlo (Mercado, 1997); quiere decir que la productividad no es una medida limitada o austera del volumen de producido, sino de la forma en que se combinan los recursos para conseguir los resultados planeados. Es la medida de la eficiencia en el manejo administrativo de la empresa (Mercado, 1997).

La competitividad engloba el potencial de la empresa principalmente desde el punto mercadotécnico. Esto quiere decir que una empresa con un área mercadotécnica creativa, ágil, moderna y actualizada, será capaz de desplazar un producto aun cuando éste no sea de buena calidad, ni se haya creado con un uso eficiente de los recursos productivos, y por tanto su precio de venta sea elevado. Lo anterior podría ser irrelevante en un país con fronteras comerciales cerradas y con poca competencia interna. Sin embargo para las empresas mexicanas, comprometidas ya ante un tratado de libre comercio con los demás países de América del Norte, es imprescindible competir con precios y calidad adecuados para sostenerse en el mercado; y esto solo puede lograrse mediante el incremento de la productividad (mercado, 1997).

Los miembros de la fuerza laboral y de la administración media presentan sus mecanismos de defensa cuando se enfrentan a lo que consideran una acción del todo arbitraria e injusta. En muchos casos, la cultura corporativa contribuye a esta reacción y trata de derrotar los intentos de reestructuración de la compañía (Morris, 1994). La reingeniería aplicada a los procesos de la empresa no es en sí misma un paradigma, sin embargo *requiere* de un nuevo paradigma para ser eficaz: el deseo de cuestionarlo todo continuamente (Morris, 1994). “Para generar el mejoramiento, se trabaja con programas. Para ejercer un control efectivo, se trabaja con disciplina”, (Buenrostro, 1998). Cuando el control es eficaz el sistema tiene tiempo para liberar energía creativa. El descontrol propicia problemas y conflictos entre los subsistemas, lo cual incrementa las barreras para el mejoramiento, y la innovación requiere de la colaboración para ser efectiva.

Todo hábito sea personal u organizacional, se sustenta en creencias; por lo que conociendo la relación entre estos dos factores, es muy importante esforzarse para modificar las creencias que sustentan los malos hábitos (Colunga, 1995). Hay que invertir en la educación de tal manera de incrementar, actualizar o cambiar los conocimientos que se tienen. “La calidad empieza con educación y termina con educación” (Ishikawa, 1986). “Toda área de conocimiento debe regirse sobre una base teórica. Sin embargo en el campo de la administración de empresas familiares, la fuente primaria de material está constituida por la amplia experiencia y la vasta literatura de compañías no familiares. El tema de las empresas familiares carece de una integración teórica y empírica, amén de que no cuenta con una definición unificada de su objeto de estudio.” (Belausteguigoitia, 2004)

El microempresario es factor muy importante en la economía de un país, ya que produce empleos o autoemplea a la familia, además de que el producto de las ventas se queda en el país. Hasta hace pocos años se le ha dado algún tipo de apoyo e impulso como: cursos de capacitación. Financiamiento a tasas especiales, asesoría. Y aún así muchas microempresas cierran dentro de los dos primeros años; según datos del Instituto Panamericano de Alta Dirección de empresas el 90% de los negocios en México son familiares y únicamente dos de cada seis empresas de este tipo logran sobrevivir una generación. Como parte del marco teórico se realizó una investigación cualitativa mediante la técnica de historia de vida. En esta se obtuvieron las siguientes conclusiones.

Si bien es cierto que las historias no se repiten y que cada ser humano tiene su tiempo, su espacio, sus oportunidades y la elección de las decisiones, la historia de vida de José Salazar nos puede ayudar a ver la manera de proporcionar a gente, que con sus propias historias desean progresar y que con sus motivaciones se enfrentan a una serie de problemas que limitan el alcanzar las metas. Las motivaciones principales de José fueron el orgullo y ayudar a su familia, a sus hijos, y que de alguna manera tuvo suerte de tener 8 hijos varones, pero no se puede pensar en que será un requisito para iniciar un negocio. Por lo que es muy importante asesoría fiscal, contable y de tramitología, que le permitirán al nuevo empresario tener ciertas cosas resueltas que José pudo resolver gracias a los estudios que sus hijos ya tenían para ese entonces.

Muchas personas con las motivaciones para iniciar un negocio no lo hacen porque no saben como y muchos otros inician su negocio y se convierte en la peor pesadilla que hayan tenido hasta dejarlos sin nada. La quiebra. Aprendiendo de la vida de José, se puede mejorar la atención que damos a este gran sector con pequeñas industrias. Quiere decir que en caso de José, gracias a su empeño, perseverancia y sobre todo a la convicción de prepararse, de capacitarse y además a que tuvo en su momento la asesoría, pudo lograr salir adelante y convertirse en un caso de éxito.

Pero, ¿que pasa con todos aquellos casos que se convierten en fracasos?, ¿Por qué a pesar de tantos apoyos de capacitación, financieros y de asistencia técnica a la micro y pequeña empresa no son usados?, ¿Qué hace falta para que se convenzan de que la capacitación es básica para el éxito del negocio? ¿acaso está fallando el mecanismo para llegar a esta gente? El aprendizaje como el de José fue efectivo, pero lento y tortuoso a la vez porque estuvo basado en la experiencia que se iba obteniendo día con día a través de enfrentarse a los problemas. El aprendizaje mediante la capacitación ahorra, tiempo, dinero, esfuerzo y tal vez mucho sufrimiento.

Entonces queda en la gente preparada y convencida la responsabilidad de concienciar a los nuevos empresarios, de que aprender primero a hacer las cosas, es decir aprender el oficio en las palabras de José, es muy importante, ya que es mejor tener el conocimiento y enfrentar la problemática a que llegue el problema y apenas tratar de averiguar que hacer. Tal vez a través de dar a conocer los casos de éxito, explicando los factores que contribuyeron al éxito y presentando casos fallidos en donde se analice lo mismo, sea una excelente forma de comunicarnos con esta agente entusiasta y emprendedora, para que ellos se convenzan que la capacitación y la asesoría son indispensables y por lo tanto se acerquen a las instancias correspondientes.

Los micro y pequeños negocios familiares son los que mayor problema tienen y desde ahí inicia la capacitación, para lograr una identificación sobre la misión y el rol que cada integrante tendrá en la empresa. Queda mucho trabajo por hacer y este es a mi parecer como poner la primera piedra de un gran edificio que es nuestro país, México.

METODOLOGÍA

El diseño de investigación y método es de tipo causal-comparativo, ya que se determinará si el microindustrial estaría dispuesto a establecerse dentro del Modelo de Arropamiento. El presente estudio se llevará a cabo exclusivamente en microindustrias establecidas en Mexicali, B.C., tomándose una muestra representativa. Para diseñar ésta se consideran a las microindustrias afiliadas a CANACINTRA (Cámara Nacional de la Industria de Transformación). La muestra es determinada en base a la propuesta por Rojas Soriano (2000), en virtud de que las preguntas de los cuestionarios aplicados son El muestreo será probabilístico dividiéndose el universo en estratos homogéneos para posteriormente hacer una selección aleatoria de los individuos dentro de cada estrato, quedando en la muestra la misma proporción.

Los sujetos: Serán las microindustrias ubicadas afiliadas a CANACINTRA y ubicadas en Mexicali, Baja California. El enfoque será hacia las micro empresas con giro industrial ya que éstas constituyen una aportación muy importante al país. Al apoyar a estas industrias, se fortalece el progreso económico y social del país.

Material : Para realizar el estudio se aplicarán cuestionarios consistentes en preguntas cerradas a los propietarios de las microindustrias en Mexicali afiliadas a CANACINTRA en un número igual a la muestra.

La variable a medir es la disposición al cambio hacia una cultura de colaboración y concentración de diferentes tipos de industrias y que tengan la posibilidad de recibir servicios, orientación, protección y asesoría para lograr el desarrollo sostenible de su negocio.

RESULTADOS

A través de la propuesta de un modelo para el logro del desarrollo sostenible de las microindustrias, provocar la disminución substancial del cierre de microindustrias mediante el *arropamiento* al brindarles servicios complementarios para su operación, creando una vinculación entre los microindustriales buscando y procurando el apoyo mutuo y recíproco.

Promover el desarrollo armonioso de la Ciudad de Mexicali con un impacto en el desarrollo sustentable

Este estudio sería el punto de partida para elaborar un manual de implementación del Modelo y fomentar la inversión mexicana dentro de la economía formal así como contribuir al crecimiento industrial en forma armoniosa cuidando el equilibrio ecológico y la protección del medio ambiente

BIBLIOGRAFÍA

Belausteguigoitia Rius, Imanol. *Empresas familiares*. Mc Graw Hill. México 2004

Ramírez Valencia, Joaquín. *Administración de pequeñas y medianas empresas*. Thompson. México 2002

Rodríguez Valencia, Joaquín. *Administración de pequeñas y medianas empresas exportadoras*. Thompson. México 2001

Garza Treviño, Juan Gerardo. *Administración contemporánea*. Mc Graw Hill. México 2005

Rodriguez Valencia, Joaquín. *Como aplicar la planeación estratégica a la pequeña y mediana empresa*. Thompson. México 2001

Reglamento de edificaciones para el municipio de Mexicali

Reglamento de imagen urbana para el municipio de Mexicali

Reglamento de acciones de urbanización para usos industriales del municipio de Mexicali, baja California

Plan de desarrollo urbano de Mexicali

Estadísticas de la Secretaría de economía

Estadísticas de la Secretaría de desarrollo económico

Información de afiliados CANACINTRA

Experiencia EMPRESER.

BANCOMEXT

DISMINUCIÓN DE LA ACTIVIDAD MAQUILADORA: CASO CIUDAD DE TEHUACÁN PUEBLA

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RESUMEN

El objetivo del trabajo es indagar las condiciones de la maquila tehuacanera ante la disminución de su actividad y la reacción de sus diferentes actores ante esta situaciones. Para ello, se parte de la ubicación de las maquiladoras dedicadas a la confección de ropa dentro de la parte conceptual con el apoyo de diferentes autores que han realizado trabajos enfocados a las maquiladoras localizadas en la frontera norte de México para posteriormente identificar las causas de la disminución de la actividad desde la óptica de los informantes clave de la maquila y la transformación en las condiciones de los trabajadores de la rama. El trabajo se desarrolló a través de una investigación cualitativa, bajo el método del estudio de casos. El diseño cualitativo incluyó un trabajo de campo, seleccionando una empresa municipio de Tehuacán, Puebla en la que se realizaron entrevistas a profundidad con elementos clave de la empresa, a través de una guía de entrevista, de tal forma que fuera posible ir corrigiendo e introduciendo nuevos factores según fuesen apareciendo en el transcurso de la entrevista.

INTRODUCCIÓN

Las maquiladoras lograron en breve tiempo mantener un vigoroso crecimiento, gracias a las concesiones fiscales y laborales, la abundancia de mano obra, la infraestructura y las facilidades no oficiales que el gobierno mexicano les otorgó, llevando su ubicación no sólo en la frontera norte, sino al resto del país llegando así a la Ciudad de Tehuacán, Puebla México.

Se podía observar que de cada 100 trabajadores 13 se ocupan en la industria manufacturera, rama del vestido, en lo que respecta a Puebla, según datos al mes de abril 2006. Para el mismo estado, revelan que del total de personal ocupado 17782 en las maquiladoras como obreros, 9359 son mujeres (Instituto Nacional de Estadística Geografía e Informática {INEGI}, 2006).

El mencionar el número de empleados referidos respecto a cuántas empresas corresponde es muy incierto debido a que, según cifras de la Secretaría de Economía, hay más de 3 mil 750 plantas maquiladoras en el país. De acuerdo con cifras del INEGI año 2006, en Puebla hay 57 maquilas. Sin embargo, en Tehuacán hay más de 300, para el mismo año según la Cámara Nacional de la Industria del Vestido (CANAIRES), 2006 y enero 2009 según la misma agrupación hay únicamente 90 legalmente establecidas.

Se ha visto una disminución en las maquiladoras establecidas en Tehuacán a partir de 2001. Subsistiendo adicionalmente otras repercusiones colaterales que afectan fundamentalmente a la sociedad que vive y desarrolla sus actividades en el mismo lugar de las empresas maquiladoras.

El presente trabajo tiene como objetivo identificar las causas de la disminución de la actividad maquiladora en Tehuacán. El alcance de esta investigación es el del estudio de las causas de la disminución de la actividad maquiladora en Tehuacán tomando como referencia un parte aguas como fueron los acontecimientos surgidos en los Estados Unidos de Norte América el 11 de septiembre de 2001, tomando precisamente como unidad de análisis a la maquiladora.

Como limitación, el trabajo se circunscribe únicamente a las maquiladoras de la Ciudad de Tehuacán, Puebla dedicadas a la rama de la confección y del vestido.

REVISIÓN LITERARIA

Las maquiladoras surgieron en México a mediados de los años sesenta, como consecuencia de la terminación del convenio de braceros entre Estados Unidos y México, mismo que permitía la emigración de la fuerza laboral mexicana a los Estados Unidos, en diciembre de 1964 (Tovar, 2003).

Una vez disuelto dicho convenio, las compañías estadounidenses siguieron buscando la mano de obra mexicana, por el bajo costo de la misma, esta vez en territorio nacional principalmente en la frontera (García, de la O., Quintero y Morales, 2000), para instalar plantas de ensamble de productos de consumo. Por su parte, el Gobierno Mexicano teniendo como titular al Lic. Adolfo López Mateos, implementó el programa de industrialización de la frontera norte del país (PRONAF), el cual dio origen al programa de maquiladoras actualmente en vigor (Tovar, 2003).

Hoy en día, las maquiladoras se han convertido sin duda en la actividad productiva más dinámica: ha generado más de un millón de empleos, contribuyendo con cerca de la mitad del importe de las exportaciones nacionales (Ibídem). Además las maquiladoras contribuyen a la formación de mano de obra calificada (García, 1999). Las maquiladoras han evolucionado de ser plantas de ensamble de poco valor agregado a fábricas capaces de realizar operaciones más complejas (Bair y Gereffi, 2003).

Las maquiladoras en México lograron en breve tiempo mantener un vigoroso crecimiento, gracias a las concesiones fiscales y laborales, la abundancia de mano obra, la infraestructura y las facilidades no oficiales que el gobierno les otorgó, llevando su ubicación no sólo en la frontera norte, sino al resto del país llegando así a la Ciudad de Puebla. La motivación principal para que las maquiladoras incursionaran en el interior del país fue la disparidad de salarios. En el centro del país se pagan salarios más bajos que en el norte (Ryszard, 2004).

Para que las maquilas avanzaran al centro del país el gobierno decretó en 1972 un acuerdo mediante el cual las empresas del ramo industrial podrían establecerse en todo el país (Barrios y Santiago, 2004; García, de la O., Quintero y Morales, 2000). La incursión de la industria maquiladora no sólo se puede apreciar en la frontera norte del país y en algunos estados del centro, sino también en el sur del mismo, como en Yucatán, con apoyo en el programa de Reordenación Henequenera (PRH) de 1984, en donde se señala el fomento de la actividad maquiladora con la intención de generar empleo y detener la migración de la fuerza laboral, tanto del interior del estado, como de ésta hacia otras entidades del país (Canché, 1998). La contribución de las maquiladoras como generadoras de fuentes de empleo es notable, y esa contribución es más evidente en la rama de la confección. Las maquiladoras, fueron una buena fuente de empleo en cualquier lugar de la república mexicana donde se instalaran y Puebla, no fue la excepción.

El Estado de Puebla, es uno de los pocos estados del interior del país que a semejanza con los del norte y occidente, dentro de la industria establecida en él, se encuentra la maquiladora. Parecía que las maquiladoras al llegar a México habían resuelto en parte el problema del empleo, sin embargo no fue así. Pero debido a los acontecimientos del 11 de septiembre de 2001, los habitantes de Estados Unidos no mantienen el consumo habitual de los bienes en los que interviene la maquila, situación por la cual la maquiladora mexicana ha visto afectadas sus operaciones y en consecuencia se recurre el despido de trabajadores empleados en ellas, sin precisarse las causas. De igual forma, el consumo de productos intermedios elaborados en el país y utilizados por ésta se ven afectados (Barrios y Santiago, 2004; Carrillo, Contreras y Alonso, 2002).

Sin embargo actualmente el número de maquiladoras establecidas en Puebla, se ha visto disminuido y por consiguiente el número de empleos, situación contraria a la que existe en el norte de México.

En los últimos años las operaciones con Estados Unidos han disminuido algo que ha contribuido a la disminución de actividades no solo con Estados Unidos, sino con otros países es la inseguridad.

En Washington D.C. y en capitales de la Unión Europea se comenta respecto a la delincuencia que se presenta en toda América Latina y que propicia fuga de capitales, así como opinión generalizada de que la pobreza está generando mayor delincuencia, por lo que se crea inseguridad y con ello atraso en los países de América Latina, porque está frenando las inversiones (Oppenheimer, 2006).

Muchas multinacionales no invierten en América Latina por los altos costos de seguridad y para las maquiladoras también hay repercusiones al respecto en el traslado de sus productos a los Estados Unidos por ejemplo. De los gastos operativos en empresas de Asia, el 3% son gastos de seguridad, mientras que en empresas de América Latina los gastos de seguridad representan un 7% (Oppenheimer, 2006).

Es importante comentar que las exportaciones de otros países como China y Centroamérica a Estados Unidos ha contribuido a la disminución de exportaciones mexicanas a ese país (Carrillo y Barajas, 2007). Lo anterior llevó a tasas de crecimiento negativas a las actividades maquiladoras, de la industria de la electrónica y del vestido propiciando el traslado de las maquilas a países asiáticos. También es oportuno mencionar que en la economía mexicana, como en la de muchos países, las divisas son necesarias para alcanzar un superávit en la balanza comercial y fortalecer su desempeño. Un sector que aporta divisas al país es el maquilador (Buitelear, Rudolf, Padilla y Urrutia, 1999), además de crear fuentes de empleo, contribuir al gasto público y a la seguridad social con el pago de impuestos y cuotas respectivamente.

El análisis de las causas que originan la disminución de la actividad maquiladora en el estado de Puebla no es tarea fácil, por lo que en este escrito sólo se pretende demostrar con base en datos estadísticos la disminución de dicha actividad reafirmando dicha información con entrevistas realizadas con informantes clave de la maquila.

METODOLOGÍA

En este trabajo se aplicó la técnica documental y de campo.

La *investigación documental* permitió la recopilación de información para enunciar las teorías que sustentan el estudio de los fenómenos y procesos.

La *investigación de campo* permitió la observación en contacto directo con el objeto de estudio, y el acopio de testimonios mediante entrevista con guía de tópicos que permitieron confrontar la teoría con la práctica en la búsqueda de la verdad objetiva (Sampieri, Fernández y Baptista, 2003).

Sujetos: La informantes clave de la maquila considerados expertos en el tema.

La muestra: La muestra permite obtener información requerida y en general se pueden hacer entrevistas más detalladas y cuidadosas cuando se trata de una porción de la población en lugar de toda ella.

Para la recopilación de datos se seleccionó la técnica de la encuesta. Se utilizó una guía de tópicos para realizar entrevistas semiestructuradas a informantes clave de la maquila.

Tamaño de la Muestra: Se utilizó el muestreo por expertos (personas con experiencia y conocimiento en el tema) manejados a conveniencia de los investigadores (se manejo a conveniencia por la dificultad de acceder a los maquiladores de la zona y otros expertos los integrantes de la muestra dieron las facilidades

para la entrevista) , trabajando con una muestra de 5 elementos, los cuales fueron contactados utilizando como apoyo el muestreo en cadena por lo que una persona conocida por los investigadores contacto con un experto en el tema y este a su vez con otro, etc.

RESULTADOS

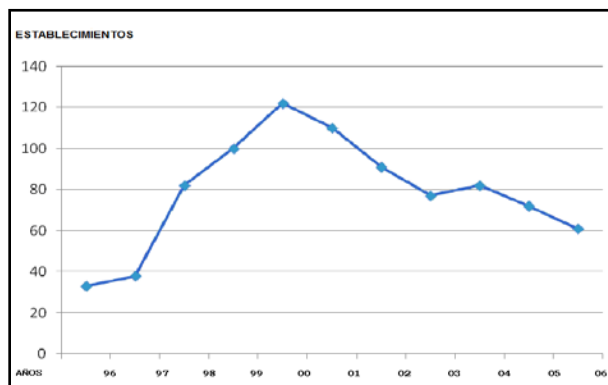
La información cualitativa obtenida en las entrevistas se apoyó con datos obtenidos de fuentes de información oficiales. Y se divide en dos apartados causas de la disminución y consecuencias de la disminución de la actividad maquiladora en la zona de Tehuacán.

Causas de la disminución.- Existen diferentes causas que han provocado o contribuido a la disminución de la actividad maquiladora en la zona referida pero una es la considerada como la que tiene mayor fuerza en el fenómeno y es la disminución de operaciones con los Estados Unidos.

A continuación se presenta como ha disminuido la actividad maquiladora al igual que el número de establecimientos.

Es más difícil determinar el número de maquilas establecidas en Tehuacán, ya que únicamente se cuenta con cifras a nivel estatal y no por municipios. Sin embargo CANAIVES, informa la disminución del número de establecimientos, precisando que a enero 2009 existen 60 maquiladoras afiliadas de un total de 90 legalmente establecidas, por lo que se nota una disminución de 210 establecimientos comparando con el número que existía a diciembre de 2006 de 300 maquilas.

Figure 1: Comportamiento Del Número De Establecimientos

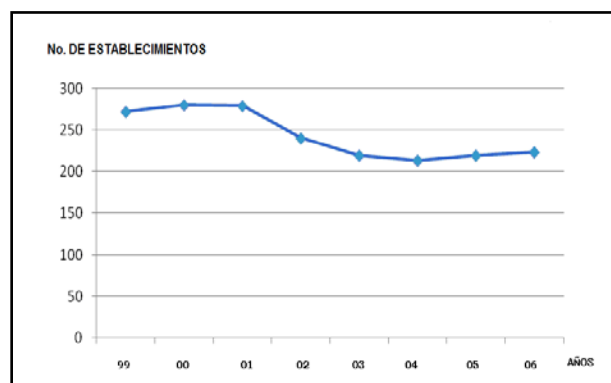


Fuente: Elaboración propia con datos de INEGI y SEDECO.

Si existe decremento de la presencia de maquilas en la región (Gráfica 1), al observar las cifras de INEGI y SEDECO, con las respuestas obtenidas por los informantes clave de la maquila los cuales comentan que la actividad maquiladora en Tehuacán ha disminuido al igual que el número de establecimientos.

Es importante comentar que la disminución que se observa en Tehuacán Puebla, México no se generaliza en otras zonas del país tal y como se aprecia en las gráficas 2,3.

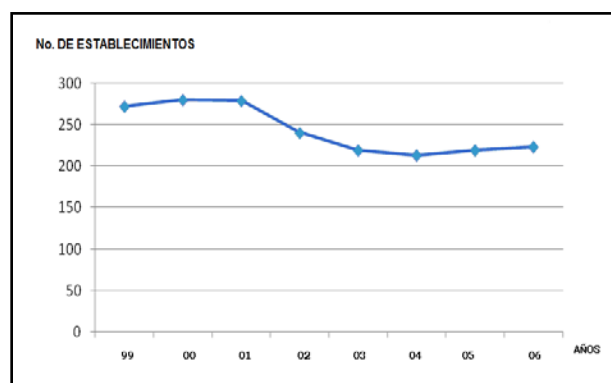
Gráfica 2 Comportamiento de la maquila en Baja California Norte.



Fuente: Elaboración propia con datos de INEGI, año.

El número de establecimientos en Baja California Norte disminuye en el 2002, con una ligera recuperación y se mantiene constante en un nivel menor repunta mínimamente el número y ahí se mantiene.

Gráfica 3 Coahuila

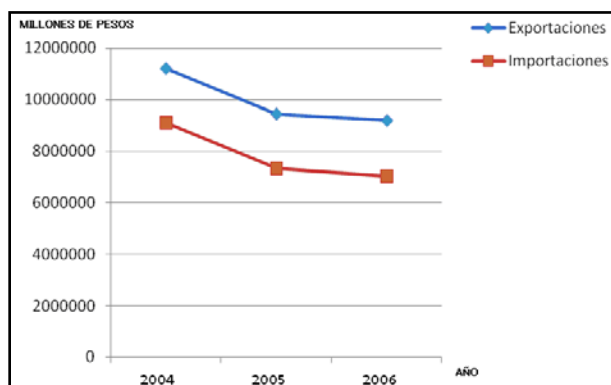


Fuente: Elaboración propia con datos de INEGI.

En Coahuila (gráfica 3) se puede observar en lo que respecta a número de establecimientos, que en el año 2002 existe una disminución de establecimientos, pero en los años siguientes se frena la disminución y el número de establecimientos permanece constante. Presentado lo referente a la disminución del número de establecimientos, se presenta a continuación la principal causa de esta situación: la disminución de operaciones con Estados Unidos, visualizada a través de las operaciones de Comercio Exterior de México con el mencionado país como son las exportaciones y las importaciones

En lo que respecta tanto las exportaciones como las importaciones realizadas por las maquiladoras, han venido disminuyendo (Gráfica 4).

Gráfica 4. Comparación De Importaciones Con Exportaciones.



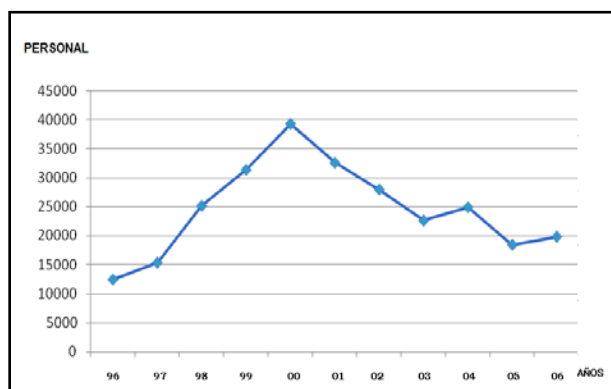
Fuente: Elaboración propia con datos de Banco de México.

De igual forma, las exportaciones y las importaciones de insumos para la elaboración de productos que se ensamblan en México para posteriormente exportarse también se han visto afectadas negativamente. Lo que confirma las respuestas obtenidas en las entrevistas de los informantes de la maquila al manifestar que la disminución de la maquila en Tehuacán obedece fundamentalmente a la disminución de las actividades con Estados Unidos por la competencia de la mano de obra de Centro América y el Caribe, la competencia de productos chinos y las condiciones de inseguridad de México.

Consecuencias de la disminución.- La consecuencia que se aprecia como situación alarmante por los informantes de la maquila es la referente al empleo.

Derivado de lo anterior, un aspecto preocupante es el empleo. Para la mayoría de los países crear fuentes de empleo resulta prioritario. Las empresas como creadoras de empleos, tienden a promover la activación de la economía y el desarrollo del país (De la Garza, 2005). Según información de INEGI (2006) la maquila contribuye de manera importante al empleo, en Puebla, en particular el sector de confección de ropa.

Gráfica 5 Personal Ocupado En Las Maquiladoras.



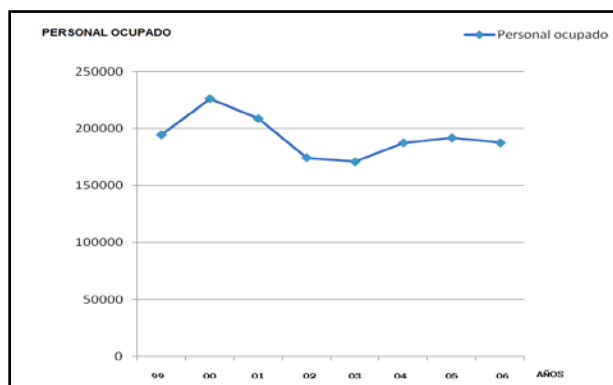
Fuente: Elaboración propia con datos de SEDECO.

En el sector estudiado se puede observar fuertes altibajos en el número de empleos generados en los últimos 11 años. Estos altibajos podrían obedecer a la competencia de las maquiladoras ubicadas en la

Cuenca del Caribe, debido al bajo costo de su mano de obra respecto a las maquiladoras mexicanas del sector mencionado (Gráfica 5). En la mencionada gráfica, se puede observar que en 1996 hay un auge en la contratación de obreros y llega al punto más alto en el año 2000, para posteriormente iniciar el descenso que se mantiene hasta el año 2006.

La disminución que se aprecia en el número de establecimientos maquiladores en Tehuacán diferente a la que se aprecia en los establecimientos del norte del país se repite en lo referente al personal ocupado por las maquilas gráficas 6 y 7.

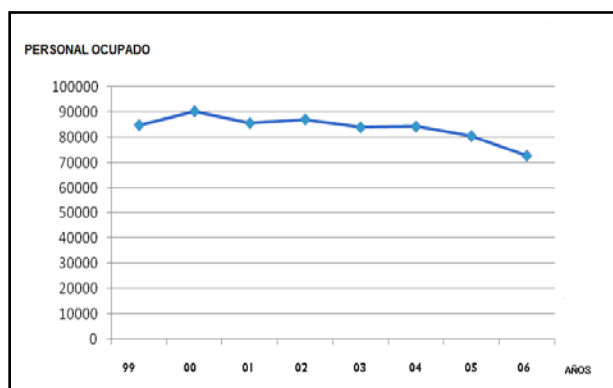
Gráfica 6 Baja California Norte



Fuente: Elaboración propia con datos de INEGI.

Lo mismo se aprecia para el personal ocupado de Baja California Norte, en el 2001 disminuye e incluso se puede apreciar un ligero incremento en el 2005, el cual se mantiene en 180,000. Y a partir de ese año el número de personal ocupado se mantiene.

Gráfica 7 Coahuila



Fuente: Elaboración propia con datos de INEGI.

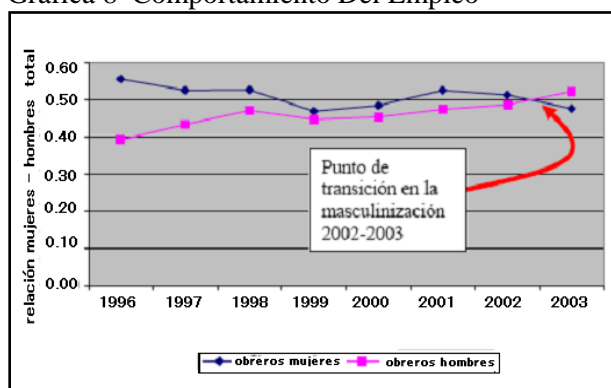
En Coahuila, en lo que respecta al personal ocupado es en el año 2001 cuando da inicio una ligera disminución en la contratación de personal continuando hasta 2006 y a partir de ese año la contratación de personal se ha mantenido.

Como apreciarse en lo que respecta al personal ocupado en la maquila, en diversos periodos se ha manifestado preferencia por la contratación de obreras, y en México no han sido la excepción. En 1980, las mujeres, que en la jerga de la industria maquiladora se les denomina operadoras, daban cuenta de 77% del total de los trabajadores en línea (Carrada, 1998). La maquila ha significado para la mujer su entrada al trabajo obrero industrial de forma masiva (García, de la O., Quintero y Morales, 2000). Este aspecto se ha explicado, de manera poco convincente, exponiendo la idea de que las mujeres son menos propensas a causar problemas y más disciplinadas, así como la existencia de mayor disposición en ellas a tareas rutinarias así como un mejor desempeño en trabajos manuales.

La contratación de mujeres en vez de hombres constituyó una estrategia de administración microeconómica de recursos humanos para buscar la estabilidad laboral (Mungaray, 1998).

La situación de género ha cambiado (Gráfica 8) y en 1997 la participación de la mano de obra femenina comenzó a disminuir (Carrada, 1998).

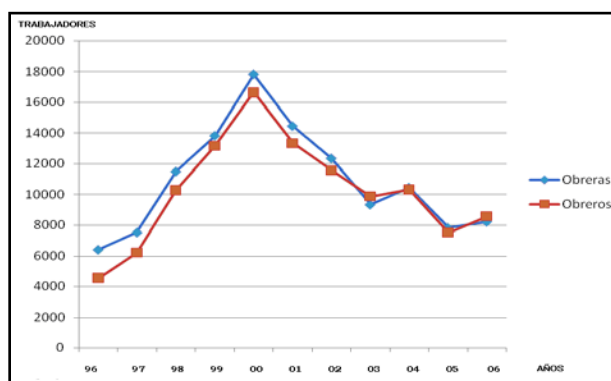
Gráfica 8 Comportamiento Del Empleo



Fuente: Martínez de Ita, Sánchez Daza y Campos Ríos, 2002.

La preferencia de contratación por género ha ido cambiando y en la actualidad; “en términos de género, poco más de la mitad de los trabajadores de la maquila de ropa son mujeres 52.8 por ciento, en tanto que 43.9 por ciento son hombres” [(Díaz, 2002, p.162) Gráficas 9,5 y 6)].

Gráfica 9 Comparativo Obreras Y Obreros De La Maquila.



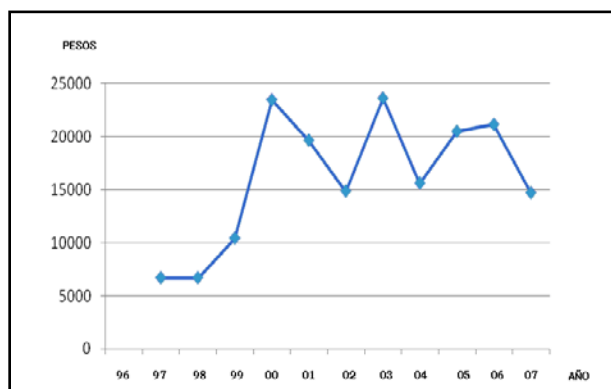
Fuente: Elaboración propia con datos de SEDECO.

En la gráfica 9, se aprecia que tanto la contratación de obreros (tanto mujeres como hombres), ha sido similar sin mostrar preferencias de género, llegó a su momento más alto de contratación en el año 2000, para iniciar la decaída.

La cantidad de despidos sólo incluye a los trabajadores que laboran en empresas maquiladoras y no se tiene un registro aproximado de los despidos en las empresas subsidiarias de esas maquilas, ni de las maquilas informales que también abundan en México (Ibídem) Gráfica 7

También es oportuno mencionar que en la economía mexicana, como en la de muchos países, las divisas son necesarias para alcanzar un superávit en la balanza comercial y fortalecer su desempeño. Un sector que aporta divisas al país es el maquilador (Buitelear, Rudolf, Padilla y Urrutia, 1999), además de crear fuentes de empleo, contribuir al gasto público y a la seguridad social con el pago de impuestos y cuotas respectivamente (Gráficas 11). Y en materia de seguridad social la parte que aporta el patrón y el trabajador en México, que funciona por una aportación tripartita: Gobierno, patrón y trabajador al disminuir el personal ocupado en las maquilas disminuye también el pago de cuotas patronales y por consecuencia las obreras.

Gráfica 10. Pago De Cuotas Patronales Al IMSS Por Las Maquiladoras



Fuente: Elaboración propia con datos de SEDECO.

En lo referente al pago de cuotas al Instituto Mexicano del Seguro Social (IMSS), en el año 2000 se observa un comportamiento errático, con altas en algunos años, y bajas en otros debido al cambio en los porcentajes para la determinación de cuotas (gráfica 11), sin embargo su disminución no es tan marcada como en el número de establecimientos y personal ocupado.

En la parte norte del país las condiciones del comportamiento de la maquila difieren de las que se presentan en Puebla. En algunas zonas del país como Torreón, Coahuila, se aprecia que las mujeres obreras permanecen trabajando hasta que tienen familia, lo que les retira del mercado laboral a los 25 años aproximadamente (Bair y Gereffi, 2003).

Es penoso comentar que las trabajadoras de México dentro de la maquila están dentro de las peores pagadas y más pobres del mundo (Comas, 2002). A pesar de todo ello, en la zona norte del país no ha disminuido el número de maquiladoras y empleo como es el caso de los estados de Baja California Norte y Coahuila (gráficas 12, 13, 14 y 15).

CONCLUSIONES

El año 2001 representa un parte aguas para la maquila en Puebla respecto a la disminución de su actividad de una forma mayormente marcada respecto a otros estados del norte del país. La disminución es claramente notoria en el número de establecimientos y de personal ocupado en las maquiladoras, apreciándose también la no preferencia en la contratación de personal por la mano de obra femenina. La cual al llegar la maquila a México tenía preferencia en su contratación y al transcurrir del tiempo la contratación se hace igual para hombres y para mujeres, lo que deja sin ningún privilegio actual a la mano de obra femenina que se emplea en la maquila. El pago de cuotas al IMSS ha disminuido como consecuencia de la disminución de contratación de personal. La actividad maquiladora ha disminuido en la Ciudad de Tehuacán Puebla teniendo como principal causa la disminución de operaciones con Estados Unidos, trayendo consecuencias negativas a la zona como puede apreciarse en la disminución de personal ocupado elevando el índice de desempleo.

REFERENCIAS

Barrios Hernández M. y Santiago Hernández R., (2004), Del calzón de manta a los blue jeans, Comisión de Derechos Humanos y Laborales del Valle de Tehuacán, A. C. En colaboración con la Red de Solidaridad de la Maquila (Maquila Solidarity Network) de Toronto, Canadá. Tehuacán, Puebla, Ciudad de Indios.

De la O Martínez M. E., (1999), Innovación Tecnológica y Clase obrera Estudio de caso de la industria maquiladora electrónica R.C.A. Ciudad Juárez, Chihuahua, México, Casa abierta al tiempo Unidad Iztapalapa, 1ª Edición.

Oppenheimer A., (2006) Cuentos Chinos El engaño de Washington, la mentira populista y la esperanza de América Latina, México, Plaza Janés.

Sampieri H., Fernández C., Baptista L. (2003), Metodología de la investigación, México, Mc Graw Hill 5ª Edición.

Bair J. y Gereffi G. (Abril 2003), Los conglomerados locales en las cadenas globales: la industria maquiladora de confección en Torreón México, Comercio Exterior Vol. 53 No. 4 México.

Buitelaar, Rudolf, R., Padilla R. Y Urrutia R. (Abril 1999), Industria Maquiladora y cambio técnico, Revista de la CEPAL, núm.67, abril 1999.

Canche Escamilla J. L., (Abril 1998) La industria maquiladora de Exportación en Yucatán, México, Comercio Exterior Vol. 48 No.4 México.

Carrada Bravo F., (Abril 1998), La inversión extranjera directa e Industria Maquiladora en México, Comercio Exterior Vol.48 No.4 México.

Carillo J., Contreras O. Y Alonso J., (2002), Aprendizaje Tecnológico en las Maquiladoras del Norte de México, Frontera Norte, enero-junio, año/vol. 14, número 027, Colegio de la Frontera Norte Tijuana, México, Red AL y C La Hemeroteca Científica en Línea en Ciencias Sociales, Disponible: www.redalyc.org 14-enero-2007.

De la Garza Toledo E. (Mayo 2005), Modelos de producción en el sector maquilador: tecnología, organización del trabajo y relaciones laborales, Contaduría y Administración, enero-abril, número 215 Universidad Nacional Autónoma de México, México.

García de Fuentes A., De la O., Quintero M. E. y Morales J(2000), El eslabón industrial cuatro imágenes de la maquila en México, Nuestro Tiempo, S.A., México, 1ª Edición.

García Zúñiga G., (1999), Tienen 40 años aquí y no hay un plan sólido para abastecerlas, CEPAL.

Díaz Núñez F.O., (2002), Características laborales de la fuerza de trabajo empleada en la maquila de ropa en la subregión de Tehuacán, Aportes, septiembre-diciembre, año/vol. VII, número 021, Aportes Benemérita Universidad Autónoma de Puebla Aportes, Red AL y C, La hemeroteca científica en línea en ciencias sociales, Disponible: www.redalyc.org 18- julio 2006.

Ryzard Rózga L., (2004), Transformaciones Económico-Territoriales de la base productiva regional; la industria en la región centro, Aportes, mayo-agosto, año/vol. IX, número 026, Benemérita universidad Autónoma de Puebla, Puebla, México: Disponible: www.redalyc.org 20-agosto-2006

ANALISIS LONGITUDINAL DE RIESGOS DE TRABAJO EN UNA PLANTA MAQUILADORA

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RESUMEN

La ocurrencia de riesgos de trabajo siempre está latente dentro del desarrollo de tareas en la industria maquiladora, sin embargo, las empresas están obligadas a implementar estrategias a favor de la salud ocupacional de sus empleados, dada la relevancia del factor humano en el desempeño productivo y el hecho de que en México la ocurrencia de accidentes afecta el nivel de riesgo de la empresa, que se traduce en incremento del costo de la seguridad social. El presente estudio analiza los riesgos de trabajo incapacitantes de 2006-2008 para determinar sus causas y proponer estrategias kaizen para su eliminación. Los datos estadísticos se obtuvieron del reporte de riesgos con apoyo del área de seguridad e higiene de la empresa. Las herramientas de análisis fueron la estadística y el diagrama Ishikawa. Los resultados ilustran que los riesgos tienen su origen principal en los obreros, por descuido o entrenamiento inadecuado; el medio ambiente físico también influye, dado que el ruido promedio sobrepasa los 90 decibeles y la iluminación genera fenómenos estroboscópicos, factores que pudiesen generar estrés en los trabajadores. Padecimiento que afecta las capacidades y merma la atención. Por lo que se infiere que el estrés laboral es la causa de los riesgos.

INTRODUCCION

De acuerdo con Anaya (2006), el origen de la seguridad e higiene (SHT) está asociado a toda labor que los seres humanos realizan, pero tomó una importancia mayúscula en el ámbito fabril con la Revolución Industrial en el siglo XIX, naciendo como ciencia, para la investigación de riesgos y enfermedades asociadas al trabajo.

Para Sarmiento *et al.* (2004), los accidentes de trabajo se consideran un problema de salud pública relevante, ya que se ha señalado que a nivel mundial un trabajador pierde la vida cada tres minutos como consecuencia de un accidente de trabajo y cada segundo cuatro más sufren lesiones por esta circunstancia. En apoyo a estos hechos se ha descrito que al año mueren alrededor de 180 mil trabajadores y otros 110 millones resultan con lesiones de diversa índole.

En 2007, en México de 14,424,178 trabajadores de 823,999 establecimientos registrados en el seguro de riesgos de trabajo del Instituto Mexicano del Seguro Social (IMSS), se reportaron 450,102 riesgos de trabajo, de los cuales 16,415 causaron incapacidades, lo que representa una tasa de 2.5 accidentes de trabajo por cada 100 trabajadores. En Baja California (B.C.) se presentaron 23,462 riesgos de trabajo, equivalente al 5.2% del total nacional. (STPS, 2007).

La agencia de noticias Notimex (2007), señala que según la estadística de la Secretaría de Trabajo y Previsión Social (STPS), los riesgos de trabajo más frecuentes ocurren a los empleados cuyo rango de edad va de los 20 a los 24 años. También destaca que los lapsos de antigüedad en el trabajo en los que ocurre el mayor número de accidentes es en las personas que llevan laborando entre uno y cuatro años (95 mil 642 casos) y quienes llevan de uno a seis meses (83 mil 506 casos). Conforme a la información, se infiere que la experiencia laboral contribuye de manera importante a disminuir el índice de accidentes, pues a partir del quinto año de labores y hasta los 25 las cifras bajan de manera considerable, hasta llegar

a los 4,200 casos entre quienes llevan laborando de 20 a 24 años, independientemente del rango de edad en la que se encuentren las personas accidentadas.

Para el IMSS (2007), el exceso de confianza, la falta de conocimiento para operar maquinarias, posiciones inseguras o no hacer uso de accesorios de protección como guantes, cascos y lentes son algunos de los factores que ocasionan un accidente de trabajo. Además, ilustra que los accidentes de trabajo son la primera causa de ausentismo laboral y más del 40% de incapacidades se expiden por este hecho. También representan el tercer motivo de atención en los servicios de urgencias, después de los que ocurren en vía pública y en el hogar.

Razón por la cual Anaya (2006), argumenta que la ausencia de la SHT trae altísimos costos a los trabajadores como primeros afectados en su propia persona, luego a las organizaciones, las comunidades y los países. También es importante resaltar que la SHT genera beneficios a las organizaciones en términos de productividad, calidad y competitividad.

En México, la Ley Federal del Trabajo (LFT) establece las obligaciones de los patrones respecto a la SHT. Se distingue el artículo 132 fracción XVI, que señala la obligatoriedad de instalar, de acuerdo con los principios de seguridad e higiene las fábricas, a fin de prevenir riesgos de trabajo y perjuicios al trabajador, así como adoptar las medidas necesarias para evitar que los contaminantes excedan los máximos permitidos en los reglamentos e instructivos que expidan las autoridades competentes.

Pero, más allá del marco jurídico que obliga a mejorar las condiciones de SHT en los centros de trabajo, es imperativo para las organizaciones comprender que si se está obligado a hacer algo al respecto, lo mejor y más inteligente es hacerlo bien, para ello debe prepararse y/o contar con personal calificado que les ayuden en ese propósito. Por lo anterior el objetivo de este trabajo es determinar la tendencia y causas de la ocurrencia de riesgos de trabajo en una planta maquiladora durante el periodo 2006-2008, así como evaluar el costo de dicha ocurrencia.

REVISION LITERARIA

La LFT en su artículo 473, define los riesgos de trabajo como los accidentes y enfermedades a que están expuestos los trabajadores en ejercicio o con motivo del trabajo. También señala que si el riesgo produce al trabajador una incapacidad temporal, deberá ser indemnizado con el pago íntegro del salario que deje de percibir mientras subsista la imposibilidad de trabajar. Pago que se hará desde el primer día de la incapacidad.

En México, además se tienen las normas NMX-SAST-001-IMNC-2000 y NMX-SAST-002-IMNC-2001, emitidas por el Instituto Mexicano de Normalización y Certificación (IMNC), A.C.; aunque no son normas de carácter obligatorio, su implementación puede acercar a una empresa al cumplimiento de las leyes nacionales y las normas emitidas internacionalmente (IMNC, 2000).

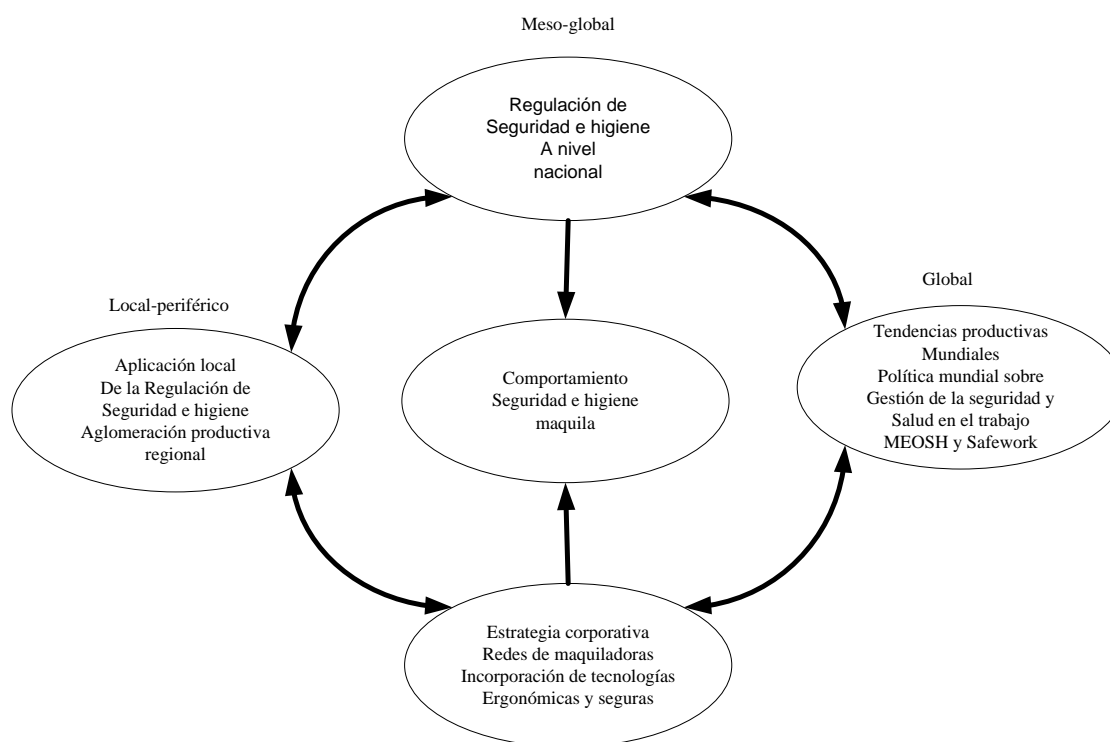
A nivel internacional la International Automotive Task Force (IATF) y la Japan Automobile Manufacturers Association, Inc. (JAMA) con el apoyo del Comité Técnico ISO/TC 176, elaboraron la especificación técnica TS-16949:2002, la cual establece en 6.4.1 y 6.4.2 que las organizaciones deben contemplar la seguridad del producto y los medios para minimizar los potenciales riesgos para los empleados, específicamente en las etapas de proceso de diseño y desarrollo, así como en las actividades del proceso de fabricación. Además, que deben mantener sus instalaciones en un estado de orden, limpieza y reparación acordes con el producto y las necesidades del proceso de fabricación (IMNC, 2007).

Para apoyar las políticas de mejora generadas por IMNC e IATF, recientemente se ha publicado la norma

OHSAS 18001, que es en realidad un modelo de gestión. Esta norma no pretende suplantar la obligación de respetar la legislación respecto de la seguridad e higiene de los trabajadores, ni tampoco a los agentes involucrados en la auditoria y verificación de su cumplimiento, sino que, como modelo de gestión que es, pretende ayudar a establecer compromisos, metas y metodologías para hacer que el cumplimiento de la legislación en esta materia (obligada) sea parte integral de los procesos de la organización (IMNC, 2000).

Pero la legislación (llámense leyes y normas) no es lo único que determina el comportamiento de las plantas maquiladoras, en relación a la seguridad y salud ocupacional de sus trabajadores. Es importante señalar que intervienen otros factores, los cuales se ilustran en la figura 1, donde con base en los trabajos de Carrillo *et al.* (2005), se presentan las relaciones causales en cada nivel socio-espacial, sus efectos son vistos más como posibles que como determinantes; es decir, sus implicaciones pueden ser alteradas debido a la existencia de otras posibles relaciones en el contexto particular del fenómeno (Massey, 1984 citado por Carrillo *et al* 2005).

Figura 1 Niveles de determinación socio-espacial en el comportamiento de seguridad, higiene y salud ocupacional de las plantas maquiladoras.



Fuente: Elaboración propia a partir de Carrillo *et al* (2005).

En este sentido, se considera que el comportamiento de las maquilas respecto a la seguridad y salud ocupacional es producto de un proceso de articulación de niveles, en el que cada uno contribuye parcialmente a su conducta; en este proceso, los alcances de cada nivel se expresan a la luz de contextos productivos particulares.

Lo que permite evitar el establecimiento de relaciones causales mecánicas para explicar la dinámica del comportamiento, además de situar la exposición que sigue en la conjunción entre las megatendencias productivas y de seguridad y salud ocupacional (nivel global), así como la transferencia productiva y de seguridad y salud ocupacional hacia las maquiladoras, además la aplicación de la regulación de seguridad

e higiene (nivel mesoglobal) y, por último, el tipo de aglomeración industrial en relación con la aplicación de la normativa a nivel local.

Atendiendo las observaciones de la propuesta de Carrillo *et al* (2005), el planteamiento se considera útil dado que permite observar el comportamiento de empresas con encadenamientos globales que trascienden el ámbito local y sujetas a procesos de transferencia productiva desde sus plantas matrices. Asimismo, se debe acentuar que al paradigma de la calidad total (asociado a las nuevas formas de organización productiva del sistema aplicado en Japón) empieza a agregarse la dimensión de la seguridad y salud ocupacional (Morag, 2006).

Con lo cual las empresas incorporan un enfoque integral en sus procesos de gestión de sistemas, lo que significa que éstos se amplían, ahora se debe tener un sistema de gestión de calidad, un sistema de gestión ambiental y un sistema de gestión de seguridad y salud ocupacional, ello es indicativo de la responsabilidad social y enfoque sustentable de las organizaciones.

Sin embargo, Ravelo y Sánchez (2006), argumentan que en México se puede identificar la cultura del “proletariado del norte”, el de los ritmos intensos de trabajo, el nacido flexible, el de las condiciones de trabajo que significan retroceso en los derechos laborales. Es decir, ilustran como la mayoría de las maquiladoras no han incorporado ese enfoque integral, se ocupan de la calidad pero no así del medio ambiente y de sus trabajadores.

Méndez (2003), enfatiza que los recintos maquiladores son imagen de sus mitos empresariales, como la calidad total, la cual, sólo en su abstracción adquiere sentido, ya que en su concreción refleja la violencia que esta rama productiva ejerce sobre el medio ambiente y la salud de los trabajadores.

Un punto central del debate al respecto es la explotación de obreros, cuya evidencia se expresa a través de largas jornadas y las pobres condiciones de trabajo, así como bajos salarios (Sargent y Matthews, 1999), por lo que distintos estudiosos del tema señalan que en el país se socava la salud y seguridad del trabajador y se tolera el abuso de los factores ambientales de trabajo. Esto representa un atractivo para que la nación sea destino para las fábricas que huyen de las restricciones y normas internacionales de salud ocupacional, a fin de mantener o incrementar su competitividad (Butler y Teagarden, 1993; Sargent y Matthews, 1999; Guendelman *et al.*, 1999).

De acuerdo con Salinas-Tovar *et al* (2004), en el país es común la práctica del subregistro de accidentes y enfermedades profesionales ante el IMSS. Una de las causas es el escaso reconocimiento de la importancia de la problemática por parte de empresas y trabajadores, especialmente de las enfermedades de trabajo, que por su naturaleza requieren de un tiempo prolongado para la presentación de signos y síntomas. Además reporta que durante 2001 en B.C. se observó un subregistro del 21.9%, mayormente para el caso de contusiones, heridas, dorsalgias, cuerpo extraño en ojo, lumbalgias y otros.

Al respecto Martínez (2007), señala que un 26% de los accidentes de trabajo que sufren los obreros mexicanos se “ocultan”, no se registran, ya que hay un “gran maquillaje” por parte de las empresas que no los reportan al IMSS para no pagar estos riesgos; además indica que se ha incrementado en casi 30% la morbilidad de los obreros en industrias como la metalmecánica, y que ha crecido el número de casos de trastornos mentales asociados al estrés e incluso cánceres que no se consideran enfermedades laborales en su mayoría.

Las estadísticas de la STPS de 2007 ilustran que en B.C. se tenían 689,270 trabajadores bajo el seguro de riesgos de trabajo, laborando en 37,996 empresas. Señala que se presentaron 23,462 riesgos de trabajo, es decir, una tasa de 3.4 por cada 100 trabajadores; de los cuales 595 causaron incapacidad. Los principales

diagnósticos de incapacidades permanentes indican que la amputación traumática de uno o más dedos se da con mayor frecuencia.

En Ensenada B.C. las estadísticas muestran que en 2007, se presentaron 2600 accidentes de trabajo y 80 incapacidades permanentes. Asimismo, indican que en la ciudad se tienen 91 empresas clasificadas como de “alto riesgo” para sus trabajadores, 70 de las cuales tramitan incapacidades frecuentes. En total, son 853 las empresas que significan un riesgo para los empleados. Aunque las estadísticas no revelan que porcentaje de dichas empresas son maquiladoras, se sabe que las actividades de ensamble generan la mayor frecuencia de las enfermedades, debido a que los puestos de trabajo de obrero demanda movimientos repetitivos y en algunos procesos el contacto con agentes químicos peligrosos (Lamas, 2008).

Por otra parte, el INEGI (2007), señala que en México 1'202,134 personas laboran en la industria maquiladora, 78.42% desempeñando funciones de obrero; mientras en B.C. se tienen 906 establecimientos maquiladores, es decir, el 32.24% del total nacional. De ahí la relevancia de estudiar la SHT en este sector.

METODO

De acuerdo con Hernández *et al.* (2006), la investigación se define como cuantitativa, dado que usa la recolección de datos para probar hipótesis con base en la medición numérica y el análisis estadístico, además de establecer patrones de comportamiento. Es un estudio descriptivo correlacional que ilustra la tendencia de la ocurrencia de riesgos de trabajo y evalúa la posible relación entre las variables del medio ambiente físico versus riesgos de trabajo, así como la relación entre estrés y riesgos de trabajo, por último la relación entre experiencia y riesgos de trabajo.

Por la temporalidad del problema a analizar la investigación se define como longitudinal, el periodo estudiado comprende los años 2006-2008. El interés por el tema se deriva de la ocurrencia de 45 riesgos de trabajo durante 2006 en la planta maquiladora objeto de estudio, la cual se dedica a la manufactura de piezas de plástico y empaques para la industria automotriz, localizada en Ensenada, B.C. La incidencia de riesgos le representó a la empresa un incremento en su prima de riesgos y por ende en sus costos de seguridad social.

La investigación se justifica dada la importancia de cuidar la seguridad y salud ocupacional de los trabajadores, quienes constituyen un importante capital para la empresa, así como por la necesidad de optimizar los costos e impactos de la SHT.

Las hipótesis a evaluar son: 1) a mayor experiencia en el trabajo habrá menor incidencia de riesgo de trabajo. Donde la experiencia se mide en años, según la antigüedad de la persona en el puesto, y 2) La incidencia de riesgos de trabajo se relaciona linealmente con las condiciones físicas del medio ambiente de trabajo y con el estrés experimentado por el trabajador.

Los datos se obtuvieron de los reportes de riesgo que la empresa presentó al IMSS. Asimismo, del formato de evaluación de la empresa, la cual incluye un estudio del medio ambiente físico del área donde se presentó el riesgo para lo cual utiliza un multímetro ergonómico, con el cual mide el nivel del ruido (dB), iluminación (lux), temperatura (°C) y humedad relativa. Para la valoración del estrés del trabajador, se aplicó el cuestionario sobre el estrés laboral de la OIT-OMS publicado por Llanea (2004).

RESULTADOS

En la tabla 1 se presentan los resultados obtenidos en relación a la ocurrencia de riesgos de trabajo incapacitantes en la planta objeto de estudio. Puede verse con claridad la tendencia a la baja tanto en 2007 y 2008 respecto a 2006. Asimismo, en relación a los días de incapacidad se observa una considerable tendencia a la baja, no así en el índice de frecuencia (If), cuya disminución es mínima.

Tabla 1 Indicadores de Riesgos de Trabajo Incapacitantes de 2006-2008

	2006	2007	2008
Riesgos de trabajo incapacitantes	45	20	11
Días de Incapacidad	895	621	262
Índice de frecuencia	0.33%	0.30%	0.24%
Índice de gravedad	16.34	25.52	19.57
Costo promedio de incapacidad	\$108,678.57	\$84,278.56	\$41,171.42

Fuente: Elaboración propia

El If es la probabilidad de que ocurra un siniestro en un día laborable, de ahí la relevancia de reducirlo al máximo posible. Respecto al índice de gravedad (Ig), es decir, el tiempo perdido en promedio por riesgos de trabajo que producen incapacidades temporales, permanentes parciales o totales y defunciones; se observa un comportamiento inestable, en 2007 se incrementa en un 64% en relación a 2006, pero en 2008 se reduce respecto a 2007 pero se ubica por encima del nivel de 2006. Respecto al costo promedio de las incapacidades también se observa una reducción –es importante señalar que se ha manejado un costo promedio, debido a que los trabajadores tienen un salario diferenciado según antigüedad, productividad y área de trabajo-, lo que permite inferir que las estrategias de mejora implementadas han permitido incrementar la SHT.

Por otra parte, el análisis de ocurrencia de riesgos por mes ilustra que junio y julio resultan críticos. Es decir, en los meses de verano se da la mayor ocurrencia de riesgos de trabajo. Adicionalmente, se realizó un análisis de frecuencias para determinar las áreas en las que se originan el mayor número de riesgos, los resultados señalan a las áreas E, B, D y A. Es importante destacar que los operadores son los que sufren el mayor número de riesgos, representan el 71.87%.

Caracterizados los riesgos se procedió a analizar la información recabada por el departamento de seguridad e higiene de la empresa a fin de poder determinar la causa que originó cada uno de los riesgos incapacitantes, se establecieron las causas posibles y para cada una se determinó su frecuencia acumulada. En la figura 2 por medio de un diagrama de Ishikawa se clasifican las causas.

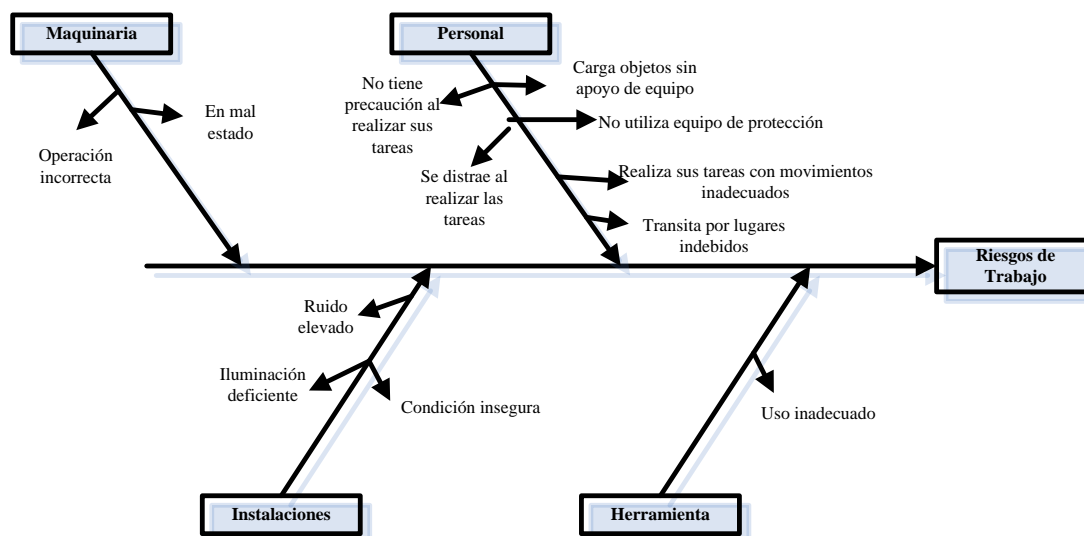
El Diagrama de Ishikawa o causa-efecto indica que es el mismo trabajador quien provoca la ocurrencia de riesgos de trabajo, principalmente por no concentrarse al 100% en las tareas que desempeña, por no operar correctamente maquinaria y herramientas y porque al realizar sus actividades incurre en movimientos que provocan actos inseguros.

También es importante destacar que los riesgos han provocado malestares en los trabajadores, las partes más afectadas son: espalda, mano derecha y mano izquierda; donde los dolores de espalda comúnmente llamados lumbalgias son los más concurrentes.

Como el origen de los riesgos es el trabajador, se decidió evaluar las condiciones del ambiente físico de trabajo a fin de poder determinar si tienen relación con la distracción y falta de precaución que experimentan los trabajadores, a continuación se ilustran los resultados.

El estudio del ambiente físico se soporta en la métrica de las variables: iluminación, ruido, temperatura y humedad relativa. Los resultados promedio obtenidos para cada una de éstas variables indican 605.72 lux de iluminación, un nivel de ruido de 77.80 dB, 26.91 grados centígrados de temperatura ambiente con 51.2% de humedad relativa. Resultados que en promedio señalan que las áreas están sobre-iluminadas, lo que incrementa los niveles de reflexividad y contraste, en consecuencia se generan fenómenos estroboscópicos en exceso y muy pronunciados, afectando la calidad de la visión del trabajador, ya que consecuentemente la vista se cansa en un tiempo relativamente corto, debido a que en presencia de mucha luz la pupila se cierra y se abre, a fin de encontrar el enfoque adecuado.

Figura 2 Análisis de Causa Efecto de Riesgos de Trabajo



Fuente: Elaboración propia.

Con relación al ruido, es importante destacar que el promedio no es un indicativo, aunque su nivel indique que está por debajo de lo establecido en la NOM-011-STPS-2001, lo relevante es el impacto que genera en cada operador, según el área de trabajo, por ello se atiende al estudio particular, el cual muestra que ocho de las treinta áreas estudiadas, es decir un 26.7%, sobrepasan los límites permitidos (la norma establece 85 dB como máximo), las áreas en cuestión se ilustran en la tabla 2. Las áreas se manejan por medio de una letra asignada por razones de confidencialidad a solicitud expresa de la empresa.

Tabla 2 Nivel de Ruido en las Áreas de Estudio

Área	dB
C	100.5
F	92.6
O	87.7
B	90.3
D	95.7
J	102.9
A	101.2
K	92.1

Fuente: Elaboración propia

Según la Organización Mundial de la Salud (1999), exposiciones prolongadas a niveles superiores a 75 dB producen sordera permanente y/o acumulación de fatiga auditiva, ésta última suele desarrollar estrés, mismo que se manifiesta en algunos de los siguientes síndromes: cansancio crónico, tendencia al

insomnio, enfermedades cardiovasculares, trastornos psicofísicos y cambios conductuales. Situación que afecta la salud ocupacional de los trabajadores, y por ende su productividad.

Para Osborne (1987), se trata de un ruido que hace a los trabajadores sensibles a cambios de umbral permanentes (CUP), lo que a mediano plazo puede ocasionar pérdida de audición. Por otra parte, con relación a las métricas obtenidas de temperatura y humedad relativa puede decirse que el medio ambiente de trabajo es confortable, la temperatura promedio es de 26.91 grados centígrados con 51.2% de humedad relativa.

Teniendo en cuenta que varios autores como Osborne (1987), Llana (2004), y otros han demostrado que las condiciones del medio ambiente de trabajo pueden afectar al trabajador ocasionándole estrés, se aplicó a una muestra de trabajadores la encuesta de estrés de la OIT-OMS para medir el nivel de estrés experimentado. La muestra de empleados se seleccionó de forma aleatoria, pero sólo considerando aquellos que laboran en las áreas con alta incidencia de riesgos de trabajo. El estudio incluyó empleados operativos representativos de los tres turnos en que opera la empresa. El 73% de la muestra corresponde al turno matutino y un 73% es del sexo femenino, característica común en empresas de este sector industrial. En promedio la muestra cuenta con 1.23 años de antigüedad en el puesto y 27.2 años de edad.

El instrumento aplicado evalúa la percepción del estrés experimentado por los empleados por medio de las dimensiones: Clima organizacional, estructura organizacional, territorio organizacional, tecnología, influencia del líder, falta de cohesión y respaldo del grupo. Los resultados manifiestan cuatro niveles de estrés: bajo, intermedio, estrés y alto.

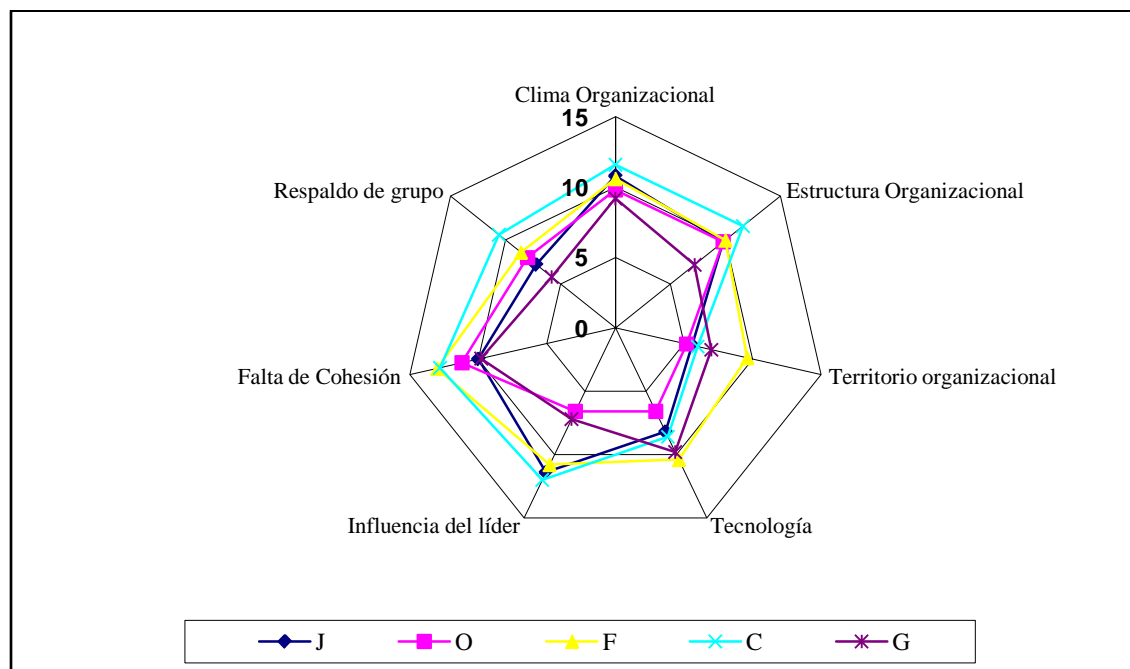
El estudio se aplicó a personal de las áreas definidas como J, O, F, C y G, encontrándose que en general todos los empleados experimentan estrés, pero particularmente el 20% se sitúa en los niveles intermedio y alto estrés, situación que debe de ocupar a la empresa objeto de estudio, ya que ello podría ser la razón de la incidencia de accidentes y/o enfermedades de trabajo.

En cuanto al análisis individual por dimensiones (ver figura 3) los resultados dejan ver que la falta de cohesión es la que mayor impacta en la generación de estrés, sin embargo también el clima organizacional es significativo para que el empleado se sienta estresado, principalmente a causa de los altos niveles de ruido. El área C resultó ser la que mayormente genera estrés en el personal, asimismo es un área con un ruido que supera los 100 dB. Razón por la cual se considera conveniente hacer un análisis de correlación entre dichas variables.

En las áreas C y J se tiene un alto riesgo de *sordera permanente*, ya que ésta se presenta por exposiciones prolongadas a niveles superiores a 75 dBA, bien por sonidos de corta duración de más de 110 dBA, o bien por acumulación de fatiga auditiva sin tiempo suficiente de recuperación. Hay lesión del oído interno (células ciliadas externas de la superficie vestibular y de las de sostén de Deiters). Se produce inicialmente en frecuencias no conversacionales, por lo que el sujeto no la suele advertir hasta que es demasiado tarde, salvo casos excepcionales de autoobservación. Puede ir acompañada de zumbidos de oído (*acúfenos*) y de trastornos del equilibrio (*vértigos*) (Llana, 2004).

Con base en los resultados obtenidos y respecto al planteamiento establecido con relación a la aseveración de que el ambiente físico de trabajo afecta la salud ocupacional del obrero, e incide en el desarrollo de estrés así como que es una de las principales causas de la ocurrencia de los accidentes de trabajo, se concluye que el nivel de ruido en las áreas descritas en la tabla 2, provoca sensación de malestar en los trabajadores, las personas afectadas hablan de intranquilidad, inquietud, desasosiego, depresión, desamparo, ansiedad o rabia.

Figura 3 Resultados Promedio de la Percepción de Estrés por Dimensiones.



Fuente: Elaboración propia

Por otra parte, es importante destacar que la “inadecuada” iluminación de las áreas objeto de estudio produce polución lumínica, misma que proviene principalmente de la mala iluminación de edificios. Los efectos de una mala iluminación son principalmente: los trastornos visuales, los dolores de cabeza y la fatiga general, aspectos que se agudizan durante largos períodos de estudio o de trabajo con luz inadecuada. La falta de visibilidad y el deslumbramiento son causa de riesgos ergonómicos. Por lo que es recomendable realizar en el futuro como complemento de la investigación el chequeo oftalmológico de una muestra de trabajadores a fin de poder determinar si hay efectos de ambliopías, tales como: presbicia, astigmatismo miópico simple e hipermetropía (Oborne, 1986).

Es pertinente señalar que la legislación mexicana no contempla hasta ahora el estrés como causa de accidente u enfermedad laboral, de ahí la importancia del desarrollo de estudios que evidencien la relación entre las variables, a fin de que la legislación pueda modificarse al respecto.

Razón por la cual se consideró importante realizar un estudio de correlación para evaluar la prevalencia de una relación lineal entre las condiciones de los factores ambientales de trabajo y el nivel de estrés experimentado por los trabajadores, se aplicó el análisis de correlación de Pearson. Los datos base del estudio se ilustran en la tabla 3 y los resultados del análisis de correlación en la tabla 4. El estudio se realizó considerando que el número de riesgos incapacitantes y el estrés son variables dependientes y se tomaron como variables independientes: iluminación, ruido, temperatura y humedad.

Tabla 3 Condiciones Ambientales y de Estrés en Días de Ocurrencia de Accidentes

Iluminación (lux)	Ruido (dB)	Temperatura (°C)	Humedad (% HR)	# Riesgos incapacitantes	Estrés
240	81.7	23.9	67.8	1	10.8
229	100.5	24.1	57.8	4	9.8
338	79.8	24.8	58.7	2	5.6
375	80.5	26.1	58.5	1	8.2
1009	82.7	25.5	58.8	2	11.4
578	83.3	25.7	57.9	1	10
308	82.2	25.9	56.7	3	7.2
267	83.2	25.9	56.3	3	9.8
1130	83.4	26	55.6	2	9.8
267	84.2	26.2	53.9	2	5.2
280	85.1	26.04	52.6	1	6.6
321	81.1	26.5	51.3	4	6.6
270	85.7	26.7	51.4	7	11.2
182	82.7	26.7	52.1	1	8
1895	83.9	27.4	51.3	2	10.6
2275	85.6	27.8	49.4	1	10

Fuente: Reporte de seguridad de la planta 2006.

Tabla 4 Resultados r de Pearson Entre Variables

Variable-riesgos de trabajo	r	Variable-estrés	r
Iluminación	-0.25952	Iluminación	0.41091
Ruido	0.330218	Ruido	0.24295
Temperatura	0.019643	Temperatura	-0.00088
Humedad relativa	-0.25717	Humedad relativa	0.17903

Fuente: Elaboración propia con apoyo de Excel.

Los resultados de la tabla 4 muestran que los coeficientes de correlación de Pearson (r) son cercanos a cero, por lo tanto se infiere que no hay una relación lineal entre las variables del medio ambiente físico: iluminación, ruido, temperatura y humedad relativa, versus la ocurrencia de riesgos de trabajo, asimismo los resultados permiten inferir que tampoco hay relación lineal aparente entre éstas y el nivel de estrés experimentado por los trabajadores. Lo que sí describen es que un 10.90% de la relación entre ruido y riesgos de trabajo es lineal, y un 16.88% de la relación iluminación estrés es lineal.

También se evaluó la relación lineal entre la ocurrencia de riesgos y la experiencia del trabajador, para los datos de 2006 se obtuvo un $r = -0.630$, mientras en 2007, $r = -0.473$ y en 2008, $r = 0.18$; en el primer caso r indica una relación inversa entre las variables y un 39.69% se explica linealmente, para 2007 también se describe una relación inversa pero explicada sólo en un 22.37% linealmente, y en 2008 por el valor de r cercano a cero se infiere que no hay una relación lineal entre las variables. Por lo que no son suficientes estos resultados para emitir una conclusión al respecto y se considera conveniente continuar realizando este tipo de análisis a fin de poder obtener mayor evidencia que permita inferir al respecto.

Es importante destacar el interés de la empresa objeto de estudio por analizar las causas de la ocurrencia de riesgos incapacitantes, así como por implementar estrategias a fin de prevenirlos, en este sentido a la empresa se le recomendaron distintas acciones entre las que sobresalen: la revisión de los métodos de trabajo: los movimientos, capacitación y adiestramiento al personal en cómo debe realizar sus tareas,

concientización al personal de la importancia de concentrarse en el desarrollo de su trabajo, también se ha continuado monitoreando las condiciones del medio ambiente físico, se ha dotado de equipo de protección al personal que labora en las áreas que lo requieran, tal es el caso de audífonos protectores para el ruido.

CONCLUSIONES

La SHT es un área funcional que debe ser considerada estratégica para toda empresa, donde se enfatice en la importancia de proveer un medio ambiente de trabajo seguro y saludable, a fin de poder cumplir con los ordenamientos legales, reducir los costos de la seguridad social y lo más significativo cuidar del capital humano que hace posible que las empresas sean competitivas.

Ciertamente muchos estudios cualitativos han ilustrado la dependencia entre el medio ambiente de trabajo y la ocurrencia de riesgos, sin embargo, el presente estudio no muestra resultados contundentes que permitan inferir respecto a la hipótesis planteada: a mayor experiencia en el trabajo habrá menor incidencia de riesgo de trabajo. Por lo que es necesario continuar investigando al respecto.

Asimismo, los resultados tampoco conducen a inferir sobre una relación lineal entre la incidencia de riesgos de trabajo y las condiciones físicas del medio ambiente de trabajo: ruido, iluminación, temperatura y humedad relativa; por lo que de igual manera es importante continuar los estudios cuantitativos a fin de poder emitir una conclusión con un respaldo sólido. En el mismo sentido los resultados tampoco permiten inferir que haya una relación lineal entre los riesgos de trabajo y el estrés experimentado por el trabajador.

La principal causa de riesgo de trabajo se presenta por la falta de concentración de los trabajadores en las tareas que desempeña, descuido en el manejo correcto de maquinarias y herramientas, y movimientos inadecuados en la operación de las mismas, estas causas generan malestares en la espalda y manos de los trabajadores. Sin embargo, falta precisar si los riesgos de trabajo están relacionados a factores externos que estén relacionados a problemas económicos, problemas familiares, no estar satisfecho con el trato de la empresa. También, quedan abiertos los estudios relacionados a los riesgos de trabajo en las mujeres trabajadoras.

REFERENCIAS

Anaya V. Ana (2006) Diagnóstico de Seguridad e Higiene del Trabajo, Listados de verificación basados en la normatividad mexicana, *e-Gnosis*, (4), Universidad de Guadalajara, Guadalajara, México.

Butler Mark C. y Teagarden Mary B. (1993) Strategic Management of worker health, safety and environmental issues in Mexico's maquiladora industry, *Human Resource Management*, winter, 32 (4), p. 479-503.

Carrillo Jorge, García Humberto y Gomis Redi (2005) Capítulo II Desempeño ambiental y evolución productiva en la industria maquiladora de exportación, en Carrillo Jorge y Schater Claudia (Compiladores), CEPAL, sede subregional de la CEPAL en México, p. 21-78.

Guendelman Sylvia, Samuels Steven y Ramírez-Zetina Martha (1999) Relación entre salud y renuncia al empleo en trabajadoras de la industria maquiladora electrónica de Tijuana, *Salud Pública de México*, (41) 4, julio-agosto, p. 286-296.

Hernández Sampieri, Roberto Fernández Collado Carlos y Baptista Lucio Pilar (2006) *Metodología de la investigación*, Editorial: Mc Graw-Hill, México.

IMNC (2000) *NMX-SAST-001-IMNC-2000: Sistemas de administración de seguridad y salud en el trabajo: Especificación*, INMC, México D.F.

IMNC (2007) *NMX-CC-16949-2002 Sistemas de gestión de calidad, requisitos particulares para la aplicación de la norma NMX-CC-9001-IMNC-2000 para la producción en serie y de piezas de recambio en la industria del automóvil*, INMC, México D.F.

IMSS (2007) En 2007, el IMSS registró 450 mil accidentes de trabajo, consultado el 10 de Noviembre de 2008 en http://www.medicinadigital.com/index2.php?option=com_content&do_pdf=1&id=11039

IMSS (2007) Memoria Estadística, capítulo VI Salud en el trabajo, consultado el 12 de Enero de 2009 en <http://www.imss.gob.mx/NR/rdonlyres/40094A70-2175-41BB-A5AA-28FAA7F80C00/0/CapVI.pdf>

INEGI (2007) Estadísticas económicas, industria maquiladora de exportación, febrero, consultado en Internet el 12 de marzo de 2007 en http://www.inegi.gob.mx/prod_serv/contenidos/espanol/bvinegi/productos/continuas/economicas/maquiladora/ime/ime.pdf

Lamas Lorena (2008) Clasifican empresas de acuerdo a riesgo, *El Vigía*, 28 de mayo.

Ley Federal del Trabajo (2006) publicada en el *DOF* el 17 de enero.

Llaneza Álvarez F. Javier (2004) *Ergonomía y psicología aplicada. Manual para la formación del especialista*, editorial Lexnova cuarta edición, Valladolid España.

Martínez Alcántara Susana (2007) En México se oculta 26% de los accidentes de trabajo, *La Jornada*, 16 de julio, consultado el 12 de mayo de 2008 en <http://www.jornada.unam.mx/2007/07/16/index.php?section=sociedad&article=045n1soc>

Méndez B. Luís H. (2003) Los mitos de la industria maquiladora fronteriza, *El Cotidiano*, jul-ago, 19 (120), Universidad Autónoma Metropolitana Azcapotzalco, D.F. México. P. 72-82.

Morag Ido (2006), Ergo makeover. Intel Israel goes injury-free and hazard-free, *Industrial Engineer Journal*, Julio, Institute of Industrial Engineers, p. 32-36.

Notimex (2007) Se registran 300 mil accidentes de trabajo al año: STPS, consultado el 16 de febrero de 2008 en <http://www.esmas.com/noticierostelevisa/mexico/617209.html>

Oborne David J. (1987) *Ergonomía en Acción*, Editorial Trillas, México.

Organización Mundial de la Salud, OMS. (1999). Guidelines for Community Noise. Consultado en enero de 2005 en: http://www.ruidos.org/Documentos/guia_oms_ruido_1.html

Ravelo Blancas Patricia y Sergio Sánchez Díaz (2006) Resistencia individual y colectiva ante la violencia de género. La experiencia de las obreras de las maquiladoras de Ciudad Juárez. *La Ventana*, (24), p. 389-404, consultado el 18 de agosto de 2007 en <http://www.publicaciones.cucsh.udg.mx/ppperiod/laventan/ventana24/ventana24-12.pdf>

Salinas-Tovar José Santiago, López-Rojas Pablo, Soto-Navarro María Oralia, Caudillo-Araujo David Efraín, Sánchez-Román Francisco Raúl y Borja-Aburto Víctor Hugo (2004), El subregistro potencial de accidentes de trabajo en el Instituto Mexicano del seguro Social, *Salud Pública de México*, 46 (3), mayo-junio, p. 204-209.

Sargent Johnn y Matthews Linda (1999) Exploitation or choice? Exploring the relative attractiveness of employment in the maquiladoras, *Jornal of Business Ethics*, 18, p. 213-227.

Sarmiento-Salinas Rodrigo, Pablo López-Rojas, Irma Araceli Marín-Cotoñieto, Arturo Godínez-Rocha, Luis Haro-García, Santiago Salinas-Tovar (2004) Factores de riesgo asociados a los accidentes de trabajo en la industria de la construcción del Valle de México, *Gaceta Médica México*, 140(6), p. 593-597.

STPS (2007) Información sobre Riesgos de Trabajo 2000-2007, consultado el 16 de enero de 2009 en <http://trabajoseguro.stps.gob.mx/trabajoseguro/boletines%20anteriores/2008/bol021/vinculos/Informaci%C3%B3n%20sobre%20Accidentes%20y%20Enfermedades%20de%20Trabajo%202000-2007.pdf>

BIOGRAFIA

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APLICACIÓN DEL CUADRO DE MANDO INTEGRAL (BALANCED SCORECARD) EN LAS PYMES A PARTIR DE LA PLANEACIÓN ESTRATÉGICA: CASO KURODA

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RESUMEN

En el mundo de los negocios, ya no es suficiente buscar la mejora sustancial en los resultados financieros para atender las expectativas de los socios y los accionistas de una empresa. La demanda cada vez más exigente de las necesidades del cliente, motiva a las empresas a buscar la innovación en sus procesos, reduciendo sus costos y otorgando al capital intelectual, el lugar prioritario que en otras décadas se otorgó a los indicadores de desempeño financiero. Como se expondrá a lo largo de esta investigación, se observará cómo al querer solucionar un problema utilizando solo una herramienta, se puede llegar a confundir los resultados a corto plazo. A través de la Planeación Estratégica aplicada en todos los niveles de la organización, se puede diagnosticar, analizar y determinar las necesidades de la empresa en materia de capacitación y mejora de sus procesos. En el caso KURODA, se presentará la aplicación del cuadro de mando integral (Balanced Scorecard), lo que les permitió medir el desempeño de la empresa desde las cuatro perspectivas: financiera, del cliente, de innovación y aprendizaje, de su capital intelectual y el de los procesos.

INTRODUCCION

En un entorno cada vez más competitivo, donde las reglas que han regido la economía están en entredicho, las organizaciones necesitan tener más claro cual es su razón de ser en el mercado o misión, y a dónde quieren llegar, cuándo, cómo y con qué recursos o lo que conocemos como visión. Si se clarifica el rumbo, su crecimiento y resultados mejorarán sustancialmente. Pero si las empresas con menos recursos como las pequeñas y medianas empresas (PYMES) desconocen su mercado, a su cliente, su competencia, sus fortalezas y debilidades, tanto como las amenazas del entorno, es muy posible, que también dejen de ver sus oportunidades.

Frente a este escenario y ante una exigencia de productos y servicios de calidad, las Instituciones Educativas tienen el compromiso de colaborar y apoyar en la búsqueda de alternativas de solución, para que los profesionistas que se están formando, brinden soluciones aplicables a la problemática del entorno en el que se desenvuelven.

De ahí que la *Universidad Autónoma de Baja California*, asume el reto de transformarse en una comunidad de aprendizaje e innovación, que propicia la educación continua y a lo largo de toda la vida de sus egresados, fomente la vida colegiada y la vinculación con las empresas y los diversos sectores de la sociedad a la que sirve.

El presente trabajo, es una muestra de que los servicios que se ofertan a los sectores productivos y de servicio, a través del área de Educación Continua de la Facultad de Ciencias Administrativas (FCA), abordan la necesidad de colaborar en la asesoría de las PYMES, no solo en la identificación de su problemática al impartir capacitación empresarial, sino fungiendo como un consultor que le permita detectar y prevenir problemáticas que mermen en su eficiencia operativa.

El caso de estudio que se aborda, es el de la empresa KURODA, una PYME dedicada a la venta al mayoreo y menudeo de artículos de plomería, muebles y accesorios de baño, pisos y recubrimientos. Esta empresa se acercó a la UABC, con el objeto de recibir capacitación en Balanced Scorecard, habiendo cursado un Taller de Planeación Estratégica en el año 2007. Mediante el análisis de sus evidencias de desempeño, se realizó un Plan Estratégico en 3 etapas para su mejoramiento de indicadores: Diagnóstico, Análisis de resultados, Implementación de las Estrategias. En este trabajo se explicará el proceso que llevó a la empresa, a confiar en la experiencia de la universidad y en su grupo de asesores.

REVISION LITERARIA

Cuando por primera vez Kaplan y Norton (2007) señalaron que los resultados de la eficiencia operativa de las empresas no solamente estaba en función de sus utilidades o su salud financiera, varios analistas y estudiosos de la administración leyeron, primero con incredulidad, luego con asombro y admiración, los resultados de sus estudios con las 500 empresas más exitosas del mundo. Al argumentar con evidencias exitosas, que el secreto de su éxito residía precisamente en la medición de sus dimensiones financieras, así como las operativas, incluyeron adicionalmente otros parámetros como el conocimiento de las necesidades del cliente, ya abordada por Crosby (1987) y la revisión continua de sus indicadores de desempeño operativo en el estudio de la calidad, Juran (1964). El incluir en la estrategia corporativa al capital humano como uno de los indicadores clave, y la innovación como el pulmón que impulsa al crecimiento, el mundo de los negocios dejó entrever su secreto para compartirlo con las pequeñas y medianas empresas (PYMES) y de esta forma, apoyarlas en su búsqueda por el mejoramiento de su eficacia, incremento de sus indicadores financieros y sobre todo, la satisfacción del cliente.

METODOLOGIA

La propuesta que se plantea en este estudio, es un Plan Estratégico que se diseñó partiendo de un enfoque sistémico, basado en la metodología de Robert Kaplan y David Norton, denominada Balanced Scorecard o BSC, y que fue presentada por primera vez en 1992. Su metodología permite vislumbrar a la empresa desde cuatro aspectos: perspectiva financiera, perspectiva del cliente, perspectiva interna del negocio (operaciones) y la perspectiva de innovación y aprendizaje, que involucra al capital humano.

El primer acercamiento de la empresa a la Facultad de Ciencias Administrativas (FCA) de la Universidad Autónoma de Baja California (UABC) se dio a través del área de Vinculación, ya que requerían un estudio de mercado para tomar decisiones respecto a la apertura de una nueva plaza en el estado. Fue en el transcurso de varias entrevistas, que los gerentes de mayoreo y menudeo de la empresa solicitaron un curso de capacitación en BSC. A sugerencia del despacho consultor que los venía asesorando por parte de la casa matriz. Luego de hacerles algunas preguntas de diagnóstico, se llegó a la conclusión de que se requerían más elementos para impartir BSC, ya que la empresa acababa de concluir un curso en Planeación Estratégica donde no obtuvieron los resultados que esperaban.

Con la colaboración de los líderes de las áreas de administración, compras, ventas, recursos humanos y operaciones, se realizó durante 6 meses la primera etapa, que consistió en el proceso de Diagnóstico en el que participaron en conjunto con los gerentes de mayoreo y menudeo, aplicando el análisis FODA en cada uno de sus departamentos. Con los resultados obtenidos se procedió a analizar los parámetros establecidos por la casa matriz, misma que no contaba con toda la información para establecer comparaciones realistas y deseables para cada una de sus sucursales, por lo que se definieron de acuerdo al siguiente Plan Estratégico por módulos:

Planeación Estratégica: Gerencia y mandos medios definirán las estrategias de acción para las necesidades inmediatas de la empresa. Desarrollo del Capital Humano: Gerencia y mandos medios elaborarán su plan personal de desarrollo acorde a las necesidades de la empresa.

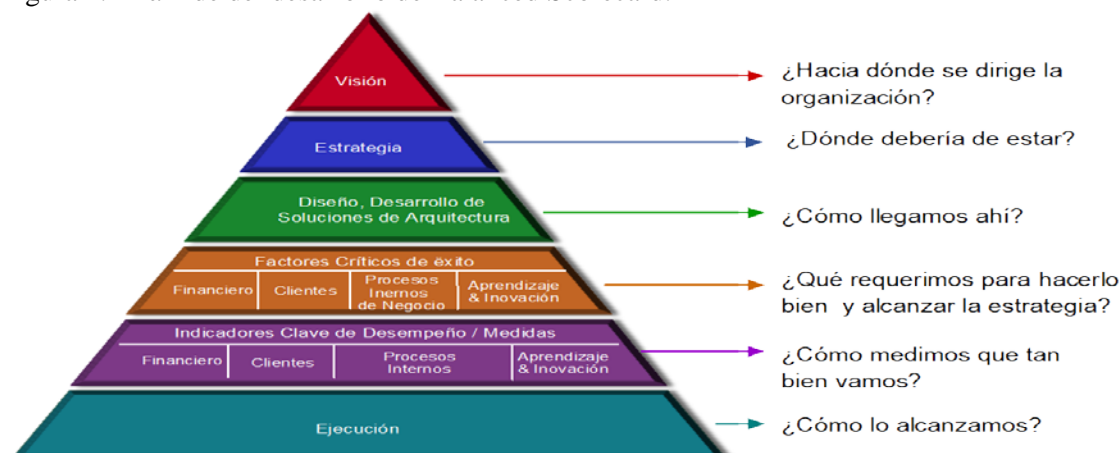
Mejoramiento de procesos operativos: Al término de este taller todo el personal será capaz de optimizar sus recursos, sus espacios de trabajo y desarrollar las habilidades para estimular la productividad.

Mejoramiento del servicio al cliente: Se adquirirán conocimientos, habilidades y actitudes encaminadas a reconocer la importancia de satisfacer las necesidades y deseos de los clientes de la empresa.

Mejoramiento de procesos financieros: El personal de las áreas administrativas adquirirán las habilidades para aplicar herramientas financieras para la toma de decisiones exitosas.

En la segunda fase, en los siguientes tres meses se establecieron los procesos críticos de la empresa, adoptando un Plan de Capacitación para aquellos que requerían ser atendidos primordialmente y que, incidían en la atención al cliente. Una vez analizados los indicadores que el mismo personal elaboró, se procedió al diseño de estrategias que subsanaran las debilidades más apremiantes y las de solución sencilla, posteriormente, se eligieron aquellas que requerían una estrategia conjunta, es decir, en que se involucraran de manera conjunta las demás áreas.

Figura 1. Pirámide del desarrollo de Balanced Scorecard.



Esta figura muestra las etapas en las que se analizaron desde la visión de la empresa hasta llegar a la ejecución de los indicadores de desempeño.

RESULTADOS

Después de la segunda etapa, comenzaron a notarse cambios no solo en los indicadores de desempeño que los mismos encargados de área fijaron, sino entre el personal que colaboró en el monitoreo de sus propios indicadores y los de otras áreas. El ejemplo más reconocible fue el de las ventas. Del mes de septiembre a octubre de 2008, las ventas se incrementaron en 5% solo en un mes. Así mismo, el área de atención a clientes que antes de la aplicación del Plan Estratégico no se habían establecido mecanismos de medición tales como evaluaciones al desempeño o algún otra herramienta como el buzón de sugerencias, se comenzó a utilizar y los trabajadores de ventas en el área de piso lograron incrementar su eficiencia en un 8%, ya que es un área con rotación mayor a otras como mayoreo, donde los empleados cuentan con más de 10 años de servicio en comparación con el área de menudeo donde el promedio es de 3 años.

Sin embargo, en áreas como las de mantenimiento y almacén, que al ser informados del proceso por el que atravesaba la empresa, a pesar de la recesión económica que ya comenzaba a sentirse en la tienda, los

trabajadores encontraron que midiendo su desempeño de manera diaria y posteriormente visualizar sus resultados, fomentaba entre ellos la creatividad y el espíritu de equipo. Sus indicadores de desempeño fueron los que denotaron mayores incrementos de hasta un 50% de mejoramiento en comparación con el mes anterior.

En el aspecto financiero, se detectó el conocimiento básico de finanzas por parte de los encargados del manejo administrativo de la empresa, por lo que se capacitó en análisis financiero para que los gerentes, comprendieran e interpretaran la información financiera con solo observar las razones como liquidez, rentabilidad, endeudamiento, rotación de inventarios y de cuentas por cobrar y pagar. El mejoramiento de las operaciones ocurrió casi desde la capacitación, ya que aún contando con el manual de organización correspondiente, su falta de actualización impedía a los trabajadores su aplicación formal, creando ellos mismos procedimientos semejantes pero sin estandarización. Con el establecimiento de procedimientos simples, documentados y monitoreados por ellos mismos, se abatió el rezago en inventarios, las mermas y pérdidas de material, una de las debilidades cuyo costo desconocían y que al estimarlo posteriormente, se detectaron desviaciones considerables para el encargado del área.

CONCLUSIONES

Con esta experiencia, la empresa KURODA mejoró en su eficiencia operativa, financiera, desde la perspectiva de los clientes y de la de sus trabajadores. Se observaron los cuatro indicadores de la madurez de un equipo de trabajo y que además, es su principal fortaleza: Sentido de realización personal, responsabilidad compartida, proactividad y sentido de independencia. La actitud de sus miembros, denotó gran capacidad de organización y prevención de errores o defectos en las operaciones, lo que contribuyó a una mejor organización del trabajo conjunto. En opinión de los trabajadores de primera línea, esta experiencia los unió más como equipo, detectaron sus fortalezas no solo como empresa, sino como el capital humano que impulsa el desarrollo de la economía local. Son experiencias como esta, las que hacen a las empresas creer en las instituciones de educación superior y verlas como alternativas viables para la solución de problemas concretos, y no como entes elitistas que solo investigan problemáticas ajenas a su diario devenir.

REFERENCIAS

Goleman, Daniel. (2007) Liderazgo que obtiene resultados, *Harvard Business Review*, Diciembre, p. 13-25.

Kaplan, R. & Norton D. (2007) "El Balanced Scorecard: Mediciones que impulsan el desempeño", *Harvard Business Review*, Mayo, edición extraordinaria, p. 4-13.

BIBLIOGRAFÍA

Crosby, P. (1987) Calidad sin lágrimas: El Arte de administrar sin problemas. México, CECSA, 1ª. Ed.

Robbins, S. & Coulter, M. (2005) Administración. México, Editorial Pearson, 8ª. Ed.

Ronquillo, José Luis (2006). Administración básica de la empresa familiar: un enfoque práctico. México, Editorial Panorama, 1ª. Ed.

EL RIESGO SISTEMÁTICO β , DESDE LA PERSPECTIVA DE PENSAMIENTO DE LINNER, SHARPE, MERTON Y MILLER

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RESUMEN

Este artículo unifica la matemática de Linner y Sharpe, para determinar la rentabilidad exigida por un accionista conocida en el modelo Capital Asset Price Model -CAPM- y las proposiciones fundacionales de las finanzas Corporativas, a partir de los estudios de Franco Modigliani y Merton. A través de las diversas ecuaciones, el lector podrá construir y matematizar el concepto de Riesgo Sistemático β , para diversas aplicaciones de las finanzas modernas. Se hace una precisión de las diferentes medidas de Riesgo Sistemático como es Beta del activo, (β_a) Beta de la deuda (β_d), Beta del accionista (β_e) y beta de un accionista sin deuda (β_u) en diversos escenarios de análisis

Palabras Clave: Riesgo Sistemático, CAPM, Costo de Capital, tasa de descuento, riesgo sistemático

INTRODUCCIÓN

El objetivo de este artículo es presentar el concepto de Riesgo Sistemático β y su formulación matemática, desde la línea de pensamiento de Linner, Sharpe, y las proposiciones de M-M (Merton y Modigliani). Cada vez más, los financistas requieren implementar una capacidad analítica, en el uso del concepto de riesgo sistemático, para el descuento de cantidades monetarias en virtud de la teoría del costo de capital, en diversos campos de las finanzas (pricing, valoración, asignación de recursos en ambientes de incertidumbre, tasación de tarifas, operaciones estructuradas, etc.). En consecuencia, se requiere la elaboración conceptual y matemática, de una tasa de descuento ajustada al riesgo, cuya notación en adelante es RADR- Risk Adjust Discount Rate-. Y para el ejercicio de estas actividades, se cuenta con el respaldo de desarrollos teóricos, formulados por economistas financieros de la década del 50 y 60 del siglo pasado, en cabeza de Linner y Sharpe, y por el otro lado, de Miller y de Merton (57) y de sus aclaraciones posteriores. Con la presentación del artículo, el lector podrá darse cuenta de la coherencia de estas dos escuelas de pensamiento y la posibilidad de combinar estos modelos en un ejercicio matemático para usos modernos en finanzas.

LAS ESCUELAS DE PENSAMIENTO COMO PUNTO DE PARTIDA PARA EXPLICAR EL RIESGO SISTEMÁTICO Y SU USO

¿Que Aportaron Linner y Sharpe al Tema Que Nos Ocupa?

William Sharpe tomó como punto de partida los resultados de Markowitz y desarrollo sus implicaciones en los precios de los activos. Agregó la suposición de que en todo momento los precios de los activos se ajustarán para igualar la oferta y la demanda de todo activo riesgoso, demostró que debe existir una estructura muy específica entre las tasas esperadas de rendimiento sobre los activos riesgosos. Hoy la estructura propuesta por la teoría de Sharpe constituye comúnmente la base para efectuar los ajustes del riesgo en muchas áreas de la teoría y de la práctica financiera (Bodie *et al* 1999).

El modelo matemático del Capital Asset Price Model es:

$$E(r) = r_f + \beta_j E(r_p - r_f)$$

[1]

Donde

$E(r_j)$: Tasa de rendimiento esperada del activo

r_P : Rendimiento de Mercado

r_f : Rendimiento libre de riesgo

$B_j = \frac{Cov(r, r_P)}{Var(r_P)}$ Riesgo del accionista

$r_P = r_m - r_f$: Risk Premiun. La prima que exige el inversionista por asumir un nivel de riesgo sistemático β . = El modelo supone que el inversionista es averso al riesgo y en consecuencia exige una compensación.

Para cuantificar el grado de aversión al riesgo de un inversionista (Bodie *et al* 1999), suponemos que el inversor elige carteras basadas tanto en la rentabilidad esperada, $E(r_P)$ como en la volatilidad de la rentabilidad evaluado por la desviación estándar, σ_P^2 . Si apreciamos que la rentabilidad sin riesgo de las letras del Tesoro es (r_f), entonces la prima de riesgo de una cartera es $E(r_P) - r_f$. Los inversores con aversión al riesgo demandaran rentabilidades esperadas más altas para colocar sus recursos con carteras con mayor volatilidad; esa prima de riesgo será mayor cuanto mayor es la aversión al riesgo. Por tanto, si cuantificamos el riesgo de aversión con el parámetro A, tiene sentido afirmar que la prima de riesgo que solicita un inversor en una cartera dependerá tanto de la aversión al riesgo A como del riesgo de la cartera σ_P^2 . Escribiremos la prima de riesgo que solicita un inversor de una cartera como una función de su riesgo:

$$E(r_P) - r_f = \frac{1}{2} A \sigma_P^2 \quad [2]$$

La ecuación anterior describe la forma en que los inversores desean relacionar el riesgo con la rentabilidad esperada. (La ecuación requiere que pongamos tasas de rentabilidad en decimales). Como criterio de referencia, sabemos que la rentabilidad tiene que ser igual solo a la tasa sin riesgo.

Es necesaria una prima de riesgo de $\frac{1}{2} A \sigma_P^2$ para inducir a los inversores a establecer una cartera general que tenga una volatilidad positiva. El termino 1/2 es solo un factor de escala escogido por conveniencia y no tiene impacto real en el análisis.

Ocurre que si el inversor considera el riesgo frente a la rentabilidad en la forma especificada en la ecuación anterior, entonces podemos deducir su aversión al riesgo si observamos primas de riesgo y volatilidad de las carteras reales. Solucionamos la ecuación por A como:

$$A = \frac{[E(r_P) - r_f]}{\frac{1}{2} \sigma_P^2} \quad [3]$$

Las derivadas parciales de A respecto a sigma y respecto al rendimiento del portafolio

$$\frac{\partial A}{\partial \sigma} = - \frac{[E(r_P) - r_f]}{\frac{1}{4} \sigma_P^3} \quad [4]$$

$$\frac{\partial A}{\partial E(r_P)} = \frac{2}{\sigma_P^2} \quad [5]$$

Por ejemplo, si un inversor cree que la prima de riesgo de la cartera es del 8% y la desviación típica es del 20%, podremos deducir la aversión al riesgo como:

$$A = \frac{0.08}{(0.5 \cdot 0.2^2)} = 4 \quad [6]$$

En la práctica no podemos observar la prima de riesgo que los inversores esperan obtener. Solo podemos observar la rentabilidad real después del hecho. Además, los diferentes inversores pueden tener distintas expectativas sobre el riesgo y la rentabilidad de varios activos. Para finalizar las ecuaciones solo se aplican a la varianza de la cartera general de la cartera de un inversor, no a los activos individuales mantenidos en esa cartera. No podemos observar la cartera total de activos de un inversor. Mientras que la relación exacta entre riesgo y rentabilidad en los mercados de capitales no se conoce con exactitud, muchos estudios concluyen que la aversión de los inversionistas al riesgo está probablemente en un intervalo de 2-4.

¿Que Aportaron Merton y Miller al Tema Que Nos Ocupa?

Las contribuciones de Merton y Miller son la base de la teoría de las finanzas corporativas modernas. Junto con Franco Modigliani (galardonado anteriormente con el Premio Nobel de economía) estudió las políticas de las empresas relativas a dividendos y a la obtención de préstamos, en una serie de artículos comenzando con “The Cost of Capital, Corporation Finance, and the Theory of Investment”, artículo publicado en la revista American Economic Review en 1958.

En concreto el desarrollo conceptual de Miller y Merton (M-M) se puede resumir en lo que se conoce como las 4 proposiciones:

MEDICIÓN DEL COSTO DE CAPITAL (Cruz 2001)

Costo De Capital Sin Impuestos

Una de las formas iniciales para entender el concepto de Costo de capital es el costo de capital contable. Para tal efecto, comencemos con la proposición I de M-M e incluyeron como supuestos, una empresa *sin crecimiento ni nuevas inversiones*.

La ecuación afirma que el valor de mercado de la empresa o proyecto está dado por “la capitalización de sus rendimientos esperados descontados por una tasa k apropiada para su clase. Esto es lo que MM se refiere cuando afirma que las empresas en una clase de riesgo tendrían la misma tasa aplicable de descuento” (Cruz 2001)

Definición y Cálculo

El valor de la empresa (V) con las restricciones planteadas sería:

$$V = \frac{NOI}{k} \quad [7]$$

Donde:

V= Valor de mercado de la empresa o proyecto

NOI= Ingreso Neto esperado en operación

k= Tasa de descuento

Con los supuestos de MM el valor de la empresa en este escenario no se vería afectado por el apalancamiento financiero. *Es decir, que el valor de la empresa es independiente de su estructura de capital.* Se puede escribir lo anterior en términos de k y resultaría:

$$k = k_u = \frac{X}{V} \quad [8]$$

Donde k_u entendido como costo de capital, es la capitalización de una corriente pura de capital contable de su misma clase riesgo.

Costo de Capital con Impuestos

En el primer escenario se reflexiono sobre el concepto de costo de capital sin impuesto. Para el segundo caso se incluye los efectos de los impuestos en el valor de mercado de una empresa o proyecto y/o actividad. Se mantienen la restricción de una empresa no apalancada.

Por lo tanto la ecuación inicial sería:

$$V_u = \frac{X(1-T)}{k_u} \quad [9]$$

Que se puede escribir en términos del costo de capital como:

$$k_u = \frac{X(1-T)}{V_u} \quad [10]$$

Por otro lado, el valor del mercado de la empresa apalancada es:

$$VI = V_u + TB \quad [11]$$

Donde,

VI = Valor de mercado de la empresa apalancada

V_u = Valor de mercado de la empresa no apalancada

T = Tasa impositiva

B = Valor de mercado de la deuda

TB = Es el valor presente de las ventajas tributarias por la deuda

Debido al subsidio fiscal representado por la deducibilidad fiscal del interés sobre la deuda, el valor de una empresa apalancada está dado por el valor de la empresa no apalancada más el valor de la deuda por la tasa de fiscal.

Costo de Capital de Una Empresa Apalancada

Para una corriente perpetua de ingresos el valor de las acciones es:

$$S = \frac{NI}{k_s} \quad [12]$$

Donde el costo de capital contable es igual:

$$k_s = \frac{NI}{S} \quad [13]$$

Las variables representan:

NI=	Ingreso Neto Operativo esperado después de intereses e impuestos
S=	Valor de las acciones
k_s =	Costo de capital contable
k_b =	Tasa de interés sobre el nuevo pasivo para el proyecto o actividad antes e impuestos
$k_b(1 - T)$ =	Tasa de interés del pasivo después de impuestos
T=	Tasa marginal tributaria
k_{ps} =	Costo de las acciones preferentes
k_r =	Costo de utilidades retenidas o de capital interno
k_e =	Costo de las nuevas emisiones de acciones comunes
k_s =	Tasa requerida de rendimiento sobre capital común en general cuando no se hace distinción entre k_e y k_r .
k=	Costo de capital compuesto o ponderado. Si una empresa obtiene nuevo capital para financiar porcentaje de pasivos su estructura de capital en equilibrio (es decir, si ha de mantener el mismo porcentaje de pasivos, de acciones preferentes y de capital común), entonces obtendrá parte de los nuevos fondos como pasivos, parte como acciones preferentes y parte como capital común. Además k es un costo marginal; es la proporción del incremento de costos de financiamiento al incremento de los fondos obtenidos por periodo para financiar un programa de inversión.

Demostración de la ecuación de capital contable con apalancamiento:

$$NI = (X - k_b B) - (X - k_b B)T = X - k_b B - XT + k_b BT \quad [14]$$

$$= X(1 - T) - k_b B(1 - T)$$

NOI después de intereses e impuestos, si factorizamos T, teniendo en cuenta la ecuación.

$$V_u = \frac{X(1 - T)}{k_u} \quad [15]$$

$$= k_u V_u - k_b B(1 - T)$$

Si tenemos en cuenta

$$VI = V_u + TB = k_u(VI - TB) - k_b B(1 - T)$$

$$= k_u VI - k_u TB - k_b B(1 - T)$$

Si reescribimos,

$$= k_u S - k_u B - k_u TB - k_b B(1 - T)$$

Ahora bien si multiplicamos a los dos lados de la ecuación por 1/S y si VI=S=B, entonces:

$$\left(\frac{N_i}{S}\right) = k_s = \frac{k_u S}{S} + \frac{k_u B}{S} - \frac{k_u T B}{S} - \frac{k_b B (1-T)}{S}$$

Si factorizamos,

$$k_s = k_u + (k_u - k_b)(1-T)\frac{B}{S} \quad [16]$$

¿Qué Significa Esta Ecuación De Costo De Capital Contable?

El costo de capital contable de una empresa apalancada estaría constituido por el costo de capital de una empresa no apalancada mas la diferencia entre el costo de una empresa apalancada y el costo marginal de la deuda, por la razón entre el valor de mercado de la deuda y el valor de mercado del capital contable por la diferencia entre uno menos la tasa impositiva.

Si recordamos la ecuación de la recta es

$$f(x) = a + bx \quad \text{Donde:}$$

a= La constante

b= La pendiente de la recta

x= La variable independiente

f(x)= La variable dependiente

Entonces, si reescribimos la ecuación del Costo de Capital Contable de una empresa, actividad o proyecto en estos términos de la ecuación de la recta tendríamos que:

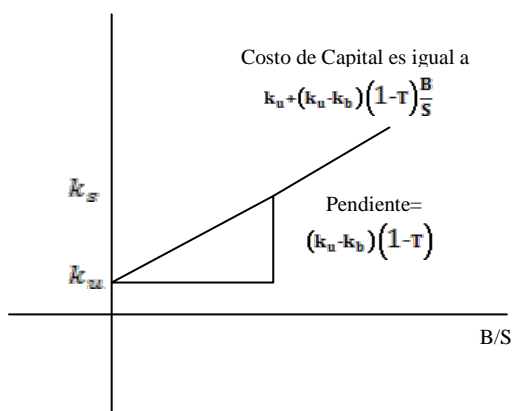
k_u es a

$(k_u - k_b)(1-T)$ es la pendiente de la recta

B/S es x

La representación gráfica de la función del costo de capital es:

Figura 1. Función de Costo de Capital



Interpretación de la gráfica: De la gráfica anterior se concluye;

El costo de capital k_s , se incrementa en la medida en que el porcentaje de la deuda sobre el total de capital es mayor.

La que define el signo de la pendiente no es la política fiscal ni la política de financiamiento sino el diferencial entre el costo del capital sin deuda menos el costo marginal de la deuda ($k_u - k_d$).

El grado de sensibilidad de un incremento de la deuda en la estructura de capital respecto al costo de capital está determinada por $(k_u - k_d)(1 - T)$. Cuando hay altos niveles impositivos hay incentivos económicos para que las empresas contraten deuda para capitalizar los ahorros provenientes por el ahorro fiscal.

Recuérdese que si definimos desde el modelo CAPM a k_u y:

$$k_u = r_f + \beta_u(r_p)$$

$$k_d = r_f + \beta_d(r_p)$$

Si partimos de que el signo es positivo, se requiere que:

$$k_u > k_d$$

Y dado que r_f y r_p son iguales en las dos ecuaciones, entonces:

$$\beta_u > \beta_d$$

Entonces, se concluye que para que k_s sea sensible de forma positiva a la deuda, se requiere que el riesgo sistémico de los accionistas, sea mayor que el riesgo sistémico de los tenedores de los contratos de deuda.

Promedio Ponderado del Costo de Capital Marginal Denominado WACC

Definición tradicional del costo de capital marginal (Weighted average Cost Capital WACC).

Una de las formas tradicionales de plantear el costo de capital es un promedio ponderado de los costos individuales de las fuentes de capital por los pesos porcentuales de cada fuente de capital sobre el total. Esto se expresaría como:

$$K = WACC = k_b(1 - T)\frac{B}{V} + k_s\frac{S}{V} \quad [17]$$

Esta es una ecuación que se usa con frecuencia en el cálculo del costo de capital, empero, tiene deficiencias en la medida que no registra los cambios del WACC a partir de cambios de apalancamiento financiero.

¿Qué Significa WACC para la Toma de Decisiones?

Si recordamos la definición dada de costo de capital como el costo de capital marginal -WACC- sería el rendimiento requerido sobre los activos, con un nivel de apalancamiento, para aumentar la riqueza de los accionistas.

Uno de los aportes de Modigliani-Miller es demostrar que el costo de capital marginal (WACC) cambia ante cambios de la estructura financiera.

$$k = WACC = k_u \left(1 - T \frac{B}{B+S} \right) \quad [18]$$

Donde está claro que el costo de capital está determinado por la estructura financiera (B/B+S). Esta ecuación además tiene las siguientes implicaciones: Si el rendimiento de los proyectos es mayor que su WACC deben estar incrementando la riqueza de los accionistas porque la variación de S sobre la variación de I es mayor que cero. Cuando los flujos de efectivo de la nueva inversión son descontados al WACC, se definen como los flujos de efectivo en operaciones después de impuestos que la empresa tendría si no tuviera dudas, es decir, que los flujos de efectivo son $CF=X(1-T)$.

Formulación Equivalente a WACC

A continuación se plantean tres formulaciones equivalentes del WACC.

$$WACC = k_b(1-T)\frac{B}{V} + k_s\frac{S}{V} \quad [19]$$

$$WACC = \frac{X(1-T)}{VI} \quad [20]$$

$$WACC = k_u(1-TL) \text{ donde } L = \frac{B}{V} \quad [21]$$

El Costo de Capital Como una Función de la Razón de Deudas a Capital Contable sin Impuesto y con Impuestos

Con el objetivo de ejercitar los conceptos planteados en los numerales anteriores, se desarrollará un ejercicio con sus respectivas gráficas. Para tal efecto, se toman dos escenarios con impuestos y sin impuestos.

En el primer escenario, la ecuación del costo de capital contable sin impuestos de una empresa apalancada es:

$$k_s = k_u + (k_u - k_b)\frac{B}{S} \quad [22]$$

Entonces para hacer la gráfica del costo de capital contable habría que calcular los diferentes componentes de la ecuación donde:

- k_u = Costo de Capital sin Deuda
- B = Valor de Mercado de la Deuda
- S = Valor de las Acciones
- k_b = Es el costo marginal de la deuda

Entonces la gráfica sería:

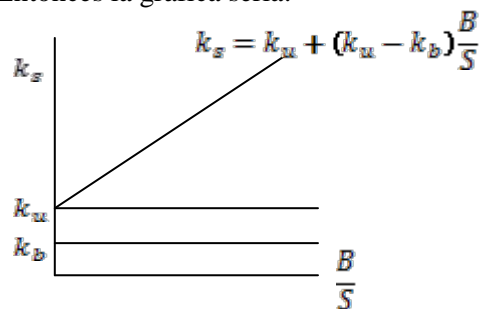


Figura 2. Función De Costo De Capital Contable Sin Impuestos

El costo de capital contable es una ecuación lineal y crece con el apalancamiento. Cuando la deuda es igual a cero el costo promedio de capital promedio es igual al costo de capital de una empresa no apalancada. En el segundo escenario, el costo de capital contable con impuestos es:

$$k_s = k_u + (k_u - k_b)(1 - T)\frac{B}{S} \quad [23]$$

Y teniendo en cuenta la siguiente definición de WACC

$$WACC = k_u \left((1 - T) \frac{B}{B + S} \right)$$

Entonces podemos visualizar el comportamiento de cada uno de los costos en función de la variación de la estructura financiera:

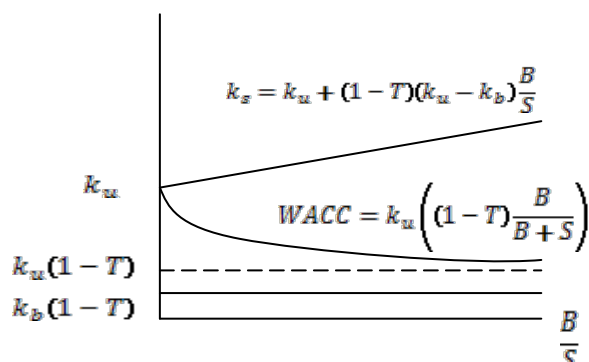


Figura 3. Función De Costo De Capital Contable Con Impuestos

El costo de capital contable crece lineal mente, y es una función con pendiente positiva, frente a la deuda.

El costo de capital (WACC) decrece a medida que la razón D/E crece.

El límite inferior del costo de capital es $k_u(1 - T)$. ¿Por qué? Partamos que el WACC es igual a $k_u \left((1 - T) \frac{B}{B + S} \right)$. Cuando S toma el valor de cero entonces $B/(B + S)$ es igual a uno, con lo cual WACC es igual a $k_u(1 - T)$.

Los estudios prácticos después de Modigliani-Miller revisaron la tesis que se sugiere en la gráfica anterior en el sentido, que el costo promedio ponderado de capital disminuía permanentemente hasta acercarse al

costo de una empresa apalancada menos 1-T. El razonamiento de esta tesis, subyace en la observación de la realidad en el sentido que el comportamiento de la relación entre el efecto de apalancamiento que el costo del componente de la deuda. Cuanta más deuda tenga una empresa mayores serán los requerimientos de intereses; y si son más altos los cargos por intereses, mayor será la probabilidad de que las ganancias (EBIT) no sean suficientes para cubrir estos cargos. Los acreedores percibirán este riesgo creciente a medida que aumente la razón de endeudamiento y entonces empezaran a cargar una prima de riesgo más alta y por arriba de la tasa libre de riesgo, ocasionando que se eleve la tasa de interés de la empresa.

¿QUÉ SE ENTIENDE POR RIESGO SISTEMÁTICO?

Se entiende como el coeficiente de volatilidad –beta- de un activo financiero e indica cuánto varía el rendimiento de dicho activo en función de las variaciones producidas en el rendimiento del mercado en el que aquél se negocia. (Sharpe 1964)

El modelo CAPM recoge esta definición de riesgo sistemático y se constituye en la medida riesgo que debe ser recompensado al accionista a través de una prima de Riesgo denominada Risk Premium. En este documento vamos a trabajar diferentes medidas de Riesgo que son operadas desde el modelo CAPM y depende si la empresa esta apalancada o no.

CAPM Empresa no apalancada $K_u = R_f + \beta_u P_m$

CAPM Empresa Apalancada $K_l = R_f + \beta_l P_m$

CAPM para la deuda $K_d = R_f + \beta_d P_m$

Donde,

K_u= El rendimiento exigido por los accionistas cuando la empresa no está apalancada

K_l= El rendimiento exigido cuando la empresa esta apalancada

K_d = El rendimiento exigido por la deuda

β_d = Beta de la deuda

β_u = Beta de los recursos propios

β_l = Beta de los recursos propios de la empresa apalancada

β_a = Beta de los activos (Nota después se explicara de donde proviene el concepto).

R_f = Tasa de interés sin riesgo de default

P_m = Prima de Mercado= Valor esperado de la rentabilidad del mercado por encima de R_f

Principio de Conservación o Distribución del Riesgo

$$R(\beta_f) \text{ FIRMA} = R(\beta_a) \text{ ACTIVOS}$$

[24]

Al igual que se puede pensar la firma como un portafolio de proyectos o activos o bien como un portafolio de deuda y/o equity se puede conceptualizar el riesgo de la firma desde estas dos perspectivas. El riesgo de portafolio de los activos o proyectos o el riesgo del portafolio de instrumentos de financiamiento (riesgo de los instrumentos de la deuda y riesgo de los instrumentos del patrimonio-equity).

De la teoría del portafolio podemos definir que el beta de un portafolio es la suma de los betas individuales por su valor en el portafolio. Esa idea se puede expresar como:

$$\beta_p = \sum_{i=1}^n \beta_i W_i \quad [25]$$

Entonces, y recogiendo el principio de la conservación del riesgo podemos anotar que el Beta de la empresa es igual al Beta de los activos o que es lo mismo decir que el beta de la firma es igual al beta de la deuda β_d mas el Beta del Patrimonio.

$$\beta_a = \beta_l = \beta_d + \beta_e \quad [26]$$

La Matemática del Beta de un Financista Moderno para Diversos Propósitos

Se definirá $k_u = f(k_e, k_d, D, E, T)$. Para tal efecto, partimos de dos ecuaciones:

$$1. \quad WACC = \frac{Ek_e + Dk_d(1-T)}{E+D} \quad [27]$$

$$2. \quad WACC = \frac{k_u[E + D(1-T)]}{E+D} \quad [28]$$

La ecuación anterior permite definir el k_u en términos de E, D y T sin incluir k_e y k_d . Con esta ecuación se indica que el $k_u > WACC$ siempre y cuando haya deuda que pueda ser desgravable fiscalmente.

Para llegar a nuestro propósito de definir k_u reemplacemos la primera definición del WACC en la segunda y despejamos k_u . Entonces,

$$\begin{aligned} \frac{Ek_e + Dk_d(1-T)}{E+D} &= k_u \frac{E + D(1-T)}{E+D} \\ k_u &= \frac{Ek_e + Dk_d(1-T)}{E + D(1-T)} \end{aligned} \quad [29]$$

Y se llega a la ecuación que define K_u como variable dependiente y esta explicada en la parte derecha de la ecuación, por la suma de los rendimientos del patrimonio y la deuda por sus pesos porcentuales.

A través de la ecuación que establece una relación entre k_e , k_u y k_d se puede establecer una relación de los betas β_e , β_u y β_d que están implícitos en los rendimientos exigidos por el modelo del CAPM.

Esto se puede reescribir al incluir el concepto del valor de la empresa sin deuda V_u , que va en el denominador de la segunda ecuación

$$K_u = \frac{EK_e + DK_d(1-T)}{E + D(1-T)} = \frac{EK_e + DK_d(1-T)}{V_u}$$

Se puede expresar *en terminos K_e* :

$$K_e = K_u + \frac{[(K_u - K_d)D(1-T)]}{E}$$

Si sustituimos,

$$K_e = K_u + \frac{[(K_u - K_d)D(1-T)]}{E} \quad [30]$$

Si usamos el modelo CAPM para cada uno de los rendimientos y usamos las definiciones matemáticas dadas en la introducción del aporte de Linner y Sharpe al concepto de Beta, se concluye que:

$$\beta_e = \frac{\beta_u[E + D(1-T)] - \beta_d D(1-T)}{E} \quad [31]$$

Por otro lado y si desarrollamos el concepto de la conservación del riesgo o como se distribuye el riesgo podemos definir el beta del patrimonio en función del beta de los activos y de la deuda. Este concepto es muy usado en algunos desarrollos prácticos.

$$\beta_l = \left[\beta_d \times \frac{D}{D+E} \right] + \left[\beta_e \times \frac{E}{D+E} \right] \quad [32]$$

$$\beta_e = \frac{\left[\beta_l \times \frac{D}{D+E} \right] + \left[\beta_d \times \frac{D}{D+E} \right]}{\frac{E}{D+E}} \quad [33]$$

$$\beta_e = \beta_l \times \frac{D+E}{E} - \beta_d \times \frac{D}{E} \quad [34]$$

Otra forma de derivar el Beta del patrimonio –equity de una empresa apalancada- es desde la una de las ecuaciones de MM. Si retomamos la proposición de Modigliani-Miller en cuanto a definir que el Valor de una empresa apalancada es la suma del valor de una empresa apalancada más el valor presente de una serie finita de los ahorros fiscales proveniente de la palanca financiera.

$$V(L) = V(D) + V(E) = V_u + TD$$

$$V_u = V_e + V_d - TD = E + (1-T)D$$

$$\beta_l = \beta_u \times \frac{E(1-T)D}{E+D} + \beta_d \times \frac{TD}{E+D} \quad [35]$$

Igualmente de la ecuación de Modigliani y Miller:

$$V_{Leverage Assets} = V_{Unleverage Assets} + PVTS$$

$$PVTS(\infty) = \frac{GF \times T}{r} = \frac{r \times D \times T}{r} = TD$$

$$\beta_l = \left[\beta_u \times \frac{\beta_u}{\beta_u + TD} \right] + \left[\beta_d \times \frac{TD}{\beta_u + TD} \right]$$

Ahora bien reemplazando:

$$\beta_e = \left[\beta_u \times \left[\frac{E + (1-T)D}{D+E} \right] + \beta_d \times \frac{TD}{E+D} \right] \times \frac{D+E}{E} - \left[\frac{D}{E} \times \beta_d \right]$$

Simplificando

$$\beta_u = \frac{(1-T)D}{E+(1-T)D} \times \beta_d + \frac{E}{E+(1-T)D} \times \beta_e \quad [36]$$

Tres formulas muy importantes de estructura y costo de capital con impuestos corporativos:

$$\beta_e = \beta_u + (\beta_u - \beta) \times \frac{(1-T)D}{E}$$

$$WACC = \frac{D}{D+E} \times (1-T)K_d + \frac{E}{D+E} \times K_e$$

$$CAPM = r_f (1-T) + (r_p - r_f) \beta_i$$

Note que ahora tenemos cuatro Betas:

β_e = Beta del Equity con deuda

β_d = Beta de la Deuda

β_u = Beta de los activos Des-apalancados o beta desapalancada (All Equity Firm)

β_i = Beta de los activos

BIBLIOGRAFÍA

Bodie Z., Kane A., Marcus A. (2004). *Principios de Inversiones*. España: Mc. Graw Hill

Bodie Z., Merton R. (2001). *Finanzas*. México: Prentice Hall

Cruz J. (2001). *Lógicas y Dialécticas en las decisiones de Inversión*. Colombia: 3R Editores

Franco M., Merton H. M. (1958) The Cost of Capital, Corporation Finance, and the Theory of Investment. *American Economic Review*. Vol 48. No 3, Junio de 1958: p. 261-297.

Mascareñas J. (2002) La Beta Apalancada. España: Universidad Complutense de Madrid. Dic.

Weston J. F., Copeland T. (1995) *Finanzas en Administración*. México: Mc. Graw Hill

Rufano A. (2003). Riesgo de las Acciones: El modelo CAPM y el Factor Beta. *Táctica Empresarial*. Vol 3. Abril de 2003: p. 3-6

Sharpe W. (1964). Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk. *Journal of Finance*. Sept: p. 425-442

CONCENTRACIÓN ECONÓMICA Y TRANSPARENCIA: CASO DE APLICACIÓN DE LAS NORMAS INTERNACIONALES DE INFORMACIÓN FINANCIERAS EN CHILE

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RESUMEN

Esta investigación buscó determinar si la información contable aportada por los grupos económicos chilenos representa fielmente su situación financiera, tanto bajo Normas Nacionales de Contabilidad como Normas Internacionales de Información Financiera (NIIF). La investigación se basó en análisis de información obtenida de la entidad fiscalizadora, de las mismas empresas y otras fuentes relacionadas; contrarrestada con los Boletines Técnicos emitidos por el Colegio de Contadores de Chile, la normativa emitida por la Superintendencia de Valores y Seguros; y las NIIF emitidas por el IASB. Los resultados obtenidos indican que la información contable analizada no representa la real posición financiera de los grupos económicos. En general, los Estados Financieros están sobrevalorados, muestran una posición financiera fortalecida y la línea de control de estos grupos está mucho antes de llegar a la dominante pública, es decir, la unidad de decisión está fuera del grupo que el mercado reconoce como tal. Lo anterior supone que dicha información carece de transparencia. En conclusión, no es posible cumplir con los objetivos de transparencia que promueven la convergencia a las NIIF, y cualquier decisión basada en este tipo de información pueden no ser apropiada.

Palabras Claves: concentración, estructura de propiedad, grupos económicos, representación fiel, posición financiera, NIIF.

BIOGRAFIA

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VALORACIÓN DE CONTRATOS DE LEASING OPERATIVO MEDIANTE OPCIONES REALES: UNA APLICACIÓN PARA COLOMBIA

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RESUMEN

Este trabajo aplica un modelo para la determinación del canon de arrendamiento en un contrato de leasing sobre vehículos y la valoración de la opción de compra que le da al arrendatario el derecho pero no la obligación de adquirir el vehículo usado a un precio determinado al vencimiento del contrato. Para realizar esta valoración se utilizaron como base los modelos propuestos por Giaccotto, Goldberg y Hedge, (2007) y por Gamba y Rigon (2007) en tres marcas de vehículos en Colombia para el periodo comprendido entre Enero de 2004 y Diciembre de 2007. El análisis de las series de los rendimientos de los precios de los vehículos muestra un proceso ARMA cuyas innovaciones tienen efectos que persisten un mes y, en algunas ocasiones, más de nueve meses. Se desarrollaron, además, pruebas para identificar posibles efectos ARCH en las series de los retornos de los precios de los vehículos analizados, las cuales permitieron mostrar un comportamiento determinístico de la volatilidad. La estimación del valor de la opción de compra del vehículo al finalizar el contrato de leasing se realiza mediante la implementación del modelo de Black-Scholes y de Simulación Monte Carlo.

INTRODUCCION

Una opción es un contrato realizado entre un operador de mercado y su cliente la cual le da derecho al cliente de comprar (*call*) o vender (*put*) el activo subyacente (Lamothe, 2006, p. 3), a un precio determinado a cambio de una prima, en una fecha futura denominada fecha de ejercicio. De acuerdo a su vencimiento ésta puede ser europea o americana, la primera se caracteriza porque sólo se puede ejercer el derecho el día de entrega pactado, mientras que en la segunda el ejercicio se puede ejercer en cualquier momento durante la vida del contrato.

Un gran paso en el desarrollo de la teoría financiera moderna comenzó con la compraventa de opciones, la cual se realizaba “sobre el mostrador”, de corredor a corredor, como en cualquier mercado el precio se convenía entre compradores y vendedores. Estos aspectos lo caracterizaban como un mercado pequeño y caro. Ello generó un interrogante: ¿existe algún procedimiento para estimar la prima de manera razonable? La respuesta a esta pregunta se originó por el trabajo seminal publicado por Fisher Black y Myron Scholes en 1973 —cuya aparición coincidió con la apertura de la *Chicago Board Options Exchange*, uno de los primeros mercados organizados de derivados— el cual está fundamentado en el planteamiento contraintuitivo de Black, quien afirmaba que al valorar una opción no era necesario conocer el valor final del subyacente cuando la opción expire; lo que se debe conocer son: el precio de lanzamiento, el plazo de expiración y la volatilidad del subyacente (Hudson y Mandelbrot, 2006, p. 92).

Del anterior razonamiento se derivó la fórmula conocida como el modelo Black-Scholes. En el modelo la volatilidad aporta evidencia sobre el comportamiento del subyacente, convirtiéndose en un parámetro para la toma de decisiones. Por esta razón, si una acción (subyacente) es estable sus opciones valdrán poco, ya que las probabilidades de que el precio se incremente de manera significativa serán bajas, por tanto las rentabilidades de la opción también lo serán. Lo contrario sucede con acciones que experimentan amplias volatilidades. En este marco, la teoría de opciones constituye la base fundamental de la valoración de activos financieros bajo un ambiente de incertidumbre. Este análisis ha sido extendido por

Myers (1984) a la valoración de activos no financieros, es decir a valoración de inversiones productivas o empresariales. Los proyectos de inversión y las estrategias de negocios son elementos esenciales para la sostenibilidad de la compañía en el largo plazo, estas decisiones estratégicas requieren una valoración acorde a la flexibilidad que tengan en el futuro para tomar nuevas decisiones relacionadas con dichos proyectos.

Las decisiones de gestión crean opciones *call* y *put* sobre activos reales que dan al tomador de decisiones el derecho, pero no la obligación para utilizar esos activos, para alcanzar los objetivos estratégicos y, en definitiva, maximizar el valor de la empresa (Brach, 2003, pag 1); las opciones reales se constituyen en la herramienta fundamental para valorar las decisiones bajo el supuesto de flexibilidad e incertidumbre.

Stewart Myers (1984), pionero del concepto de opciones reales, sostuvo que la valoración financiera de las oportunidades de inversión mediante el enfoque tradicional de Flujo de Caja Descontado (DCF) hace caso omiso del valor de la opción en proyectos de inversión inciertos y arriesgados. Las opciones reales como herramienta de valoración se pueden aplicar a diversos sectores como es el caso de los contratos de *leasing*, los cuales corresponden al caso de estudio desarrollado en este informe de trabajo.

El *leasing* es un contrato mediante el cual una parte entrega a la otra un activo para su uso y goce, a cambio de un canon periódico, durante un plazo convenido, a cuyo vencimiento, el bien se restituye a su propietario o se transfiere al usuario, si éste último decide ejercer una opción de adquisición que, generalmente, se pacta a su favor.

En Colombia el *leasing* aparece a principios de la década de 1970, como una actividad comercial no vigilada. Comienza a ser regulado por el gobierno en la década de 1980 cuando se expide el Decreto 2059 de 1981, mediante el cual se estableció que las sociedades comerciales que se dedicarían a la actividad de *leasing* quedarían sometidas al control y vigilancia de la superintendencia de sociedades, como cualquier otra sociedad mercantil. En la década de 1990 la superintendencia Bancaria (Actualmente Superintendencia Financiera) entidad encargada de la vigilancia y reglamentación del *leasing* lo reconoce como una operación especial diferente al crédito, a la venta a plazos y al arrendamiento puro, al establecer que en los casos de enajenación de los bienes objeto de un contrato de *leasing* y en ejercicio de la "opción de compra" el valor comercial de la enajenación sería el de dicha opción (Decreto 836 de 1991).

El tratamiento que se le ha dado a éstos contratos en Colombia los ha hecho atractivos para los diferentes agentes en la economía, ya que elimina el IVA para los cánones de arrendamiento financiero y autoriza descontar del impuesto sobre la renta el impuesto a las ventas pagado en la adquisición de los bienes de capital entregados en *leasing*. Estos beneficios han permitido que el mercado desarrolle varios tipos de *leasing*, entre los que se encuentran: el *leasing* financiero, *leasing* de importación, *leasing* inmobiliario, *leasing* de infraestructura, *leasing* operativo, *multileasing*, *leasing* municipal, *leaseback* y el *leaseback* de infraestructura. Las compañías de leasing carecen de un modelo formal que les permita estimar de una manera adecuada el canon de arrendamiento, las penalidades por abandonar el contrato antes del vencimiento y el valor de compra del activo en leasing cuando el inversionista desea ejercer la opción de compra. Las razones anteriormente expuestas demuestran la necesidad de realizar estudios profundizando en este tema.

REVISION LITERARIA

La literatura financiera ha dedicado especial atención a la valoración de los contratos de leasing sobre activos, en especial aplicando como metodología de valoración las opciones reales. Las líneas de investigación en esta materia son diversas, no obstante se observa un significativo aporte de los estudios empíricos sobre valoración de proyectos mineros, petroleros e inmobiliarios. Entre estos estudios se destacan los realizados por Grenadier (1995, 2005), Mooradian y Shiawee (2000), Myers (1983), Boer (2000), entre otros.

Este trabajo se concentrará en el estudio de la valoración de los contratos leasing sobre vehículos, específicamente a través de la metodología de opciones reales. Los principales autores que ha desarrollado trabajos sobre el tema son: McConnell y Schallheim (1983) quienes describen los diferentes tipos de contratos de leasing y definen un marco para valoración a través de opciones compuestas para cada uno de los tipos de contratos. Hussain (2005) asume que la depreciación del activo subyacente sigue un movimiento browniano aritmético. Giaccotto, Goldberg y Hedge (2007) valoran la cancelación y la penalidad que se debe cobrar al terminar el contrato antes de la maduración asumiendo una tasa de interés constante. Gamba y Rigon (2007) desarrollaron un modelo para valorar la opción de cancelación y la penalidad cuando se termina el contrato de manera anticipada, para lo cual asumieron una tasa de interés estocástica dentro del modelo.

En Colombia, la literatura relacionada con la aplicación de esta metodología de opciones reales en la valoración de proyectos es reciente y se ha aplicado desde diversos frentes: Mora, Agudelo y Dyner, (2004) proponen el empleo de la metodología de opciones reales para valorar un proyecto de inversión en generación de energía eólica en Colombia. Cayón y Sarmiento (2005) se concentran en el desarrollo de herramientas metodológicas de opciones reales y en el análisis de la información adicional con la que cuenta el inversionista al aplicar la primera y segunda derivada del modelo de Black-Scholes, conocidas como delta y gamma. No obstante, dicha metodología no se ha aplicado en Colombia para valorar contratos de *leasing*.

METODOLOGIA

Comúnmente un contrato de *leasing* sobre vehículos nuevos, se caracteriza porque el arrendatario no es responsable por la diferencia que se genere entre el precio de mercado del activo en t , (V_t) y su valor residual al momento de terminar el contrato ($\lambda^t V_0$), siempre que:

$$V_t < \lambda^t V_0 \quad (1)$$

Los modelos teóricos sobre estos contratos estudian principalmente dos opciones: la opción europea de compra en la expiración y una opción de cancelación (Giaccotto, Goldberg y Hedge, 2007. p.414).

Este trabajo se basa en los modelos propuestos por McConnell y Schallheim (1983); Giaccotto, Goldberg y Hedge (2007) y Gamba y Rigon (2007). En este caso se estudia una opción de cancelación como una opción *call* compuesta para contratos de *leasing* con vencimiento a tres años ($K=3$), en la cual el arrendatario puede elegir entre cancelar o renovar el contrato en cada periodo ($K=1$, $K=2$ y $K=3$). Este contrato, para $K=1$, básicamente es un *leasing* de un periodo más una opción *call* para el uso del activo en el segundo periodo con un precio de ejercicio igual al pago contractual en el *leasing*.

Una vez definidas las características de la serie de los precios de los vehículos nuevos y usados se realiza la estimación del canon que se pagará de forma periódica durante la vida del contrato y se valora la opción de comprar el vehículo al finalizar el contrato. Para ello se utiliza como herramienta el modelo de Black-Scholes y el método de simulación Montecarlo. Se toman los precios anuales comenzando en enero 2004 con el precio nuevo, y a medida que transcurre el tiempo se toman los precios de este mismo vehículo pero usado (por ejemplo: el vehículo con un año de antigüedad será el correspondiente al precio de enero 2005 con un $K=1$, y así sucesivamente hasta llegar a $K=3$).

En este trabajo se toma como variable de análisis los precios mensuales de los vehículos nuevos y usados publicados en la revista “Motor” (publicación quincenal de la Casa Editorial El Tiempo, que presenta los precios de referencia de los vehículos usados en Colombia) para el periodo comprendido entre enero de 2004 a diciembre de 2007. El análisis se realiza para tres gamas de vehículos comerciales los cuales han

sido comercializados desde hace varios años y pertenecen a marcas tradicionales en el mercado colombiano como son: Mazda Allegro, Toyota Prado y Montero Mitsubishi. El estudio se restringe al periodo y marcas mencionados debido a las limitaciones que se presentan para acceder a la información histórica de los precios.

Una vez definidas las características de la serie de los precios de los vehículos nuevos y usados se realiza la estimación del canon que se pagará de forma periódica durante la vida del contrato y se valora la opción de comprar el vehículo al finalizar el contrato. Para ello se utiliza como herramienta el modelo de Black-Scholes y el método de simulación Montecarlo. Se toman los precios anuales comenzando en enero 2004 con el precio nuevo, y a medida que transcurre el tiempo se toman los precios de este mismo vehículo pero usado (por ejemplo: el vehículo con un año de antigüedad será el correspondiente al precio de enero 2005 con un $K=1$, y así sucesivamente hasta llegar a $K=3$).

RESULTADOS

El análisis econométrico de las series de precios no se encuentra la presencia de efectos ARCH, lo cual permite utilizar una volatilidad constante para el desarrollo de los modelos de valoración tanto por Black-Scholes como por Simulación Montecarlo.

Cabe resaltar en los resultados empíricos que durante el período de muestra la proporción del valor de la prima de la opción respecto al precio del vehículo nuevo, varía de acuerdo a cada marca de vehículo. Por ejemplo, para el caso del vehículo Mazda esta proporción varía entre un 5.26% y un 7.91% para el caso de la estimación con Black-Scholes, mientras que por Montecarlo varía entre un 5.18% y 8.78%; para el Montero las estimaciones varían entre un 8.77% y 14.24% por Black-Scholes y entre un 8.79% y 14.2% por Montecarlo; y en última instancia, para la Toyota Prado las estimaciones se encuentran entre un 9.9% y un 16.93% por Black-Scholes y un 9.88% y 16.85% por Montecarlo. Lo anterior demuestra la obtención de resultados muy similares por los dos métodos utilizados para la valoración de los cánones y primas de las opciones sobre los contratos de leasing para todas las marcas de vehículos estudiadas.

CONCLUSIONES

Dentro de los resultados se pudo encontrar una relación directa entre el precio del vehículo nuevo y el valor de la opción a cobrar dentro del contrato de leasing, es decir, mientras más alto sea el precio del vehículo mayor es el valor de la prima a cobrar por el derecho a adquirirlo al vencimiento del contrato. Por el contrario, se encontró una relación inversa entre el valor de la opción de compra y el nivel de las tasas de interés, es decir, si las tasas de interés en el mercado disminuyen, la prima a cobrar por la opción va a ser más alta, lo anterior se explica porque existe un mayor riesgo de que el cliente decida no ejercer la opción al finalizar el contrato de leasing debido a que puede encontrar financiación más barata para adquirir el activo en el mercado.

Se puede concluir que los precios de las tres marcas de vehículos analizadas tienen un comportamiento cíclico durante cada año, alcanzando su máximo valor a mediados de cada año durante el período de la muestra. Sin embargo, se encuentra una tendencia decreciente en los precios de vehículos nuevos de estas marcas durante todo el período muestral, debido a la presencia de nuevos modelos en el mercado, lo cual hace que modelos anteriores pierdan su valor.

Cabe mencionar que este estudio es una primera aproximación a la valoración de opciones dentro de los contratos de leasing sobre vehículos en Colombia. Sin embargo, es importante aclarar que esta aproximación se limita a la valoración de la opción de compra del vehículo al vencimiento del contrato, pero no incluye la valoración de otras opciones como es el caso de la opción de cancelar el contrato de leasing antes de su vencimiento.

REFERENCIAS

Agudelo, Carla Susana, Dyner, Isaac y Mora, Ana María (2004). "Energía eólica en Colombia: una aproximación desde las *opciones reales*". II Encuentro Colombiano de Dinámica de Sistemas. https://www.uis.edu.co/portal/investigacion/grupos/simon_uis/eventos/Encuentro_2004/trabajos/11/documento/11.pdf

Boer, F. Peter (2000) Valuation of Technology Using "Real Options". Research Technology Management, Jul/Aug, Vol. 43 Issue 4, p. 26

Brach, Marion A (2003) Real Options in practice. John Wiley & Sons, Inc. United States of America

Cayon Fallon, E. y Sarmiento Sabogal, J. (2005) Análisis de Opciones Reales: un enfoque delta-gamma para la evaluación de proyectos de inversión real. Cuadernos de Administración, Jun. 2005, Vol.18, No.29, p. 121-130. ISSN 0120-3592.

Gamba, Andrea y Rigon, Riccardo (2007) The Value Of Embedded *Real Options*: Evidence From Consumer Automobile Lease. Contracts - A Note. December. papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID1080526_code327209.pdf?abstractid=1080526&mirid=1

Grenadier, Steven R. (2005) An Equilibrium Analysis of Real Estate Leases. By:... Journal of Business, Jul, Vol. 78 Issue 4, p. 1173-1213

Grenadier, Steven R.(1995) "*Valuing lease contracts: A real-options approach*," Journal of Financial Economics, Vol. 38, p. 297-331

Hudson, R. y Mandelbrot, B. (2006) **Fractales y Finanzas**: Una aproximación matemática a los mercados: arriesgar, perder y ganar. Barcelona, Tusquets Editores.

Husain, Riaz (2005) Valuation Of Lease Contracts In Continuous Time With Stochastic Asset Values. <http://www.financialdecisionsonline.org/current/hussain.Pdf>

Lamothe, P. y Pérez-Somalo, M (2006) Opciones Financieras y productos estructurados. Madrid. 3ª Edición. McGraw Hill.

Mcconnell, Jhon y Schallheim, James. (1983) Valuation of asset *leasing* contracts. Journal of financial economics. p. 237-261.

Mooradian, Robert M.; Yang, Shiawee X. (2000) Cancellation Strategies in Commercial Real Estate *Leasing*. Real Estate Economics, Spring, Vol. 28 Issue 1, p. 65-88

Myers, S.C. (1984) Finance Theory and Financial Strategy. Interfaces, p.126-137.

Myers, Stewart C.; Majd, Saman. (1983) Calculating abandonment value using option pricing theory. Sloan School of Management. "May 1983, revised August 1983." Publisher: Massachusetts Institute of Technology

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CREACIÓN DEL CUADRO DE MANDO SOCIAL COMO HERRAMIENTA DE GESTIÓN EN LA EMPRESA PRIVADA COLOMBIANA, SECTOR AGROQUÍMICO

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RESUMEN

Mediante la creación de un Cuadro de Mando Social se establece la estrategia para conocer acerca de las actuaciones sociales de la empresa privada, donde de fondo se modifica la práctica tradicional de la contabilidad para apuntar, a través de perspectivas, a la selección de variables sociales de la compañía, al análisis de su actuación dentro del entorno, a las medidas adoptadas como solución para disminuir o eliminar los impactos negativos ocasionados y al desarrollo de indicadores que valoren cualitativa y/o cuantitativamente la actuación empresarial en temas como: deterioro del medio ambiente, condiciones laborales de los trabajadores, discriminación de género, programas de acción social y relaciones externas con los clientes, proveedores y competidores, con la sociedad y con los gremios, lo que le permitirá a la organización mostrar su transparencia y compromiso.

Palabras clave: cuadro de mando social, estrategia, perspectivas, indicadores.

INTRODUCCIÓN

Tener una visión para formar una empresa socialmente responsable, implica darle sentido al trabajo empresario integrado con el desarrollo de sus actividades lucrativas para las cuales fue creada. Buscar una forma operativa de hacer realidad la consolidación social dentro de la empresa es el objeto de este trabajo, para que a partir de su diseño se haga posible la realidad de implementarla en diferentes entidades.

Las empresas han entrado lentamente en el proceso de informar sobre sus actuaciones sociales, en general, fijan algunos ítems como importantes y los reflejan junto con sus informes financieros, más como parte de cumplir una obligación tácitamente impuesta por la misma sociedad que con una convicción para mostrarse realmente comprometidos con las situaciones, “hoy se busca que la responsabilidad social sea parte de la estrategia de la empresa, integrando rendimiento económico, bienestar social y protección medioambiental” (Martínez, 2005: 32). De modo que se debe establecer un nuevo orden social dentro de los negocios para que los gastos en el campo social se consideren una inversión a mediano y largo plazo y de alta rentabilidad. (Kliksber citado por Pérez, Martínez & Rodríguez, 2006: 87).

REVISION LITERARIA

La creación del cuadro de mando social, se inspira en los principios de un cuadro de mando integral (Kaplan y Norton: 1997), en los modelos internacionales de contabilidad social, en el manual de balance social (OIT: 2001), en el Manual Técnico Andino, en la normatividad ambiental, específica para agroquímicos, nacional e internacional y en el estudio de las prácticas sociales propias del sector desde cuatro perspectivas: humana, relacional, de valores y medioambiental.

METODOLOGÍA

Para efectos del desarrollo de la presente investigación, se aplicó el estudio de casos experimental. En este tipo de estudio se desarrollan nuevos procedimientos y técnicas contables con la intención de ayudar al ejercicio de la contabilidad. Los procedimientos y técnicas parten de perspectivas teóricas existentes y se

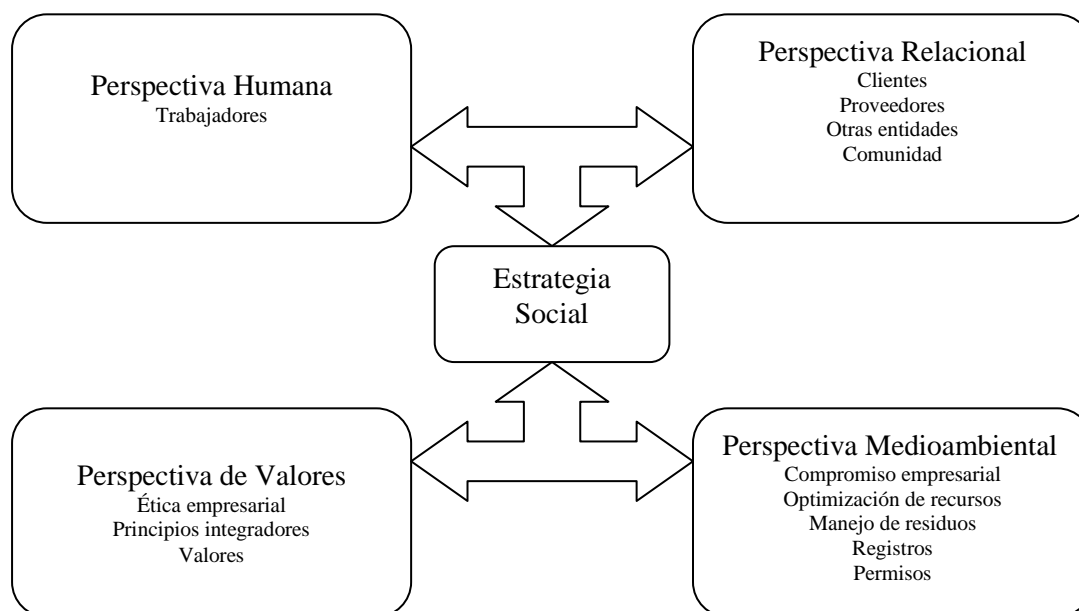
desarrollan usando un razonamiento normativo. Su intención es indicar lo que debe hacerse en la práctica. El estudio de un caso experimental sirve para examinar las dificultades de implementar propuestas nuevas y para evaluar los beneficios que se pueden obtener.

Creación del Cuadro de Mando Social

“La industria colombiana de plaguicidas se inició en 1963, con el proceso de formulación, el cual consiste en importar el ingrediente activo y adicionarle una serie de solventes y emulsificantes para la venta a los agricultores”. (León, 2007: 76). La fabricación de plaguicidas comprende dos grupos: insecticidas y fungicidas y herbicidas y reguladores biológicos. El mayor nivel de producción lo registra el primer grupo con el 45,4%, mientras el segundo grupo registra una participación del 24,5%. Se debe destacar que los registros ante el Instituto Colombiano Agropecuario han aumentado pasando de 918 en 1997 a 1.370 en 2003 y estas licencias incluyen insumos prohibidos o restringidos en otros países, pues algunos de ellos se consideran de alta toxicidad, (Íbid. P. 77).

El cuadro de mando social es un sistema de información de la gestión social de la compañía, donde se visualiza la implantación y comunicación de los objetivos trazados, los planes de acción a seguir, cumplimiento de las metas sociales y la medición a través de indicadores establecidos. Su creación requiere la previa formulación de la misión, la visión y las perspectivas. Figura 1.

Figura 1. Cuadro de Mando Social



Esta figura muestra la estructura básica del cuadro de mando social.

Por ejemplo, facilitar el desarrollo del talento humano a través del entrenamiento y la capacitación genera en el empleado un alto grado de compromiso con su empresa y aumenta su conocimiento específico sobre cada producto. Esta especialización lo llevará a propender por el uso adecuado de los productos dentro de marcos de seguridad confiables, solucionando eficazmente las quejas, reclamos y/o sugerencias de los clientes para mejorar el cumplimiento de sus requisitos y de esta forma obtener un impacto positivo para el ambiente.

El proceso de formulación de objetivos no es idéntico para todas las compañías, en general, su objeto social y el entorno definen el rumbo a tomar para cada caso, sin embargo, la configuración básica sirve de base para cualquier firma.

RESULTADOS

Implantar un cuadro de mando social requiere cuidar en particular los siguientes cuatro aspectos:

Compromiso. Toda la organización debe involucrarse en el actuar social. Desde la gerencia general hasta el empleado de más bajo rango, debe conocer hacia dónde se quiere llegar y hacer su parte.

Esquema organizacional. Todos los mandos superiores, medios y bajos deben tener su responsabilidad bien determinada. Su ejemplo impone el curso a seguir en cada una de las perspectivas y alguna actuación por fuera de lo esperado debe corregirse de inmediato para no poner en peligro la implantación de la herramienta.

Seguimiento y control. Cada perspectiva debe tener una cabeza responsable de velar por su cumplimiento a cabalidad, de hacer el seguimiento y de imponer una solución eficaz en caso de desvío. El cuadro de mando social se mide en sí mismo, pero requiere que se estén revisando sus indicadores y niveles-objetivo para corregir las desviaciones.

Publicación de resultados. Actuar socialmente es importante, pero dar a conocer sus resultados es fundamental. Los logros emanados de la implementación del cuadro de mando social, se deben comunicar explícitamente a los públicos internos y externos de la compañía, no se exagerarán resultados positivos, sino que se utilizarán criterios de transparencia y veracidad en su comunicación. Pero el énfasis y efectividad en la comunicación de todos los logros del actuar social se verán reflejados en la generación de confianza y el mejoramiento de la imagen corporativa.

CONCLUSIONES

El cuadro de mando social no sustituye los métodos sociales existentes, ni elimina las medidas e indicadores sociales actuales, sino que les da una mayor coherencia y los ordena jerárquicamente, es voluntariamente asumido por las empresas, de implementación gradual y a largo plazo que conduce al establecimiento de una imagen corporativa limpia, con el concurso del entorno y el desarrollo humano en particular. Por tanto, constituye una decisión estratégica de la alta dirección encaminada a condicionar el actuar presente y futuro de la organización donde se comprometen recursos, se modifican procedimientos y se incrementan respuestas ante las exigencias planteadas.

Los beneficios que se pueden obtener empleando el cuadro de mando social, son:

Primero En la perspectiva humana: buena gestión en las relaciones con los empleados, alto grado de comunicación bidireccional, desarrollo de personal especializado para la compañía con compromiso institucional claro y buen clima organizacional. Segundo, en la perspectiva de valores: da a conocer sus actuaciones con criterios de transparencia, neutralidad y claridad, institucionaliza los valores, normas y criterios de decisión que deben regir toda la actividad de la organización, y crea la cultura de la empresa y un clima ético que fortalece la identificación de los miembros de la organización con el proyecto común.

Tercero, en la perspectiva relacional: incremento de las ventas a clientes actuales y captación de nuevos clientes, mejora en los procesos de relación con los clientes, mejora de los costos de los procesos y de los productos de los proveedores, transparencia en la relación con los socios, interacción e integración oportuna con la comunidad, mejora en los resultados empresariales, incremento de ingresos y disminución de costos. Finalmente, en la perspectiva medioambiental: determina la sostenibilidad, sitúa la actuación de la empresa en el contexto de restricciones o límites ecológicos, mantiene un enfoque

preventivo que favorece el medio ambiente, adopta estrategias de aprovechamiento, que implica volver a introducir en el sistema lo producido como insumo y adopta estrategias de eliminación de residuos para asegurarla de forma apropiada y no contaminante.

REFERENCIA

Colombia, Ministerio del Ambiente, Vivienda y Desarrollo Territorial, (2007, abril), “Resolución 693 por la cual se establecen criterios y requisitos que deben ser considerados para los planes de gestión de devolución de productos postconsumo de plaguicidas”, Bogotá.

Colombia, Instituto Colombiano Agropecuario, (2003, julio), “Ley 822 por la cual se dictan normas relacionadas con los agroquímicos genéricos”, Bogotá.

Kaplan, R., (2001), *Cómo Utilizar el Cuadro de Mando Integral*, Barcelona, Gestión 2000.com.

León Sicard, T., (2007), *Medio Ambiente, Tecnología Y Modelos De Agricultura En Colombia*, Bogotá, Universidad Nacional de Colombia.

Manual Técnico Andino, Secretaría General de la Comunidad Andina, Norma Comunitaria para el Registro y Control de Plaguicidas Químicos de Uso Agrícola.

Martínez Herrera, H., (2005), *El Marco Ético de la Responsabilidad Social Empresarial*, Bogotá, Universidad Javeriana.

Organización Internacional Del Trabajo, ANDI y Cámara Junior de Colombia, Capítulo Antioquia, (2001), *Manual de Balance Social*, Medellín, Colombia.

Pérez, T.; Martínez, M. y Rodríguez, A., (2006), *Gerencia Social Integral e Incluyente*, Bogotá, Universidad de La Salle.

Román Castaño, Y., Sánchez Caicedo, Y., Correa Jaramillo, J., y Olarte Mejía, O., (2008), *Responsabilidad Social y Balance Social en Organizaciones Colombianas*, Medellín, Fundación Universitaria Luis Amigó y Universidad de Medellín.

BIOGRAFIA

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LAS EXPECTATIVAS DE LOS TURISTAS CUANDO CONTRATAN LOS SERVICIOS DE LOS GUIAS DE TURISTAS: UN ENFOQUE CUALITATIVO

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RESUMEN

Como parte del desarrollo de las empresas que ofrecen un servicio dentro del ramo turístico, específicamente con los guías de turista en la ciudad de Cancún, será necesario conocer las expectativas de los turistas para responder a sus necesidades de tal manera que estas se cumplan o se excedan al momento de prestar un servicio. Las expectativas de los turistas tienen un impacto positivo, es muy amplio y fortalecerá varios aspectos como son: el gestionar de una mejor manera los procesos de ventas, construir una atmósfera adecuada en el punto de encuentro del servicio, formular estrategias de mercadotecnia más efectivas, capacitar a los guías de tal manera que establezcan un nivel de expectativas determinado respecto al servicio, entre otros. El diseño de la investigación que se llevó a cabo es un estudio cualitativo sobre la búsqueda de elementos o atributos que el turista considere llenaran sus expectativas, y posteriormente en un estudio cuantitativo se desarrollara un reporte de las mediciones de las expectativas de los turistas para evaluar la fiabilidad y validez.

PALABRAS CLAVE: Empresas turísticas, guías de turista, expectativas, ventaja competitiva

INTRODUCCIÓN

La importancia de estudiar a Cancún principal polo turístico del estado de Quintana Roo radica en que año con año se cuenta con la visita de turistas tanto nacionales como internacionales, como se aprecia en la tabla 1, en donde en el año 2008 se observa un incremento del 9% con respecto al año 2007, según los indicadores turísticos del estado de Quintana Roo. Los turistas se sienten atraídos al destino debido a los diferentes atractivos que se tienen ejemplo de ello son sus playas, sus zonas arqueológicas, sus parques temáticos, sus centros nocturnos, entre otros.

Tabla 1: Afluencia de Turistas al Estado en los años 2007 y 2008

Destino	Enero – Diciembre 2007	Enero – Diciembre 2008
Cancún	3,004,802	3,265,591
Cozumel	553,327	924,451
Chetumal	493,008	475,152
Isla Mujeres	117,316	144,689
Riviera Maya	2,836,934	3,215,862
Total Estado	7,005,386	8,025,745

Indicadores Turístico del Estado de Quintana Roo en los periodos de Enero a Diciembre de los años 2007 y 2008, proporcionados por la Secretaría de Turismo del Estado de Quintana Roo

Cancún como un destino turístico maduro, exige a las empresas incrementar su interés en la calidad del servicio, acreditaciones y medidas de satisfacción, buscando que los visitantes tengan una experiencia única y quieran regresar, además de recomendar el destino a otras personas.

Las empresas realizan estudios para medir la calidad del servicio, además de medir la satisfacción del cliente, pero siempre examinando y midiendo resultados desde su punto de vista, dejando al turista en un segundo termino, es decir las empresas realizan sus procesos en base a sus recursos tanto financieros, materiales y de recursos humanos.

La opinión del cliente es un punto extremadamente importante en cuanto a lo que buscan de un servicio o un producto es por eso que este estudio identifica las principales expectativas de los turistas nacionales cuando contratan los servicios de un guía de turista, de esta manera el conocimiento que se tenga sobre lo que esperan podrá ser utilizado como ventaja competitiva y transformarse en una mejor gestión sobre los procesos de venta, la construcción de una atmósfera adecuada en el punto de encuentro, la formulación efectiva de estrategias de mercadotecnia, el fortalecimiento de puntos relevantes para cumplir con el nivel de expectativas respecto al servicio mediante cursos de capacitación.

Esta investigación inicia con la revisión literaria en donde se analizan estudios sobre las expectativas de los turistas, así como la conceptualización de las expectativas y su importancia en diferentes modelos, posteriormente se establece el diseño de investigación adecuado en donde se plantea la metodología del estudio y por último la obtención de los resultados y conclusiones.

REVISIÓN LITERARIA

Estudios sobre las expectativas en la ciudad de Cancún.

Dentro de una búsqueda de estudios realizados en Cancún sobre las expectativas del turista en cualquiera de los sectores que envuelven al turista, se encontraron dos estudios realizados por la Universidad La Salle Cancún a través del Instituto de Investigaciones Turísticas y un estudio realizado por la Universidad del Caribe, pero ninguno llega a profundizar en el tema.

Ahora bien, la Secretaría de Turismo y las empresas que prestan un servicio en el sector turismo deben anticiparse a las expectativas de los consumidores, y para ello necesita reconocerlos y diferenciarlos. Hay que detectar clientes estratégicos, que no son solamente aquellos que realizan un volumen de consumo mayor, sino también los que pueden arrastrar a mucha gente detrás y que puedan desestabilizar la competencia. (Documento inédito)

Conceptualización de las expectativas.

Los clientes llegan al encuentro del servicio (la prestación práctica del servicio, los “momentos de la verdad”, como también se les conoce) con una serie de expectativas respecto a cómo debe ser el servicio que espera recibir. (ISMI, 2001)

Una expectativa es lo que creen los clientes que ocurrirá durante una experiencia de servicio (predicciones) o lo que desean que los clientes ocurra (deseos). (Zeithmal y Bitner, 1996)

La importancia de las expectativas radica en que los clientes las utilizan como parámetros de medición, comparan lo que esperaban con lo que recibieron, por lo tanto las expectativas en los servicios hay que comprenderlas, medirlas y administrarlas. (Zeithmal y Bitner, 1996)

Desde el punto de vista de la mercadotecnia de servicios podemos tener dos niveles de expectativas.

- El nivel uno de expectativas es el servicio deseado, el nivel del servicio que se quiere recibir.
- El nivel dos de expectativas es el servicio adecuado, es el umbral del servicio aceptable.

Cuando el servicio se sitúa por debajo del servicio adecuado es decir se encuentra en el nivel mínimo aceptable, el cliente está muy insatisfecho, mientras que si se sitúa por encima del servicio deseado el cliente se sentirá muy satisfecho; Por lo tanto las empresas deben buscar satisfacer las expectativas de los clientes a través de la entrega de un servicio deseado.

Zeithmal (1996) manejan factores que determinan la formación de las expectativas de los clientes, en relación al servicio deseado, las cuales son:

- Las necesidades personales que pueden ser tanto físicas, sociales, psicológicas y funcionales
- Intensificaciones permanentes del servicio en donde entra la filosofía personal del servicio y comentarios dirigidos por otras personas sobre el servicio.

Desde el punto de vista de calidad los tipos de necesidades del cliente corresponden con tres expectativas:

1. La calidad requerida, que corresponde a los atributos indispensables que el cliente pide expresar sus necesidades y que la empresa pueda conocer en todos sus términos para satisfacerlas.
2. La calidad esperada, se refiere a aquellos atributos del bien que complementan los atributos indispensables no siempre explícitos, pero que el cliente desea y suele tener un fuerte componente subjetivo.
3. La calidad potencial, son las posibles características del bien que desconoce el cliente, pero que si se las ofrecemos, valora positivamente.

Importancia de las expectativas en diferentes modelos.

Modelos relacionados con el mejoramiento de la calidad en los servicios y la satisfacción del cliente proponen que la calidad que se percibe de un servicio es el resultado de una comparación entre las expectativas del cliente y las cualidades del servicio que se entrega. A partir de este punto analizaremos dos modelos que requieren conocer las expectativas de los clientes como una entrada al modelo y orientar los resultados hacia la obtención de beneficios tangibles y cuantificables de la empresa.

El modelo Servqual (Parasuraman, Zeithaml y Berry 1985) es un ejemplo en que se considera la calidad esperada de la calidad percibida en un análisis de las brechas como se muestra en la figura 2.

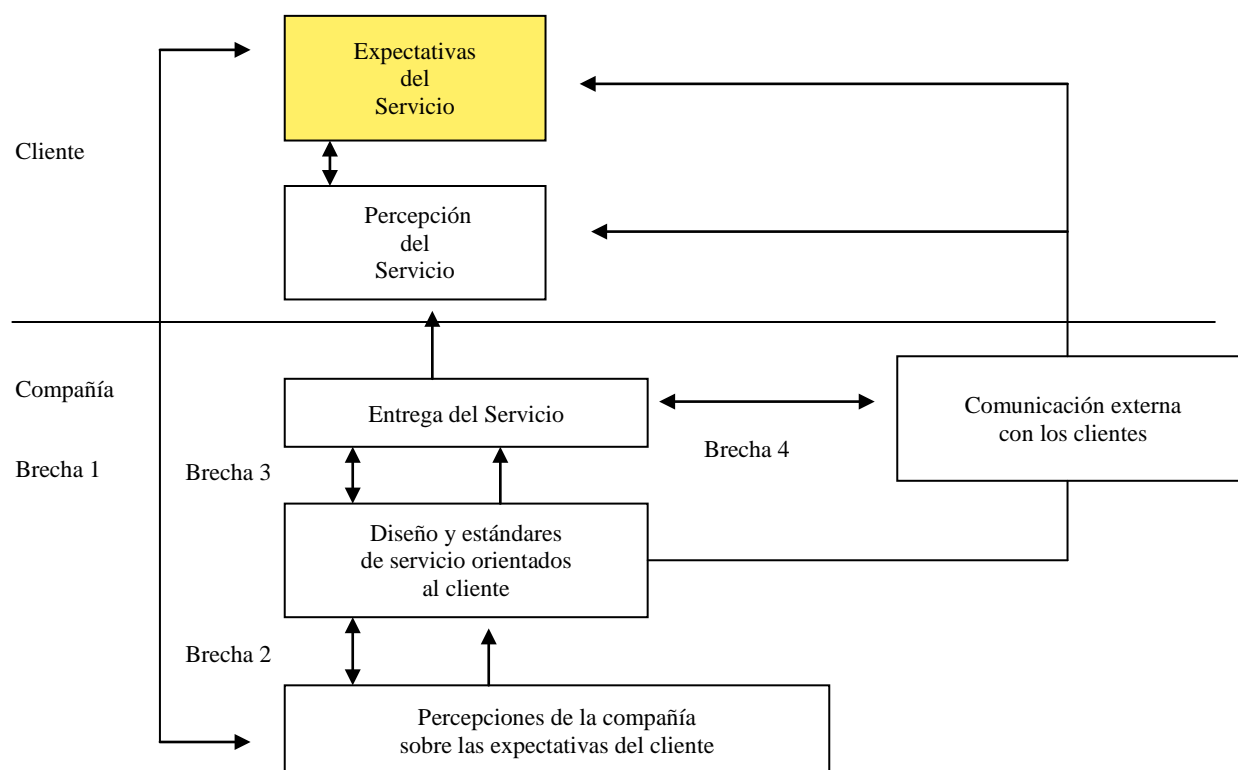
El modelo Servqual distingue la calidad esperada de la calidad percibida, a partir de la observación de cuatro factores que implican la ausencia de calidad:

1. La ignorancia de las expectativas del cliente por parte de la empresa.
2. La inexistencia de normas.
3. La discordancia entre el servicio ofrecido y las normas.
4. El incumplimiento de las promesas por parte de la empresa.

Este modelo hace un análisis de las brechas, que no son más que los espacios entre las expectativas y las percepciones.

El segundo modelo en el que las expectativas toman un valor importante es en la Cadena de Utilidad en el Servicio (Lovelock 1997). Este modelo establece relaciones entre las utilidades, la lealtad del cliente y la satisfacción, la lealtad y la productividad del empleado. El análisis de este estudio se enfoca al eslabón número 4 “Valor del servicio externo” que se observa en la figura 3.

Figura 2: Modelo de las brechas sobre la calidad en el servicio



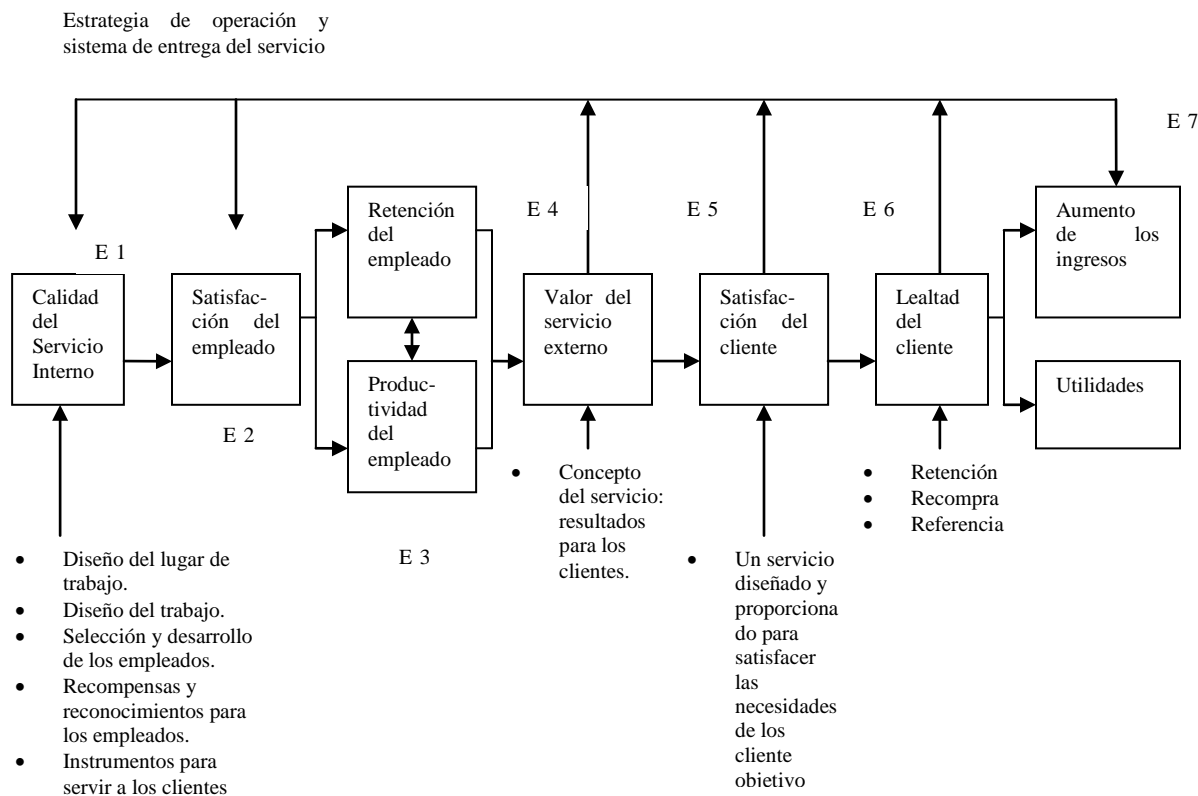
El modelo de las brechas propone primeramente cerrar la brecha del cliente, es decir, el vacío que existe entre las percepciones y las expectativas del cliente. Parasuraman, Zeithaml y Berry, 1985

El valor siempre es relativo, debido a que se basa tanto en las percepciones de la forma en la cual se proporciona un servicio, como en las expectativas iniciales del cliente. Por lo común, una compañía mide el valor utilizando las razones expresadas por los clientes para un nivel elevado o bajo de satisfacción. Debido a que el valor varía según las expectativas individuales, los esfuerzos para mejorar el valor inevitablemente requieren que las organizaciones de servicio se acerquen más al cliente esto implica que todos los niveles de la compañía conozcan cuales son los valores relevantes para el cliente y ajustar un servicio estándar a sus expectativas. (Lovelock y Reynoso, 2004).

Este modelo lleva a identificar las diferencias entre las percepciones que tienen los clientes de la calidad que se proporciona y sus expectativas antes de la entrega. Las diferencias entre las experiencias y las expectativas se pueden medir en dimensiones genéricas, como la confiabilidad y la puntualidad del servicio, la empatía y la autoridad con las cuales se proporcionó el servicio y el grado hasta el cual el cliente se queda con una evidencia tangible.

Por lo tanto estos dos modelos convergen en que para generar una percepción de alta calidad en sus servicios, las empresas deben centrarse en gestionar eficazmente las expectativas. Se debe resaltar que las expectativas de los clientes son cambiantes y crecientes en la medida en que los mercados evolucionan, lo que significa que las empresas tienen que mantener un seguimiento continuo de lo que esperaban los clientes de un servicio. (ISMI, 2001)

Figura 3: Cadena de Utilidad en el Servicio.



Esta figura muestra la Cadena de Utilidad en el Servicio de Lovelock y Reynoso (2004) Administración de Servicios E significa eslabón.

METODOLOGÍA

El objetivo de esta investigación es conocer cuales son las expectativas de los turistas nacionales que visitan la ciudad de Cancún al momento de contratar a un guía de turista. El diseño de la investigación se desarrollo en dos fases la primera consistió en el desarrollo de una estudio cualitativa a través de grupos focales y la segunda fase en un estudio cuantitativo que se llevó a cabo con una encuesta para su medición.

Primera Fase: Investigación cualitativa

La investigación cualitativa fue a través de dos grupos focales en donde el objetivo particular fue indagar cuales eran las expectativas para un turista nacional al momento de contratar los servicios de un guía de turista

Los grupos focales se realizaron en las instalaciones de la Universidad del Caribe con apoyo de estudiantes de séptimo y octavo semestre. Los grupos focales fueron moderados por un profesor del área de mercadotecnia de la Universidad del Caribe, dentro del guión pre- establecido se les preguntaba cuales eran sus expectativas y cuales eran sus experiencias al contratar a un guía de turista. Para cada grupo focal se invitó a 20 turistas nacionales, teniendo una participación de 10 personas en el primero y 9 personas en el segundo.

Al final del estudio cualitativo se obtuvo una lista de 57 items, los cuales se describen en la tabla 3:

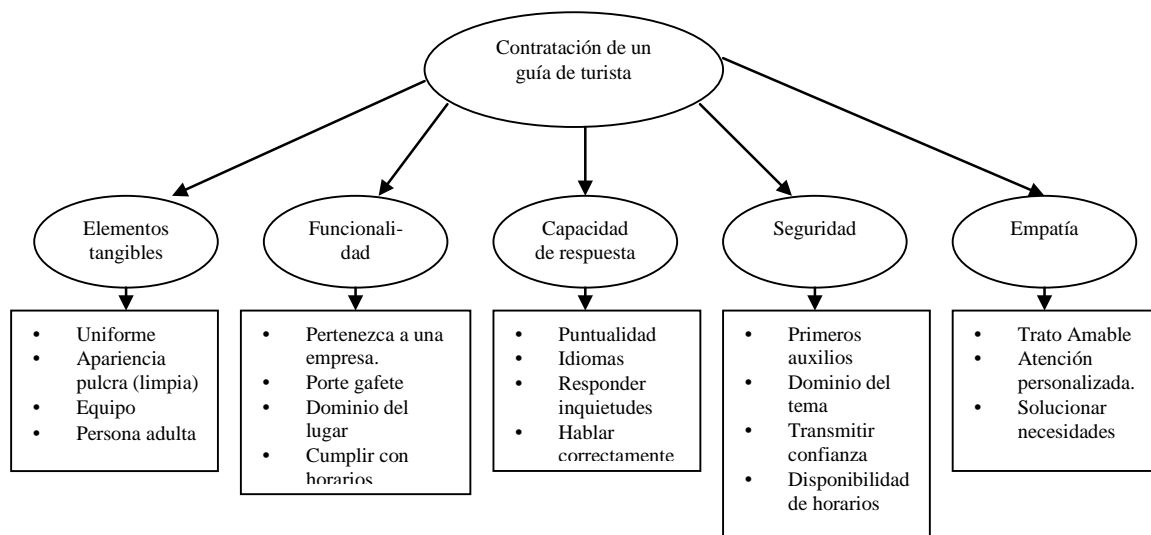
Tabla 3: Respuestas obtenidas de los grupos focales:

1. Los guías de turistas deben de ser personas accesibles.	20. Que conozca el mercado turístico (mercados de artesanías y comidas)	39. Que nos muestre lugares bonitos.
2. El guía de turista debe hacer entretenido el recorrido.	21. Que el guía cumpla con lo que promete.	40. Que el guía este capacitado.
3. Los servicios del guía deben ser de alta calidad.	22. Los guías deben de ser educados	41. Que explique bien.
4. Los guías de turistas deben de ser amables.	23. <i>El equipo que utiliza debe ser el adecuado.</i>	42. Que realice bien su trabajo
5. Aprender todo lo relacionado con el lugar que se visitó.	24. Que explique bien en el recorrido (con voz fuerte, que se le entienda cuando habla)	43. Que proporcione suficiente información.
6. Que nos ayude a aprovechar al máximo el recorrido	25. Que haga dinámicas en el recorrido.	44. Que me lleve a bucear.
7. Que el trato de los guías sea personalizado, por que llevan después a muchas personas.	26. El guía debe ser una persona honesta	45. Que conozca lugares atractivos para el turista
8. Que los guías cobren un precio que sea razonable.	27. Que proporcione información clara y precisa.	46. Que los recorridos no los haga tan rápidos por llevar a otros grupos.
9. <i>Que nos ayude a solucionar todas nuestras necesidades.</i>	28. Que la información sea relevante	47. Que no nos mezcle con extranjeros por que no nos toman en cuenta.
10. <i>Que los guías cuenten con los conocimientos suficientes.</i>	29. Que nos lleve a los mejores antros de Cancún.	48. <i>El guía de turista debe ser una persona adulta y respetuosa.</i>
11. <i>El guía debe brindar la información necesaria.</i>	30. Que me lleve a conocer lugares interesantes	49. <i>Que transmita seguridad.</i>
12. El guía de dar un buen servicio.	31. Llevarme al lugar directamente que me interesa.	50. <i>Que resuelva todas nuestras dudas</i>
13. Que tenga un buen trato.	32. Ayudar a que no me pierda y llegar más rápido.	51. <i>Que se vea que pertenece a una empresa.</i>
14. El guía debe administrar bien el tiempo del tour.	33. Que nos ahorre dinero (conocer lugares de comida baratos)	52. Que tenga disposición a dar el tour.
15. <i>El guía debe tener buena apariencia e imagen.</i>	34. El guía debe saber primeros auxilios.	53. Que sea responsable
16. Que los recorridos los hagan interesantes.	35. Que sea una persona puntual.	54. Nos debemos sentir cómodos con el guía.
17. <i>Que el guía cuente con los conocimientos suficientes del lugar.</i>	36. Que me aclare todas mis dudas durante el recorrido.	55. Que el guía sea simpático y tolerante
18. <i>Que los guías tengan conocimientos suficientes de la cultura.</i>	37. Que nos inspire confianza.	56. <i>Que se le entienda cuando habla, por que a veces no se le entiende nada.</i>
19. Conocer nuevas experiencias por medio de los recorridos.	38. Que los recorridos duren más tiempos	57. Que hable varios idiomas.

Resultados obtenidos de los grupos focales en donde participaron turistas nacionales para indagar cuales son sus expectativas cuando contratan los servicios de un guía de turista. Realizados en el mes de marzo del 2009.

Los resultados de la primera fase dieron el insumo para construir un primer acercamiento a las expectativas que los turistas tienen cuando contratan los servicios de un guía, un grupo de expertos de la Universidad del Caribe dividió los resultados en 5 grupos según la revisión literaria en cuanto a la formación de las expectativas de Zeithmal (1996), el resultado que se obtuvo fue un modelo preliminar como lo muestra la figura 4 de las expectativas del turista.

Figura 4: Modelo preliminar conceptual de las expectativas del turista cuando contrata los servicios de un guía de servicios



Modelo preliminar obtenido de los resultados de los grupos focales. Zárraga y Corona, 2009

Segunda Fase: Investigación Cuantitativa

En esta segunda fase se probó el modelo a través de una investigación cuantitativa, que consistió en una encuesta en la que se re-escribieron los ítems del modelo preliminar conceptual de las expectativas del turista cuando contrata los servicios de un guía de servicios, de forma que se pudieran calificar en una escala de 1 al 7 en donde 7 significa fuertemente de acuerdo y 1 significa fuertemente en desacuerdo.

Los resultados se aplicaron a 400 turistas nacionales apoyados por alumnos de la Universidad del Caribe de séptimo y octavo semestre previamente capacitados para la aplicación del instrumento del 4 al 10 de abril del 2009, que en México son las vacaciones de Semana Santa y es cuando se tiene una visita aproximada de 97,439 turistas nacionales de acuerdo a las cifras obtenidas en el barómetro de Cancún como lo observamos en la tabla 4. Los 400 turistas resultaron de la aplicación de la muestra con población infinita.

Tabla 4: Número de turistas nacionales que visitaron Cancún.

Periodo de Semana Santa - Año	Número de Visitantes Nacionales
2007	86,179
2008	108,700

Datos de visitantes nacionales obtenidos del barómetro de la ciudad de Cancún.

El levantamiento se llevó a cabo en los principales puntos de encuentro de los turistas nacionales, el instrumento consistió en 23 preguntas, los sujetos de estudio fueron turistas nacionales mayores de 25 años.

El análisis de los datos se hizo mediante un análisis de factores, alpha de cronbach's, y análisis discriminante que son una técnicas estadísticas de variables que se usan para resumir la información de variables en un menor número de subconjuntos o factores. El propósito es simplificar el modelo preliminar conceptual de las expectativas del turista cuando contrata los servicios de un guía de servicios para identificar factores subyacentes. Para realizar el análisis se utilizó el programa estadístico SPSS.

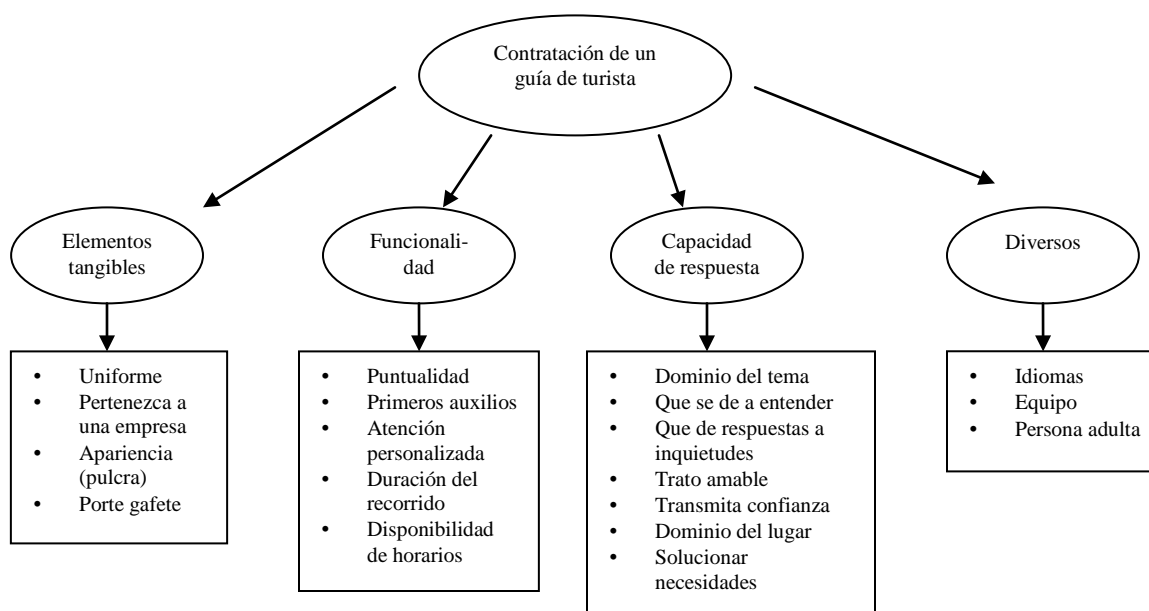
RESULTADOS

Para probar la pertinencia del análisis factorial se realizó la medición de Kaiser – Meyer – Olkin (KMO) en donde compara la magnitud de los coeficientes de correlación observados con la magnitud de los coeficientes de correlación parcial. Los valores menores 0.5 del estadístico KMO indican que las correlaciones entre pares de variables no pueden explicarse por otras variables y que tal vez el análisis factorial no sea adecuado, por lo contrario cuando se acerca a 1 generalmente indica que el análisis factorial puede ser utilizado con los datos. Para este análisis se utilizó el paquete estadístico SPSS en donde dio como resultado una medida de adecuación muestral de KMO de .911 lo que significa que es adecuado el análisis.

Se aplicó el procedimiento del análisis de los componentes principales para nuestro análisis factorial, en donde el valor propio de un factor indica la varianza total que se le atribuye. La varianza total explicada por los cuatro factores combinados explica el 66.006% de la varianza total. Por ultimo se obtuvo una matriz en donde se minimiza el número de variables con cargas altas a un factor, lo cual aumenta la posibilidad de interpretar los factores, en donde se utilizó el procedimiento varimax a través del programa estadístico SPSS

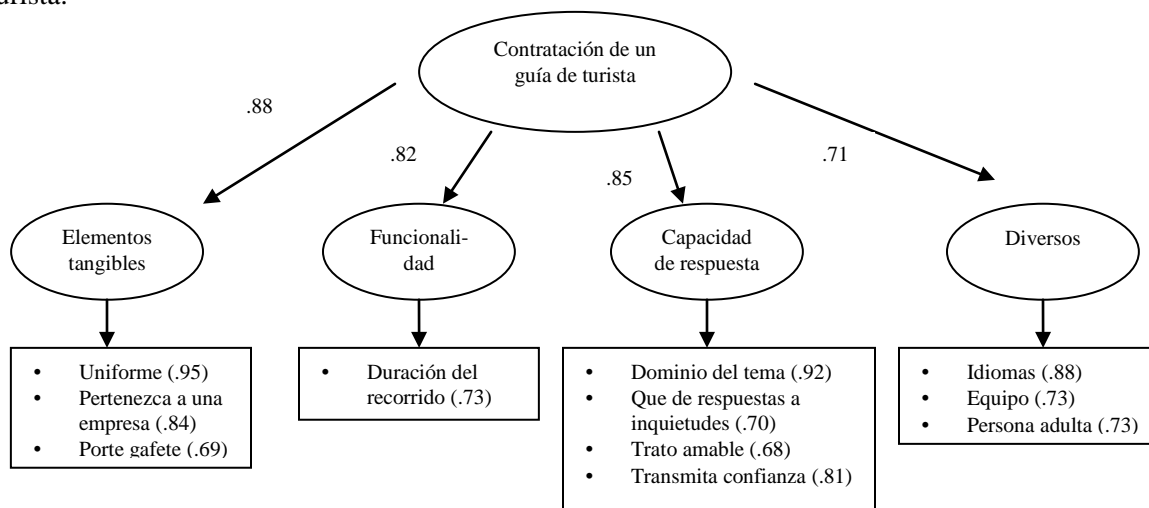
Con los datos obtenidos en la matriz de componentes rotados se sabe que se conformaran 4 subdivisiones como lo muestra la figura 5.

Figura 5: Modelo re estructurado de las expectativas del turista cuando contrata los servicios de un guía de servicios después del análisis factorial.



A través del Alfa de Cronbach's se validó la confiabilidad de consistencia interna. Las subdivisiones obtuvieron un valor de 0.891 a .660 como se muestra en la figura 6. Las variables que obtuvieron un resultado mayor de 0.60 en la matriz estructural se diferencian en el modelo final como lo muestra la figura 6.

Figura 6: Modelo final de de las expectativas del turista cuando contrata los servicios de un guía de turista.



Modelo final obtenido después de los análisis estadísticos en el SPSS. Zárraga y Corona, 2009

A través de los datos obtenidos podemos concluir que las expectativas que tiene el turista cuando contrata los servicios de un guía son en la parte de elementos tangibles, es decir lo que quisiera ver es :que el guía use uniforme, que pertenezca a una empresa y que porte su gafete con sus datos; En cuanto a la parte funcional que el recorrido tenga una duración adecuada; En cuanto a la capacidad de respuesta que domine el tema, que responda a sus inquietudes, que el trato sea amable y logre transmitir confianza y por ultimo que hable otros idiomas, que cuente con el equipo necesario y que sea una persona adulta.

CONCLUSIONES

Se concluye que las operadoras turísticas que manejan guías de turistas se deben esforzar por ampliar las expectativas del cliente y con los resultados obtenidos tener una ventaja competitiva, apuntando al fortalecimiento de estos puntos relevantes para cumplir con el nivel de expectativa que el turista desea.

Asimismo la gestión de la empresa debe de realizarse a favor de lo que el turista espera de ellos, y se puede reflejar en capacitación, estrategia de ventas, imagen del personal, logística de los recorridos, y servicio a cliente entre otras.

Las expectativas son parte fundamental en las empresas turísticas, como fuente para la creación de valor y en donde es parte complementaria de modelos como la cadena de utilidad en el servicio y el modelo de las brechas.

Hoy por hoy las empresas turísticas deben tener como requisito antes que medir la satisfacción, conocer cuales son las expectativas de sus clientes de esta manera podrían dar un paso adelante ante su competencia.

REFERENCIAS

Indicadores Turísticos del Estado de Quintana Roo. Proporcionados por la Secretaria de Turismo del Estado.

Instituto de Investigaciones Turisticas. Universidad la Salle (2001). Estudio sobre la caracterización del Turista en el Caribe Mexicano Enero 2000 – Junio 2001.

Instituto de Investigaciones Turisticas. Universidad la Salle (2004). Estudio de Mercado Permanente para el Estado de Quintana Roo como Destino Turístico Marzo 2003 – 2004

Zárraga, L., Corona E. (2009). Medida de Satisfacción de los Turistas sobre el Servicio de Guías en las Zonas Arqueológicas de Tulum y Cobá en el Estado de Quintana Roo, México. Revista Internacional de Administración y Finanzas., Volumen 2

La calidad en los servicios y satisfacción al cliente. Sin fecha. Documento inédito.

ISMI International Service Marketing Institute (2001). La Calidad en los Servicios: Cómo se mide y Gestiona (I). MK Marketing, Número 159

(2009). Definición de expectativas. Consultado en Febrero, 17, 2009 en <http://es.wikipedia.org/wiki/Expectativa>.

Zeithaml, V. y Bitner, M.J. (1996) Services Marketing, Editorial McGraw-Hill

Parasuraman, A., Zeithaml, V. y Berry, L. (1985). A Conceptual Model of Service Quality and its Implications for Future Research. *Journal of Marketing*, 49

Lovelock, C. (1997). Mercadotecnia de Servicios. México: Prentice Hall.

Lovelock, C., Reynoso, J., D'Andrea, G., Huete, L. (2004). Administración de Servicios. México: Prentice Hall

ISMI International Service Marketing Institute (2001). La calidad en los servicios: Cómo se mide y gestiona (II). MK Marketing, Número 160

Malhotra, N. (2008). Investigación de mercados. México: Prentice Hall.

Hair, Bush y Ortinau (2000). Investigación de Mercados: Mc Graww Hill

LA EFECTIVIDAD DEL PLAN NACIONAL DE FRANQUICIAS PARA LAS MIPYME EN MÉXICO, CASO MUNICIPIO BENITO JUÁREZ, QUINTANA ROO

Francisco José May Hernández

RESUMEN

Hablar de MiPyME, y especialmente de su relación con el formato de las franquicias a nivel global, podría ser algo común hoy día, sobre todo por la importancia de las primeras en todo el orbe por ser grandes generadoras de empleo y aportar de manera significativa al PIB de los países donde operan. Las franquicias sin embargo, de acuerdo a la opinión de los expertos en la materia en México, a diferencia de las MiPyME, que son operadas según el modo tradicional, tienen un índice mucho mayor de sobrevivencia pudiendo darse de hasta el 95% en los primeros cinco años, contra el 30% de sobrevivencia en los dos primeros años de operación de las MiPyME. Tal situación ha conllevado a que al menos en México, el gobierno considere la posibilidad de apoyarse en el formato de negocios operado por las franquicias, creando el programa denominado Plan Nacional de Franquicias, con la intención de revertir el índice de cierres de las MiPyME que operan en el esquema tradicional; sin embargo, en la praxis las cosas pudieran no parecer tan alentadoras, toda vez que la experiencia obtenida con otros programas muestra la ineficiencia en la implementación de los mismos, específicamente por el desconocimiento de la realidad del entorno al cual se destinan, pudiendo los objetivos tornarse inalcanzables. En Quintana Roo, específicamente en el Municipio Benito Juárez, no es la excepción, ya que aún y cuando se encuentra por encima de la media nacional respecto al número de Micro empresas operando en su territorio, la atención que se le pone al momento de desarrollar programas para este segmento es mínima sino es que nula, ya que como estado debiera tener ciertas consideraciones, sobre todo al ser el número uno en crecimiento en franquicias con el 12% anual junto con Guadalajara y Puebla; pero es excluido sin que se encuentre alguna justificación válida, entre tanto los programas como el Plan Nacional de Franquicias, no son utilizados de manera eficiente por diversas razones que se exponen a lo largo del presente trabajo.

INTRODUCCION

Mucho se habla hoy en día del formato que ha venido a cambiar el paradigma respecto al modo de extender una marca en el mercado actual a través del capital de terceros, estrategia que permite a la vez, una mayor participación y posicionamiento en un mercado cada vez más competitivo. La aportación de quien se interese en pertenecer a determinada marca, es principalmente el deseo emprendedor y la búsqueda de un concepto que se adecue a su perfil y su poder adquisitivo para determinar la factibilidad de adquirirla o no.

Este formato de negocios, es conocido hoy día como FRANQUICIAS, y el hablar de éstas no es hablar de una industria, es hablar de una estrategia de crecimiento, de expansión de negocios, adoptada por miles de empresarios y emprendedores para crecer o bien, para incursionar de manera más firme en el mundo de los negocios, desde esta perspectiva, la franquicia es *un formato de negocio con posicionamiento de marca que permite la explotación de un concepto desarrollado y probado en su viabilidad y documentado en manuales por un emprendedor denominado franquiciante a través del otorgamiento de los derechos a otro emprendedor inversionista denominado franquiciatario, cuya unión o alianza se estipula bajo las cláusulas de un contrato de franquicia.*

En el documento “La importancia de las Franquicias en la Economía Mexicana” presentado en la Universidad de Matanzas Cuba por el Mtro. Francisco May Hernández, se hace mención del impacto que

este formato tiene para la economía de los países, independientemente de su grado de desarrollo, y que la misma ha conllevado a que los gobiernos le presten especial interés y creen programas de apoyo al desarrollo del mismo, para incentivar la economía interna a través de la apertura de nuevas unidades que generan sin duda empleos formales a razón de 10 ó 12 en promedio por local instalado, al menos en México de acuerdo a datos recabados.

En México, de acuerdo con la información incluida en el documento presentado en Matanzas, el sector factura cada año un equivalente al 6% del PIB nacional, con un promedio en la dinámica de crecimiento anual de 15%. De mantener este ritmo se prevé que para el 2012 su facturación podría superar el 8% del PIB. Estos indicadores económicos no pasan desapercibidos para el sector público, a grado tal que se implementan de manera constante programas de apoyo al sector, pero ninguno había sido tan declaradamente dirigido como el anunciado por el presidente Felipe Calderón el noviembre de 2007, el cual tiene por nombre oficial “Programa de Apoyo a Empresarios Mexicanos vía Modelo de Franquicias” y es conocido como Plan Nacional de Franquicias (PNF) por lo que nos referiremos a éste, como Plan y no como programa.

Este Plan, se encuentra incluido en el Plan Nacional de Desarrollo 2007 – 2012 de la Secretaría de Economía publicado en el Diario Oficial de la Federación (DOF) el 31 de mayo de 2007, mismo que fue aprobado el 14 de mayo de 2008 mediante decreto del Presidente Felipe Calderón, publicado en el DOF; dentro de la línea estratégica 1.1.5 inciso b en donde se menciona la creación del Plan Nacional de Franquicias como parte de las estrategias para llevar a las empresas Gacela, a su máximo desarrollo, mediante el apoyo integral, la sistematización y el acercamiento a los mercados para potenciar los desarrollos locales y regionales. Para lograr esto, el PNF previó un presupuesto para el 2008 de al menos 500 millones de pesos para consultoría, capacitación, transferencia de modelos y el sistema de créditos, con lo que al final del año se pretendía alcanzar 250 nuevas marcas mexicanas. El subsecretario de la Pequeña y Mediana Empresa de la Secretaría de Economía, Heriberto Félix Guerra, explicó que el PNF inició 2008 de manera directa con 200 millones de pesos para consultoría, capacitación y transferencia de modelo. Además contó con 300 millones de pesos disponibles en la parte de "credifranquicias" con la banca comercial, para financiar la creación de nuevas marcas.

El PNF no es otra cosa que un programa que pone al alcance de más mexicanos, la posibilidad de emprender un nuevo negocio, con el apoyo y experiencia de una empresa franquiciante o franquiciadora, aumentando sus posibilidades de éxito y apoyando la creación permanente de nuevos puestos de trabajo. Asimismo, apoya la evolución de negocios exitosos independientes a ser empresas franquiciantes, siempre y cuando cumplan con los requisitos requeridos. La finalidad que persigue es ambiciosa, ya que pretende multiplicar los puntos de venta de franquicias ya existentes e impulsar la creación de por lo menos un millón y medio de empleos en el periodo 2006-2012.

Según investigadores del sector en México, como Ferenz Feher y Enrique Alcázar Córdova, se prevé un crecimiento aún mayor que el que actualmente tenemos, las marcas operando se espera sumen 1200 funcionando de forma continua con aproximadamente unos 100 mil puntos de venta en el territorio nacional, éstas en conjunto se proyecta que generen 1.5 millones de empleos, toda vez que su potencial económico también se relaciona con su demostrada capacidad de generar empleos directos e indirectos a través de las cadenas de proveedores que desarrollan.

Si se toma en consideración que en los tres primeros años del nuevo siglo, el número de franquicias se estima que se ubicaba en las 500 marcas con 35 mil puntos de venta ubicados a lo largo y ancho del territorio nacional, operando en más de 65 giros diferentes y aportaban un orden de 400 mil empleos, entonces podemos inferir que se espera que para el 2012, de acuerdo al PNF, se incremente en un 150% el empleo generado por el sector, al pasar de 400 mil a 1 millón en cuanto a plazas de trabajo (siendo que algunos expertos y el mismo plan de la Secretaría de Economía vaticinan que puede llegar al millón y

medio, lo que representaría en consecuencia un incremento en el orden del 266%); en cuanto a unidades establecidas se espera un crecimiento estimado del 257.1% al pasar de 35 mil a 125 mil aproximadamente. En lo relativo a marcas establecidas el crecimiento es en el orden del 50%.

A opinión de los expertos en el tema, las condiciones para el año 2008 se encuentran de manera tal que permite vaticinar un crecimiento aún mayor en el sector, ya que con el PNF como catalizador de las PyME y las ventajas que ofrece para acceder a créditos con tasa cero, indudablemente se vislumbra un panorama alentador, aunque falta convencer de lleno a la banca la cual, no en su totalidad cree mucho en el programa, ya que de acuerdo al artículo titulado “La banca Incrédula ante el programa de las franquicias” el 13 de marzo de 2008, para el Universal por parte de Humberto Niño de Haro, a la vuelta de seis meses, el PNF no termina de convencer a la banca comercial del país para que otorgue financiamientos a emprendedores en la compra de franquicias.

La ventaja que sin duda había en esos momentos para las franquicias, tanto como para otros formatos de negocio, es el ambiente de estabilidad que se percibía en la economía y la política a nivel nacional y ante el hecho de que no se presentaran, al menos de forma evidente, condiciones nacionales o internacionales que pudieran perturbar la situación de ese momento, incluyendo el ambiente de la economía norteamericana, lo que propiciaba que se apreciaran políticas públicas enfocadas a apoyar de manera real y efectiva, incluso mediante financiamientos blandos a las MiPyME y específicamente a las franquicias. Ya que desde la perspectiva de la AMF, La transformación de pequeños y medianos negocios en franquicias sería la vertiente de mayor demanda, al prever un crecimiento de 13% el año próximo.

Tal vez la interrogante respecto al papel que juegan las MiPyME en este escenario sea válida; sin embargo no hay que olvidar que de acuerdo a información de la Secretaría de Economía, el porcentaje de las Micro, Pequeña y Mediana empresa que se desarrollan en nuestro país, se encuentra en 99.8%. Lo alarmante del caso es que su tiempo de vida es en la mayoría de los casos reducido ya que, de acuerdo con diversos especialistas e investigadores como Elia López, Víctor Calderón y Eduardo Torreblanca, entre el 60 y 80% de las MiPyME en este país mueren antes de cumplir dos años, Situación que llama indudablemente la atención si lo comparamos con el formato de las Franquicias, en el que según datos de la AMF, el 95% de los negocios operados bajo este sistema sobreviven por lo menos 5 años y el 98% de estos, llegan a cumplir 15 años de operación a diferencia del modelo tradicional por lo que resulta en consecuencia, que el formato de negocio desarrollado por las franquicias apoya para tratar de abatir e invertir en la medida de lo posible la fórmula, ya que si se promedia las opiniones de los expertos respecto al porcentaje de mortandad de las MiPyME (70%), los negocios operando bajo el esquema de franquicias tienen alrededor de un 65% más de posibilidades de sobrevivir al medio, ya que por lo regular dos de cada 100 franquicias cierran en el mismo período que lo hace una MiPyME.

Algunos estudiosos en la materia como Oscar Aragón Castañeda, auguran que este sector (Franquicias), llegue a consolidarse aún más al grado de que 90 por ciento de las empresas en el país pertenezcan a este modelo de negocio en el año 2020. Lo anterior permite vislumbrar un crecimiento aún mayor en sus aportaciones en los diversos sectores dentro de la economía mexicana en los que tiene indudablemente aportaciones significativas. Aunque quizás haya giros en los que de manera irremediable se llegue a una saturación, al menos en territorio nacional, pero no necesariamente en otros rincones del orbe en donde se vislumbra un nuevo mercado a atacar, el mismo Aragón Castañeda aclaró esto, pero dice que aunque se llegue a dar, existen otros sectores con mejor panorama como el de la tecnología y los servicios, en los que el crecimiento apenas inicia. Lo cierto es que, con el PNF se pretende, a su criterio, que las unidades creadas bajo este esquema sean puntos de venta con capacidad de subsistencia por lo menos al quinto año, aumentando en un 150% su permanencia, respecto a los dos años como máximo que sobreviven en la actualidad.

Tales circunstancias han conllevado a que La Asociación Mexicana de Franquicias (AMF) destaque el hecho de que las autoridades federales coinciden en la urgencia de apoyar al sector en México para impulsar a nuevos emprendedores, a la transformación de pequeñas y medianas empresas en franquicias y a la vez impulsar de igual manera a las ya existentes, argumento bajo el cual surgió el PNF, con el que se pretende que ocho de cada diez PyME en México adopten el formato para el 2012 de acuerdo a lo declarado por El presidente del Colegio Mexicano de la Mercadotecnia AC, Gustavo Cordero Rodríguez, y para el 2020, de acuerdo a lo declarado por Oscar Aragón Castañeda, se espera un 10% más de alcance, es decir que se llegue a la meta de que el 90% de las PyME operen bajo el formato de franquicia.

En este punto es donde el presente trabajo cobra importancia, y es pertinente hacer la siguiente aclaración ante lo que parece ser una constante en los datos vertidos en las instancias encargadas de coordinar, actualizar y difundir los números de las empresas ubicadas en territorio nacional, ya que de acuerdo con datos obtenidos en la Secretaría de Economía, se estima que en 2006 existían 4'290,108 empresas, de las cuales el 99.8 son MiPyMe, y según datos del Sistema de Información Empresarial Mexicano (SIEM), al 5 de junio del 2008, se cuenta con un total de 636,704 empresas a lo largo y ancho del territorio nacional en los tres sectores de la producción, de las cuales 590,125 son MICRO empresas. Para los objetivos del presente trabajo nos enfocaremos en lo obtenido a través del SIEM, simplemente para corroborar los alcances del Programa Nacional de Franquicias; toda vez que aunque pudiera parecer ambiciosa la meta propuesta por el Presidente del Colegio Mexicano de la Mercadotecnia, el número de micro empresas representa el 92.68% del total de las empresas establecidas en el país, y al ser el PNF un plan dirigido en su concepción para las PyME, se infiere en consecuencia que es discriminatorio al igual que otros programas de origen gubernamental, de lo cual se hace mención en el documento presentado en el congreso realizado en Costa Rica por el Instituto para la Investigación de los Negocios y Finanzas IBFR (por sus siglas en inglés) por May y Olivares (2008), ya que solamente se dirige para 7.31% de las empresas (considerando a las grandes inclusive).

Si se toma exclusivamente a la pequeña y mediana empresa, que es para quienes en específico el programa está diseñado de acuerdo a la declaración del Presidente de la AMF, Carlos Roberts, el mismo solamente estará dirigido entonces para el 6.58% del total de las empresas en México; si adicionalmente se considera, que de acuerdo a los datos publicados en diversos artículos y de lo cual se hace mención en el presente documento, cada unidad del formato de franquicia, tiene en promedio de 10 a 12 empleados, tomando la media, entonces se ubicarían, de acuerdo con la última clasificación de la Secretaría de economía del 27 de febrero de 2004, como pequeñas que ya nacieron con el formato, las cuales, según reportes de la Asociación Mexicana de Franquicias (AMF) y de especialistas en el área, para el 23 de diciembre del 2007 se ubicaban en el orden de las 50 mil unidades, lo cual representa un promedio de 119.34% del total existente, es decir, que antes de haber puesto en marcha el programa, éste ya fue rebasado en un 39.34% en la meta propuesta para el 2008, y en un 29.34% para la meta del 2020. Por lo que lo esperado por el presidente del Colegio de Mercadotecnia e inclusive por Oscar Aragón Castañeda respecto al 80% y 90% respectivamente es ya un realidad, e inclusive ya ha sido superado por mucho. Sin embargo, se puede hablar de otra realidad, aún más abrumadora, ya que de acuerdo con Ferenz Feher, consultor acreditado y especialista en la materia, para fines del 2007, el número de unidades se reportó en el orden de las 70 mil, con lo que no solamente se alcanza la meta sino que además se rebasa en un 67% con base al total de las PyMe registradas en el país en el SIEM. De acuerdo a Oscar Aragón Castañeda, la interpretación respecto al apoyo para las PyMe por parte del PNF, abarca a las micro inclusive, ya que no pretende en ningún momento ser un programa discriminatorio, siendo entonces que llama la atención de nueva cuenta, el mal manejo de la clasificación publicada por la Secretaría de Economía para dar a conocer los alcances de programas como el PNF. Desde esta perspectiva entonces, el alcance que se pretende, viene siendo una meta no solamente muy ambiciosa sino inalcanzable para el tiempo que se prevé y las condiciones actuales del entorno, ya que desde esta postura y con los datos obtenidos el 5 de junio del 2008, el número de MiPyMe a las que pretende llegar suman en total 632,020 que representan el 99.26% de todas las empresas del país, de las cuales, solamente el 9.36% operan bajo el formato de

franquicias, proyectando un crecimiento al 2012 del 722.31% para poder alcanzar el 80% del total de las MiPyMe registradas ante el SIEM a junio del 2008, y para el 2020 de 812.60% si se pretende lograr el 90%, lo que representaría un crecimiento anual en el primer caso del 144.46% o bien del 67.71% para el segundo, que desde cualquier perspectiva sigue siendo una utopía y no resultaría ser la “panacea” para los aspectos económicos ni laborales que se pretende con el PNF, ya que se requeriría además que el crecimiento de esta cifra se estancara durante el período que se proyecta dentro del plan, adicional a que ninguno de los puntos franquiciados abiertos en el mismo período cerraran, lo que desde cualquier ángulo que se le vea es prácticamente inalcanzable, porque significaría en primera instancia frenar el crecimiento empresarial que sostiene la economía del país representado en más del 99% por las MiPyMe, y en segundo lugar que la apertura de franquicias fuera en una cifra constante, cosas que difícilmente sucederán.

Para demostrar lo anterior, nos permitimos presentar el comportamiento de las empresas registradas en el SIEM del 2001 a septiembre de 2008:

Empresas registradas en el SIEM								
Año	2001 (1)	2002 (2)	2003 (3)	2004 (4)	2005 (5)	2006 (6)	2007 (7)	2008 (8)
Número de empresas	638300	647829	642213	623078	678941	671389	711243	713039

Como se puede observar, a excepción de los períodos 2002-2003, 2003-2004 y 2005-2006, en donde se presentó un decrecimiento del 2.36, 2.11 y 10.07 por ciento respectivamente, los otros años han tenido tendencias a la alza siendo el único período en el cual hubo un retroceso respecto al punto inicial del 2001, el del 2003-2004, cuyo porcentaje fue menor en un 2.38%. Sin embargo la media de crecimiento anual en los últimos 8 años (tomando la parcialidad del 2008 como un año completo), es de 10,677 unidades promedio por año, lo que representa el 15.25% del total de las unidades operadas como franquicias actualmente (considerando la base de 70,000 unidades de acuerdo a la AMF), lo cual deja de manifiesto que, si de acuerdo a las declaraciones vertidas en diciembre del 2007 acerca del crecimiento esperado para el 2008 en el orden del 17 al 20% respecto a las existentes al cierre de año, sacando la media de esta proyección al 18.5%, entonces se espera para el 2008 un crecimiento a razón de 12,950 unidades, las cuales quedarían apenas un 21,28% por encima del crecimiento promedio anual reportado por el SIEM, en caso de que realmente se alcanzara la meta, lo que no se logrará del todo, ya que al investigar al respecto el presidente de la AMF, Carlos Roberts, dijo el 10 de septiembre del 2008, que “para el cierre de la actual administración federal habrá mil marcas en operación bajo este modelo de negocio, no mil 500, como se anunció en julio del año pasado durante el lanzamiento del programa”, lo que nos lleva a deducir el desconocimiento de la realidad de las MiPyMe por parte de los dirigentes de los organismos que operan las franquicias, ya que el abrir inclusive 1,500 unidades, representaría solamente un crecimiento del 14.04% del promedio de las MiPyMe que abren de manera anual en el país de acuerdo a los datos presentados anteriormente, y si como menciona, solamente se abrieran mil, estas abarcan el 9.36% únicamente, las cuales sumadas a las existentes al momento, hacen que el universo se extienda y se torne inalcanzable el objetivo propuesto.

Como se puede observar en la tabla, bajo esta perspectiva tan desproporcional en cuanto al crecimiento de las MiPyMe y las franquicias, el PNF no podrá alcanzar en ningún momento las metas propuestas del 80% al 2012 y ni qué decir del 90% para el 2020, ya que el crecimiento del formato al menos al día de hoy, ha sido menor respecto al crecimiento de las empresas independientes, sin importar el índice de efectividad de unas y otras, ya que como se aprecia en las tablas presentadas anteriormente, aún y con las tendencias de poca efectividad y durabilidad manifestadas en distintas declaraciones acerca de las MiPyMe y su 70% promedio que no llegan a cumplir los dos años operando en un formato diferente a las franquicias, las tendencias han ido a la alza.

Tomando la media de aperturas por año reportadas por el SIEM y las metas propuestas por el PNF a razón de una constante del 18.5% anual, los datos que se obtendrían serían los siguientes:

Cuadro comparativo de aperturas de MiPyMe y franquicias proyectadas por el PNF												
año	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
unidades	723716	734393	745070	755747	766424	777101	787778	798455	809132	819809	830486	841163
franquicias	82950	98296	116480	138029	163565	193824	229682	272173	322525	382192	452897	536684
Porcentaje	11.46%	13.38%	15.63%	18.26%	21.34%	24.94%	29.16%	34.09%	39.86%	46.62%	54.53%	63.80%

Tabla realizada con los datos del SIEM al 3 de octubre del 2008, proyectando una constante de crecimiento de 10,677 unidades con un 18.5% de conversión o aperturas de negocios bajo el formato de franquicias

Se considera la totalidad de empresas, incluyendo a las grandes, ya que en promedio representan el .7% del total de las empresas del país, por lo que el sesgo en esta información es mínimo.

Hasta este punto se realizan los siguientes planteamientos:

1. El PNF se estructuró sin una conciencia real de la situación de las MiPyMe en el país o
2. El PNF se desarrolló para beneficiar a algunas firmas en exclusiva operando en territorio nacional para la certificación de unidades a franquiciar.

Siendo el objetivo del presente trabajo el determinar la pertinencia del Programa y el alcance de las metas propuestas, nos enfocaremos en esto y no en lo segundo, ya que no es relevante para la investigación el demostrarlo.

¿Qué datos ayudarían entonces a determinar el alcance real de un programa como el PNF que nos permitiera vislumbrar la pertinencia de su aplicación y su ayuda para quienes, operando como MiPyMe, en determinado momento pudieran interesarse en el formato?

Los datos que no pueden pasarse por alto es en primer lugar que en la actualidad no se cuenta con información real documentada respecto a la realidad de las franquicias en nuestro país. Por lo que surgiría otra interrogante y se daría sustento a la hipótesis respecto a la consideración de que el PNF se estructuró sin una conciencia real de las MiPyMe en el país, ya que no se puede determinar un crecimiento sin un punto de partida real, ¿cómo se puede medir el crecimiento de lo que se desconoce?, ¿cómo se determina la permanencia del formato por encima del esquema tradicional si se desconocen las cifras reales?, porque se entiende en consecuencia que los datos vertidos al día de hoy han sido meras especulaciones, siendo muestra de lo anterior las tablas siguientes:

CAFE	Unidades		Diferencia	Unidades		Diferencia		
	2005	2006		2006	2007			
Chocolate Café	7	7	0	13	16	3		
Paciugo	0	0	0	0	0	0		
Quicháo	2	2	0	2	2	0		
Como a la antigua	2	2	0	2	2	0		
Plantaciones de origen	0	4	4	4	0	-4		
The Buzz Café	15	15	0	15	15	0		
The coffe Factory	36	45	9	42	78	36		
The Italian Coffe	209	301	92	301	209	-92		
Café Calesa	30	34	4	34	30	-4		
Mrs. Field Bakery and Coffe	8	15	7	15	8	-7		
Café Macchiato	72	93	21	93	116	23		
Java Times Coffe	6	8	2	6	10	4	06'-07'	06'-07'
Trigo y Café	78	84	6	84	78	-6	Cerraron	Abrieron
	465	610	145	611	564	-47	113	66
						Porcentaje	18.5	-7.7

RESTAURANTES	Unidades	Unidades	Diferencia	Unidades	Unidades	Diferencia
	2005	2006		2006	2007	
La cueva del oso	0	0	0	0	0	0
El tarasco	4	4	0	4	4	0
Chops	1	1	0	1	1	0
Crebagette	0	2	2	2	0	-2
Fonda Santa Clara	2	2	0	2	2	0
Don Eraki	4	4	0	6	7	1
Potzolicalli	5	5	0	26	28	2
Bocadel Rio	0	3	3	4	5	1
Bonkey Shushi	3	4	1	3	5	2
Las Gaoneras	60	79	19	79	87	8
China in Box	0	0	0	0	3	0
Sushi-Itto	66	73	7	73	66	-7
Mariscos Dorado	7	11	4	7	7	-4
Mikono Suhi Bar	11	13	2	11	12	1
La tradición de la Parroquia	5	7	2	3	4	1
Wicklow Irish Pub	1	1	0	1	1	0
Gemma	22	24	2	24	22	-2
100% Natural	26	42	16	39	41	2
Controne	2	2	0	2	2	0
El Rey de la Barbacoa	9	20	11	20	20	0
Celtics Irish	3	4	1	1	1	0
Súper Salads	30	39	9	0	1	0
Bigo's	5	7	2	7	5	-2
Lizarrán	1	2	1	2	1	-1
Alpen House	12	22	10	12	22	10
Carne Express	0	3	3	3	9	6
Karne Garibaldi	5	7	2	7	5	-2
La casa del Waffle	4	6	2	6	4	-2
La Wafflería	7	10	3	10	7	-3
La Manzana de Santa	1	0	-1	0	1	1
La Terraza de la Abuela	2	8	6	7	9	2
Los Bisquets Bisquets Obregón	53	60	7	60	68	8
Sr. Cara de Papa	6	9	3	5	6	1
Mariachuchena	1	3	2	3	3	0
	358	477	119	437	458	21
	Porcentajes					25
						46
						5.7
						4.8

*Fuente, revistas *entrepreneur* enero 2007 y enero 2008, 500 franquicias, edición especial anual.

Estas tablas se desarrollaron tomando los datos de una parte de lo publicado en la revista Entrepreneur en los meses de enero de los años 2007 y 2008, la cual, según el Lic. Jorge Alba Guevara del Área Comercial de la AMF, es un medio con el cual tienen nexos y es inclusive socio comercial de la Asociación, por lo que se toma por veraz la información publicada. Se eligió el segmento del café y los restaurantes, ya que el 23% de las franquicias operan bajo el formato de restaurantes, solamente por debajo del sector servicios con el 24%.

Considerando lo publicado por la AMF respecto a que , el 95% de los negocios operados bajo este sistema sobreviven por lo menos 5 años y el 98% de estos, llegan a cumplir 15 años de operación a diferencia del modelo tradicional. (Fuente: AMF), las tablas demuestran la incongruencia de lo anterior, ya que del 2006 al 2007 en cuanto al rubro de las cafeterías, cerraron el 18.5% de las empresas respecto al mismo período comprendido entre el 2005 y 2006, además de que abrieron un 7.7% menos unidades; y en cuanto a restaurantes cerraron el 5.7% y abrieron 4.8% en los mismos períodos, habiendo una tendencia negativa al abrirse menos de las que cierran. En suma y sintetizando las dos tablas, arrojarían que se cerraron 138 unidades y se abrieron solamente 112, es decir que al menos en este período se cerraron más de las que se abrieron, lo que a todas luces es una incongruencia porque entonces simplemente las franquicias no estarían en el lugar en el que se ubican actualmente, lo que podría entonces inferirse como una especulación en el manejo de la información que se vierte al declarar respecto al sector.

Con la finalidad de poder dar aún más respaldo respecto al porcentaje de sobrevivencia de las franquicias respecto al modelo tradicional de abrir un negocio, se llevó a cabo la tarea de realizar una investigación tomando como base los datos publicados en la revista Entrepreneur de los años 2004 y 2009, las cuales abarcan el período de cinco años según el cual es en el que, el 95% de los negocios bajo el formato de franquicias sobreviven. De manera inicial se tomó el universo completo del sector alimentos y bebidas, por la razón comentada con anterioridad y los resultados fueron los siguientes:

Franquicias Mexicanas 2003	501
Franquicias Mexicanas 2008	812
Franquicias Alimentos 2003	199
Franquicias Alimentos 2008	279

* Se toman los años inmediatos anteriores a la publicación porque son los que existen al momento de llevarse a cabo la misma.

Cierres 03-08
42
% Cierre
21,1%
No se publicaron
56
% sin publicar
28,1%
Total Aparente
49,2%

Del 2003 al 2008, se tuvo un “crecimiento” de las franquicias mexicanas totales publicadas, en el orden del 62%. lo cual podría ser halagador para el formato; en el área de alimentos este “crecimiento” se dio en un 40.2 %, al encontrarse 80 nuevas franquicias dentro del sector, lo que de nueva cuenta podría verse como un dato nada despreciable; sin embargo, el entrecomillado de la palabra “crecimiento” nos refiere a que no es más que un mero espejismo, ya que analizando más a fondo se encontró lo siguiente:

Del año 2003 al 2008 se detectaron 42 cierres de empresas en el sector de los alimentos, lo que representa al 21.1% del total publicado, adicionalmente 56 empresas no se incluyeron en la lista del 2008, lo que equivale al 28.1%. Si se suman ambos porcentajes, parecería que el 49.2% de las empresas cerraron en este período lo que equivaldría porcentualmente al número de franquicias que cerraron en los últimos cinco años, cifra muy superior al constantemente citado 5% en los primeros cinco años de vida de empresas bajo el formato (considerando el 95% de permanencia manifestado por la AMF). Sin embargo al investigar al respecto, las cifras de las franquicias no publicadas se considera de empresas aún funcionando y vigentes en el mercado, por lo que el 21.1%, es el dato a considerar en este punto. Con todo esto entonces el crecimiento porcentual real es en el orden del 19.1%.

Hay que tener en consideración, la repercusión que la crisis norteamericana ha venido teniendo en las economías de todo el orbe, incluyendo a México, a grado tal que de acuerdo con Carlos Roberts, el Programa Nacional de Franquicias (PNF), de la Secretaría de Economía, redujo en una tercera parte las metas de crecimiento fijadas para 2012, lo que conlleva a que las aperturas de nuevos puntos de ventas operando bajo el formato y el número de empleos se vean reducidos en un 33% respecto a lo planeado al inicio del programa. Esto daría como resultado que la perspectiva planteada en el presente trabajo se ratifique respecto a lo inalcanzable del proyecto, ya que por un lado está lo que se pretenda y por otro la realidad en la que se encuentra inmerso el programa mismo, en donde los factores económicos, políticos y sociales sin duda alguna tienen repercusión dentro de él.

EL PNF EN QUINTANA ROO Y EN CANCÚN

El Plan Nacional de Franquicias fue presentado en Cancún en el mes de junio del 2008 en un foro realizado en la Universidad Anáhuac de la entidad.

Analizando las características del entorno del estado de Quintana Roo, vale la pena señalar que en él operan 23,447 empresas en su totalidad, de las cuales el 96.16% son Micro empresas (un poco sobre la media nacional de 92.68%), el 3.84% se encuentran como pequeñas, medianas o inclusive grandes empresas. Si se excluye de la estadística las empresas grandes, a fin de ubicar el número de empresas a las

que impactaría el PNF, entonces el porcentaje se reduce al 3.25%, lo que significan 762 empresas del total de las instaladas en el territorio estatal.

En el Municipio Benito Juárez (Cancún), las cifras respecto a la proporción de las MiPyMe no varía mucho respecto a lo hasta ahora señalado a nivel nacional y estatal, ya que el 96.41% de las empresas en el municipio son Micro empresas, el 3.12% son pequeñas o medianas y el restante 0.48% empresas grandes, por lo que desde la perspectiva de que el programa se dirige a las MiPyMe de acuerdo a lo declarado por Oscar Aragón el porcentaje contemplaría a un 99.52% del total de empresas en el municipio.

La realidad es que al momento de estar llevando a cabo la presente investigación, no se cuenta por parte de las instancias públicas o privadas con datos respecto a cuántas de las empresas registradas se desempeñan bajo el formato de franquicias, ya que a las autoridades reguladoras del comercio les atañe la legalidad con la que se lleva a cabo el desempeño de las actividades comerciales de los negocios como tales, incluyendo el giro o actividad más no el formato bajo el cual operan; sin embargo al recurrir a la AMF, para la obtención de datos que permitieran vislumbrar la realidad de las franquicias en el estado de Quintana Roo y en específico del municipio de Benito Juárez (Cancún) los datos respecto al número de unidades por estado que ellos tienen contemplan en Quintana Roo únicamente 4 de ellas.

Por obvias razones se puede percibir que únicamente se contemplan las que son miembros de la Asociación y que inclusive se descartan algunas de ellas, ya que la empresa Xburger no se contempla dentro de esta cifra, siendo que fue de las primeras en beneficiarse con el PNF en el estado al igual que “Los de pescado”. Se menciona lo anterior, toda vez que es de llamar la atención que de acuerdo a información recabada el 2 de abril en el Diario de Yucatán, Quintana Roo como estado, se ubica junto con Puebla y Guadalajara en el primer lugar en crecimiento nacional de franquicias con un 12% anual, y si consideramos que el 61.26% de las empresas en el estado se encuentran en este Municipio, entonces el número de éstas que podrían acceder al programa se encontrarían mayoritariamente en esta entidad; sin embargo, siendo que estos datos provienen de declaraciones de la AMF, surge la interrogante respecto a que si el 12% se refiere con base a los datos que ellos operan, el número entonces sería mínimo ya que Puebla con 44 unidades, Guadalajara (Jalisco) con 85 y Quintana Roo con 4, con un crecimiento en el porcentaje mencionado, no representaría un crecimiento considerable, al menos en éste último.

Investigando respecto al desarrollo del formato en la zona, incluyendo los estados de Campeche, Yucatán y Quintana Roo, se ubica el hecho de que, desde 1989 se desarrolló una franquicia en la zona llamada Empire Busines Brokers dedicada a la correduría y consultoría de negocios, misma que se puede decir fue la pionera en la materia en la zona sureste del país, ya que de acuerdo con datos encontrados en la revista Entrepreneur de enero del 2004, en ese tiempo las franquicias ubicadas en el área se encontraban de la siguiente manera:

Nombre	Ubicación	Giro	Año apertura	Unidades	Inicio de franquicia
Corporate Solutions Mico	Cancún, Q. Roo	Capacidad—n en idiomas para empresas	1998	2	2002
Spa Bar	Mrida, Yuc	Spa	2002	0	2002
Spa O2 Lounge	Mrida, Yuc	Spa y Lounge	2002	1	2002
Theme+ Spa	Mrida, Yuc	Spa Temático	1999	0	1999
Oxyvent	Mrida, Yuc	Máquinas expendedoras de Oxígeno	2003	0	2003
Pasaporte Internacional VIP	Cancún, Q. Roo	Venta de certificados vacacionales en cruceros carnival	1997	1	2003
Empire Busines Brokers	Cancún, Q. Roo	Corredores de negocios y servicios de consultoría	1981	67	1989
ODS cobranza*	Cancún, Q. Roo	Cobranza, investigación y mensajería	2001	5	2003
Prendalana	Cancún, Q. Roo	Casa de empeño y transferencia de dinero	1999	11	2001

Tabla desarrollada con datos de la revista entrepreneur enero 2004, 500 franquicias

* Operadora de la franquicia Pollo Pirata.

Como se puede apreciar en esta tabla, de 9 franquicias publicadas en la revista, 5 se encontraban en Cancún, 4 en Mérida y Campeche no figuraba; sin embargo, y con fines de comprobar el hecho de que el 95% de las empresas bajo el formato de las franquicias sobreviven los 5 años de acuerdo a los expertos en el tema, se realizó la tarea de comparar con base a la revista del 2009, cuántas empresas de las publicadas aún sobreviven o al menos se publican después de este lustro y el resultado fue el siguiente:

Nombre	Ubicación	Giro	Año apertura	Unidades	Inicio de franquicia
Mi viejo molino	Mérida, Yuc	Alimentos	2000	2	2006
Saladman'a	Cancún, Q. Roo	Alimentos	2002	2	2007
Escamochas	Campeche, Camp.	Alimentos	2005	8	2006
Picalim—n	Campeche, Camp.	Alimentos	2004	203	2005
Picalco	Campeche, Camp.	Alimentos	2007	16	2008
Smooogs	Campeche, Camp.	Alimentos	2008	4	2008
Hot Baking Company	Playa del Carmen Q.Roo	Alimentos	1998	3	2007
Los de pescado	Cancún, Q. Roo	Alimentos	2004	3	2007
X-Burger	Cancún, Q. Roo	Alimentos	2006	1	2008
Kalifornia Express	Mérida, Yuc	Alimentos y bebidas	ND		
D'oro internacional	Mérida, Yuc	Joyería de oro	2004	18	2007
Esthel	Mérida, Yuc	Accesorios dama	1986	18	2007
Abito	Mérida, Yuc	Ropa de lino	1996	10	2007
Zingara	Cancún, Q. Roo	Trajes de ba-o /			
Rockete'as	Mérida, Yuc	Accesorios	2000	30	2005
Skinevolution	Campeche, Camp.	Equipos de audio			
		Depilaci—n	2006	5	2006
Esbelt center	Mérida, Yuc	Cl'nica de nutrici—n y obesidad	2001	9	2005
Bell'sima	Mérida, Yuc	Cosmticos /			
Instituto Europeo	Cancún, Q. Roo	Art'culos de belleza	1998	32	2008
		Idiomas	2005	2	2007
		Educaci—n y			
		Entretenimiento			
Ciencia Kids	Cancún, Q. Roo	Infantil	2002	9	2004
		Compra /venta de			
		negocios y bienes			
Empire Bussines Broker	Cancún, Q. Roo	ra'ces	2001	3	2006
Prendalana	Cancún, Q. Roo	Casa de empe-o	1999	96	2001
		Servicio de limpieza y			
		mantenimiento en			
Trabajo en alturas	Cancún, Q. Roo	lugares dif'ciles	2005	2	2008
Motel	Cancún, Q. Roo	Telefon'a Pblica	2003	600	2005

Comparativamente estas tablas arrojan los siguientes datos:

1. De las nueve franquicias publicadas solamente dos aparecen después de 5 años (Empire Bussines Broker y Prendalana), lo que da un índice de sobrevivencia en el orden del 22.2 %, toda vez que 7 según esto ya no operan o ya no se publican. Al verificar punto por punto se ubicó que ODS cobranza y VIP International son la únicas que sobreviven adicional a las 2 mencionadas, pero en el primer caso no franquician, administran una marca denominada Pollo Pirata que según ellos opera como franquicia sin que se compruebe los términos de esto, por su parte VIP Internacional sigue vigente, al menos en la red.
2. El 100% de las franquicias ubicadas en Yucatán cerraron, dejaron de operar bajo el formato o no fueron publicadas en esta edición.
3. Del 2003 al 2008, se dio un crecimiento de 9 a 24 marcas operando en el territorio del sureste de la República Mexicana, lo que podría percibirse como un crecimiento del 166.6%, lo cual no sería del todo cierto, ya que habría que considerar los cierres y tomar como base las nuevas aperturas, por lo que el porcentaje de fracasos sería de 77.8% en tan solo un lustro, porcentaje mayor al promedio nacional del 19.1%.
4. El 41.6% de las franquicias en la península se encuentran en Cancún y el 42.8% en Quintana Roo.
5. En segundo lugar se encuentra Yucatán con el 36.36% y Campeche posteriormente con el 20.8%.

Siendo la primera intención del presente trabajo el investigar respecto a la efectividad del PNF para las MiPyMe en el municipio Benito Juárez, podemos deducir con base a la investigación realizada lo siguiente:

1. No se puede medir un beneficio real en tanto no se tengan datos reales y serios respecto a la realidad de las franquicias en la entidad, ya que se encuentra un panorama que es constante en materia de MiPyMe, y es la urgencia de homologar criterios respecto a la clasificación y alcance de los programas emanados en beneficio de éstas, independientemente su sector o área de actividad.

2. Como otros programas dirigidos a las MiPyMe, se percibe el lanzamiento de programas sin un plan estratégico, ya que en la zona no se cuenta más que con un despacho acreditado por la AMF y la SE y se encuentra en Playa del Carmen, cuando el 90% de los casos de desarrollo de franquicias locales se encuentra en Cancún. Se tiene conocimiento de representaciones de algunos de los despachos acreditados en la zona, pero sin una base establecida, teniendo que desplazarse los encargados desde zonas tan distantes como la Ciudad de México, Monterrey o Tijuana inclusive, lo que encarece el proceso de acreditación de la parte interesada. Lo anterior, desde cualquier perspectiva, lleva a una apreciación de ineficiencia en lo que se pretende para fomentar la implementación del formato vía el PNF o bien, la adquisición de una marca operando bajo el formato, vía el mismo plan.
3. Siendo Quintana Roo, junto con Guadalajara y Puebla los que más crecimiento han tenido de acuerdo a la AMF con el 12%, resulta increíble el percatarse de lo desatendido que está el sector en la zona, ya que en total, de acuerdo a datos recabados, aportan 1076 unidades con sus 24 marcas al formato, lo que representa el 1.54% del total de las existentes en todo el territorio nacional, lo que hace cuestionar el porqué de lo desatendido del formato en la zona por parte de las instancias involucradas en el PNF.

Por lo tanto en cuestión de financiamiento a las franquicias o a las MiPyME para que adopten el formato, o a inversionistas que deseen incursionar en él, se puede percibir que para que tengan acceso al financiamiento otorgado por el gobierno vía el PNF, uno de los puntos más críticos a superar es homologar los criterios para su otorgamiento, pero al mismo tiempo, instar a las instancias acreditadoras a expandirse en el territorio nacional, o bien, que la misma SE capacite y certifique a emprendedores interesados en especializarse en la acreditación de empresas para su incursión a planes de esta naturaleza. La homologación por tanto debe darse desde la raíz (gobierno e instancias vinculadas como la AMF), para poder instrumentar las estrategias adecuadas que conlleven a un notorio aumento de emprendimientos vía el formato de franquicias.

Y tal cual se concluyó el trabajo presentado por los mtros. Miguel Olivares Urbina y Francisco May Hernández, en el seno del congreso de la IBRF 2008 celebrado en Costa Rica de igual manera “es urgente implementar estrategias que ayuden a la creación, fortalecimiento y desarrollo de las MiPyme, haciendo una clara distinción entre clasificaciones con la finalidad de contar con programas dirigidos según los tamaños de las empresas, ya que es imposible construir criterios incluyentes para los sectores cuando las condiciones entre micro empresas y pequeñas empresas desde la clasificación, son contundentemente diferentes.” Aunado a que deben de desarrollarse de manera congruente a los planes, estrategias de expansión de las instancias certificadoras para que el beneficio de programas de esta naturaleza, realmente permeen al mercado objetivo para el cual se crean.

BIBLIOGRAFÍA

Ferenz Feher, Franquicias=éxito, motivos y razones, ed. Somohano Express, México 2006.

Ferenz Feher, Las franquicias un efecto de la globalización, 100 preguntas, 100 respuestas, la manera más segura de hacer negocio.

Mauro C. Paulo, Saporisi Gerardo, Sea su propio jefe a través del franchising, ediciones Macchi 1993
E-book Escogiendo la Franquicia perfecta, Lo que debes saber y preguntar antes de invertir en una franquicia. Oscar Aragón Castañeda

Revista Inversionista febrero 2008

Revista Entrepreneur Enero 2008

Revista Entrepreneur enero 2004

Revista Entrepreneur Enero 2009.

Revista Inversionista Febrero 2009

Diario Oficial de la Federación 27 de febrero de 2004.

Francisco May Ponencia “La importancia de las Franquicias en la Economía Mexicana” Matanzas, Cuba, marzo 2008.

<http://www.elfinanciero.com.mx> 22 de agosto 2007

<http://www.elempresario.com.mx/Franquicias/Paginas/20071225111148260.aspx>

World Franchise Council.

Asociación Brasileña de franquicias (ABF)

http://www.franchisesnet.com/franquicias_en_el_mundo.htm

www.economia.gob.mx

www.siem.gob.mx

BIOGRAFIA

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LAS DECISIONES FINANCIERAS EN LAS GERENCIAS DE LAS PYMES DE MANIZALES – COLOMBIA 2008

Jairo Toro Diaz, Universidad Autónoma de Manizales -Colombia

RESUMEN

A continuación se presentan los resultados del proceso investigativo realizado sobre los gerentes de las PYMES de la Ciudad de Manizales – Colombia, en lo referente a las decisiones en el ámbito financiero, mostrando el modelo Gerencial privilegiado en el ejercicio y como las decisiones de operación son las mas frecuentemente tomadas dentro de las organizaciones.

INTRODUCCIÓN

Validar las decisiones financieras y caracterizar el perfil de los gerentes se hace necesario para darle un sentido más objetivo, científico y humano al de carácter técnico y en muchos casos empírico, a la administración financiera. De otro lado, la teoría financiera actual plantea no solo el objetivo básico financiero de la Gerencia financiera que se convierte en su norte para la gestión, sino que describe tres (3) decisiones básicas que los profesionales de esta área desarrollan en este nivel, decisiones de inversión, financiación/y reparto de dividendos, las cuales son muy pertinentes para grandes empresas multinacionales y transnacionales que tienen sus actividades en países desarrollados, pero si tenemos en cuenta que en países en desarrollo como Colombia, se presentan situaciones que hacen que dichas decisiones no sean las realmente existentes, por ejemplo la existencia de las corporaciones y empresas sin ánimo de lucro, hacen que las decisión sobre el reparto de dividendos no tenga aplicación y pertinencia. Por otro lado en estudios anteriores se encontraron como la mayor parte de las decisiones que en el día a día, toman en nuestro medio los gerentes financieros de pequeñas y medianas empresas, son decisiones que tienen que ver con la operación de las compañías, para solucionar problemas de contratación de personal, proveedores, insumos, etc., que permitan la buena operación y desarrollo de las actividades económicas. Es por esto que en el presente estudio se pretende validar y caracterizar la existencia de una cuarta (4º) decisión financiera en nuestro medio, que permita la conceptualización y teorización de las decisiones de operación.

METODOLOGÍA

Tipo de Estudio

Es un trabajo de validación descriptiva, que esta orientado a observar y caracterizar una realidad sin intervenir o manipular variables que puedan predecir o mediar su comportamiento o respuesta, Lo anterior se realizó a través del desarrollo de un estudio en un modelo empírico analítico, en este caso para identificar las decisiones financieras y caracterizar los lineamientos generales de los modelos de Gerencia Financiera utilizado en las PYMES de Manizales.

Población y Muestra

Se trabajó con todas las empresas (pequeñas, y medianas) privadas de Manizales con base en las proyecciones del censo empresarial desarrollado por el DANE (Departamento Administrativo Nacional de Estadística) en el 2005. Posteriormente se seleccionaron aleatoriamente las 50 Empresas para la muestra sobre la base de datos de 712 PYMES reportadas por la Cámara de Comercio de Manizales entidad estatal que regula el funcionamiento de las empresas. La Muestra se estableció teniendo como base el estudio sobre las PYMES en Colombia de octubre de 2007 del centro de Estudios Económicos de Asociación Nacional de

Instituciones Financieras – Entidad Estatal (ANIF) este muestra como el 96,1% de las empresas son MIPYMES de las cuales las medianas representan el 30% y las pequeñas el 70%, esta distribución porcentual se le aplicó al número de encuestas sugeridas por el Director del trabajo (50 empresas). Muestra de 50 PYMES repartidas según el peso porcentual así:

- Mediana 15 empresas
- Pequeñas 35 Empresas

RESULTADOS

El ejercicio de la gerencia Financiera continua siendo ejercido mayoritariamente por el género masculino (68%), aunque las mujeres han incursionado de manera significativa en dichos cargos directivos (32%), y lo anterior nos muestra cierta correlación con lo encontrado por TORO (2006) el cual encontró una distribución similar entre hombre y mujeres (75% y 25% Respectivamente) en las Gerencias financieras de las empresas del sector Educativo de Manizales, aunque como arrojan los resultados las mujeres cada vez han incursionado mas dentro de estos cargos, posiblemente por las tendencias que muestran los estudios sobre recurso humano desarrollados por el Ministerio de protección Social, donde el género femenino muestra mayor interés por estudiar profesiones relacionadas con áreas de la Salud, el diseño y las artes. El sector en donde se ubican las PYMES presenta una concentración en el sector de la Comercialización con el 52%, lo que muestra una cierta tendencia con respecto al estudio presentado por el centro de estudio económicos de ANIF (2007). en el cual la mayor concentración de las MIPYMES en Colombia esta en el sector de la comercialización con 69%, pero difiere del dato arrojado por el censo económico realizado por el DANE (2005) donde las PYMES dedicadas al sector del comercio son el 21,5%, esto muestra una vez mas como sector denominado terciario cada vez tiene mayor participación en los sectores productivos del país y este comportamiento va en la dirección de las tendencias mundiales.

Los servicios con el 24% es el sector que sigue en el orden de distribución, el cual también presenta cierta similitud con el mismo estudio de ANIF, pero muy inferior al Censo Económico del DANE (2005), según el cual las PYMES mayoritariamente se encuentran distribuidas en el sector servicios con un 59,2%. La construcción representa el 8%, dato muy similar al presentado por ANIF (2006) donde el mismo sector representaba el 9%. Manufactura 6%, Metalúrgico 4% y otros sectores el 6% donde en este ultimo se destaca el sector Agropecuario, lo cual responde a la vocación que el Departamento de Caldas tiene desde años atrás, pero que siendo minoritario concuerda con los datos presentado por ANIF (2006). Estas dos ultimas evidencias posiblemente son el reflejo primero de las características topográficas de la ciudad de Manizales que por encontrarse en una zona montañosa y altamente sísmica e inestable, no presenta muchos terrenos aptos para el desarrollo del sector de la construcción, por otro lado la crisis cafetera de los últimos años siendo Manizales parte del denominado “Eje Cafetero” y que durante las décadas de los 70s y 80s la principal actividad económica era la actividad agrícola, centrada en la producción de café, así como el desplazamiento forzado de los agricultores por condiciones de la violencia del conflicto armado del país, pueden ser algunas de las causas que han hecho el cambio de vocación productiva. En lo referente a la estructura operativa de las PYMES, estas presentaron una estructura promedio de 59,7% en Activos Corrientes y 40,3% en Activos Fijos, dicha estructura promedio guarda relación con las actividades económicas donde se ubicaron la mayor parte de las empresas (76% Comercialización y Servicios) las cuales requieren de buena liquidez y capital de trabajo para su operación, una muestra de esto es el reporte de empresas que reportaron estructuras operativas con un 100% representados en solo activos corrientes. Por su parte la Estructura Financiera promedio esta representada por 44,04% en Pasivos y 55,7 en Patrimonio, lo que evidencio un nivel aceptable de endeudamiento externo.

Con respecto a las decisiones financieras, las de inversión se puede observar como las PYMES de Manizales presentan en su mayor proporción inversión tradicional en recursos propios de la operación (inmuebles, Planta, maquinaria, equipos, muebles y enseres 74%-76%) la inversión externa esta representada principalmente por el sector financiero 62%, posiblemente por la baja percepción de riesgo

que se tiene de este sector y un creciente y significativo aumento de inversión en el mercado de bursátil o de valores 38%. En lo que se refiere a las decisiones de operación, las principales están enfocadas a contratación de personal y manejo de proveedores (84% - 86%), así como la compra de materias primas, el manejo de arrendamientos y contratación de servicios con 70% y 72%, esto guarda cierta relación con lo presentado por TORO (2006) y esto posiblemente se presenta en Colombia y en países en desarrollo, debido a la escasez de recursos, el tamaño limitado de las organizaciones y la existencia de organizaciones, fundaciones, corporaciones, cooperativas y entidades sin ánimo de lucro, que hace que la gerencia Financiera se involucre mucho más en la toma de decisiones de orden operativo y que tal vez no fue tenido en cuenta por autores en el área financiera, como los Españoles Fernández y García (1992) y otros autores más recientes como García Santillán y Otros (2006).

Con respecto a las decisiones de financiación, se encontró que los gerentes de las PYMES de Manizales principalmente buscan su financiación en las entidades del sector financiero o bancario (74%), seguidos por los socios o accionistas (52%) y en una menor proporción en entidades Gubernamentales (40%), lo cual guarda cierta relación con el comportamiento de las PYMES del país presentado por el estudio de ANIF (2007) el cual mostró igualmente que las PYMES buscan su financiamiento bancario entre un 51% y un 36% dependiendo del sector (industria, comercio y servicios), de la misma manera Navarrete Mayorga (2005) mostró en el diagnóstico integral de las empresas de familia de Bogotá, que estas recurren a dos fuentes de financiamiento, siendo la prioritaria las entidades financieras en un 69% siendo muy similar esto al presente estudio; y a aportes de capital en un 27% siendo similar este dato al mostrado por ANIF, el cual muestran como las PYMES buscan financiarse en una pequeña proporción entre el 27% y el 8% con recursos propios de socios o accionistas, mientras que en Manizales dicho porcentaje representa la segunda fuente de financiación con un 51%, por su parte el Departamento de Plantación Nacional de Colombia (DNP) en su informe del COMPES 3484 de agosto 13 de 2007 también manifiesta que la encuesta sobre Innovación y Desarrollo Tecnológico de las PYMES indica que estas siguen presentando una marcada preferencia de financiación en el sector bancario para su financiación y que las demás fuentes de financiación (gobierno, mercado de capitales, entre otros) solo representan el 1% de las alternativas tenidas en cuenta por los empresarios, posiblemente por lo joven del mercado de capitales Colombiano, por la falta de conocimiento sobre dichas posibilidades de inversión y la falta de formación en este campo que pueden tener los gerentes de nuestra región.

Las decisiones de reparto de dividendos muestran como en casi la mitad de las empresas encuestadas lo hace con base en la existencia de una normativa interna (Estatutos 44%) y en un pequeño porcentaje por normativas externas (legislación 14%), se ve como la propuesta gerencial en las PYMES representa un porcentaje importante de las alternativas de decisión (38%) y como un 12% manifestó que el reparto de dividendos no aplica a su empresa por ser una organización sin ánimo de lucro, lo que radica básicamente en los orígenes y características de las empresas en Colombia, lo anterior contrasta con lo presentado por TORO (2006) donde las decisiones de reparto de dividendos no se presentaron en ninguna de las respuestas de las instituciones indagadas, posiblemente por el tipo de conformación y condición de constitución, ya que al ser sin ánimo de lucro los excedentes deben ser reinvertidos según las normativas estatales y estatutarias y si tenemos en cuenta que por su carácter de Instituciones de Educación Superior la Ley las enmarca en este contexto.

Con lo anterior las decisiones tomadas por la gerencia financiera de las empresas, se vería muy limitada solo a la inversión y financiación según lo expuesto por la teoría clásica de la gerencia financiera, pero es aquí, donde el análisis de los resultados muestra una evidencia que contrasta al teoría con nuestra realidad, y es como las decisiones operativas se convierten en otro ámbito de decisión de los gerentes financieros, esto puede estar evidenciando que el funcionamiento de las organizaciones, la operación del día a día y como se desarrollan las organizaciones, influyen el estilo gerencial. Una posible explicación para que las decisiones de operación como: compras, costos, cartera, manejo de tesorería, etc., aparezcan dentro del ámbito de desarrollo de los gerentes, puede ser que en el contexto internacional de

la gran empresa (multinacional y transnacional), el gerente financiero es visto más en el ámbito de solo las altas directivas y el mercado de capitales, donde la decisiones de financiación e inversión son de vital importancia, así como el reparto de dividendos es uno de los temas esenciales a tratar con las juntas directivas o de socios, siendo además las decisiones de operación de un ámbito inferior (gerencia media) y mas del ámbito del director administrativo.

El análisis Bivariado se encontró el 56% de las empresas con una permanencia en el mercado superior a 10 años fueron pequeña empresa, el 28% Mediana y el 10% de las empresas pequeñas presentaron una antigüedad en el mercado entre 5 y 10 años. Este análisis muestra como la mayor parte de las pequeñas empresas se encontraron en sector comercial con un 42%, seguido por el sector servicios con un 8%, similar distribución presentaron las Medianas empresas donde su mayor concentración se encontró en el sector servicios con un 16%, seguido por el sector comercial con un 10%. Esta distribución es muy semejante al estudio presentado por ANIF (2007) donde los sectores donde más se concentraron las PYMES fueron el de comercio y servicios. Para este análisis de las empresas según sus activos, pasivos y patrimonio, se definieron tres escalas o rangos para los valores de activos, así como de pasivos y patrimonio, la escala consistió en:

0% – 49% Bajo

50% - 69% Medio

Mayor de 70% Alto.

Se encontró que la mayor parte de las pequeñas empresas presentaron sus activos corrientes en el rango alto con un 35,4% y el resto de las Pequeñas empresas se encontraban entre 16% y 18% entre bajo y Mediano respectivamente. Por su parte las Medianas Empresas presentaron el mayor porcentaje en el rango bajo con tan solo 12,5%, el 6,3% en Medio y el 10,4% en alto. Con respecto a los activos fijos las pequeñas empresas presentaron una mayor concentración en el rango de bajo con un 41,7%, seguido de Medio con 16,7% y 12,55 en alto. Las medianas empresas presentaron una similar concentración con un 14,6% en el rango de bajo, 8,3% en Medio y 6,3% en alto. De otro lado con respecto a la distribución de los pasivos se encontró que las pequeñas empresas presentaron un 29,2% en el rango bajo, un 25% en Medio y un 16,7% en alto. Por su parte la distribución de las Medianas empresas estuvo en un 18,8% en el rango bajo, 8,3 en el medio y 2,1 en el alto. Frente al Patrimonio las pequeñas tienen su mayor concentración en el rango bajo con 33,3%, un 12,5% en medio y un 25% en alto, mientras que las Medianas presentaron un 14,6% en alto, 10,4% en medio y tan solo un 4,2% en bajo.

Con respecto al análisis del tipo de empresa y su modelo gerencial, este mostró que las pequeñas y las medianas refirieron referenciar el modelo de líder participativo con 50% y 24% respectivamente, mientras el modelo que menos es ejercido en ambos grupos de empresas es el paternalista, lo cual concuerda con lo encontrado por Toro (2006) donde el modelo que se evidencio mas fue el líder participativo.

ANÁLISIS MULTIVARIADO O DE CLÚSTER

Para la realización de este análisis se tomaron como variables nominales ilustrativas las siguientes: Genero, Tipo de Empresa, Sector Productivo, Antigüedad de la Empresa y como variables nominales activas las restantes. Inicialmente se realiza un análisis de clasificación jerárquico y el histograma de índices de nivel, muestra la presencia de tres clases de empresas, esta agrupación es corroborada con el dendograma de clasificación.

La primera clase está formada por 16 empresas. El perfil de estas empresas es el siguiente: son pequeñas empresas del sector comercio, sus activos fijos y patrimonios son bajos, los activos corrientes son alto.

La clase 2 es la mas grande (32 empresas) se caracterizan por ser medianas empresas del sector servicios, son empresas de mas de 10 años, tienen activos corrientes medios, pasivos bajos y patrimonios altos, el modelo gerencial es el “líder participativo”.

La clase 3 es la más pequeña, consta de solo dos empresas, clasificadas como medianas empresas, entre 5 y 10 años de antigüedad, el capital humano y tecnológico es el factor clave del éxito.

CONCLUSIONES

Con respecto a la antigüedad de las PYMES en el mercado, se encontró como la gran mayoría de empresas tenía una antigüedad superior a 10 años de funcionamiento, si a esto le sumamos que en su orden siguen las empresas entre 5 y 10 años de permanencia en el mercado, esto hace mas evidente cierta madures empresarial. El sector donde se ubicaron las PYMES encuestadas, se presenta una concentración en el sector de la Comercialización y servicios, pero llama la atención el poco porcentaje de PYMES ubicadas en el sector agroindustrial lo cual no responde a la vocación histórica del Departamento de Caldas y el Eje Cafetero. Frente a la estructura operativa el estudio mostró que las PYMES presentaron una estructura promedio mas concentrada en Activos Corrientes que en fijos, lo cual guarda cierta relación con la actividad económica donde se ubicaron la mayor parte de las empresas, las cuales requieren de buena liquidez y capital de trabajo para su operación, una muestra mas de esto, es que un grupo pequeño de empresas reportaron estructuras operativas con un 100% representados en solo activos corrientes. En la Estructura Financiera levemente mas representada en Patrimonio que en pasivos, lo que evidencio un nivel aceptable de endeudamiento externo.

Frente a las Decisiones Financieras tomadas por los gerentes de las PYMES de Manizales, los datos recolectados mostraron que las decisiones Operativas que mas frecuentes toman los gerentes son lo referente a contratación de recurso humano, compra de materia prima e insumos y contratación con proveedores, lo anterior sumado a lo evidenciado en las decisiones de reparto de dividendos donde un grupo de empresas por los orígenes y características de las empresas en Colombia, manifestó que el reparto de dividendos no aplicaba por ser su organización sin animo de lucro, con lo anterior las decisiones tomadas por la gerencia financiera de las PYMES, se vería muy limitada solo a la inversión y financiación según lo expuesto por la teoría clásica de la gerencia financiera, pero es aquí, donde el análisis de los resultados muestra una evidencia que contrasta al teoría con nuestra realidad, y es como las decisiones operativas se convierten en otro ámbito de decisión de los gerentes financieros, esto puede estar evidenciando que el funcionamiento de las organizaciones, la operación del día a día y como se desarrollan las organizaciones, influyen el estilo gerencial.

El capital Humano sigue siendo el más resaltado por los gerentes en este estudio y estudios similares como el factor clave de éxito, además ratificando lo presentado por Vallejo (1998- 1999) en el Estudio de Competitividad para Caldas, donde se muestra como el factor mas importante de Competitividad de la región, el cual se ve valorado y tenido en cuenta por los gerentes financieros como un pilar básico y fundamental para el logro de las metas propuestas, ya que son el conocimiento, el talento y la fuerza que impulsa el logro de las actividades. Por otra parte es importante anotar como siendo el capital financiero la razón de origen de la gerencia financiera, lo vemos en un segundo plano, ratificando las nuevas tendencias y los cambios en la mentalidad de los gerentes y empresarios, donde cada día se convierte mas en uno de los medios por los cuales se alcanzan los logros y el crecimiento de las organizaciones. Todo este análisis lleva a una conclusión muy importante, que para ejercer la gerencia financiera no solo son necesario unos fundamentos teóricos y conceptuales bastante sólidos en los conocimientos contables, financieros y económicos, sino que también se hace necesario unas habilidades, actitudes y competencias que proporcionan seguridad razonable a la administración de la empresa y a sus dueños con miras a la consecución de los objetivos y a facilitar el desempeño flexible y eficaz de la organización.

REFERENCIAS BIBLIOGRÁFICAS

Proyecciones de Población. Proyecciones Nacionales y Departamentales 2006 – 2020. DANE Departamento Administrativo Nacional de Estadística. Septiembre 2007.

Modigliani, Franco. Miller, Merton H. *The Cost of Capital, Corporation Finance and the Theory of Investment. The American Economic Review*, Vol. 48, No. 3 (Jun., 1958), pp. 261-297.

Toro D., Jairo. Caracterización de las Gerencias o Vicerrectorías Financieras de las Instituciones de Educación Superior de Manizales, 2006.

Navarrete, C. y Mayorga, Z. *Proyecto Diagnóstico de la gestión financiera de las empresas de familia de Bogotá*. Universidad de la Salle, 2005.

Lorie, James H. and Savage, Leonard J. Three Problems in Rationing Capital. *The Journal of Business*, Vol. 28, No. 4, Capital Budgeting . Published by: The University of Chicago Press. (Oct., 1955), pp. 229-239.

Leland, Haynes and Goldstein, Robert. An EBIT – Based Model of Dynamic Capital Structure. *The Journal of Business*. University of Chicago, 2001, Vol. 74, No. 4.

BIOGRAFIA

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CRITERIOS DIFUSOS EN LA SELECCIÓN DE CARTERAS

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RESUMEN

Teóricamente se ha planteado el uso de las curvas de indiferencia para identificar la cartera eficiente que se ajuste a los intereses y prevenciones de un agente (enmarcados en el rendimiento que exige y en el nivel de exposición al riesgo que está dispuesto a asumir), pero en la práctica no ha prosperado su uso por la dificultad de valorar intangibles como la aversión y la utilidad. En este artículo se presenta una solución con la que se reconoce la cartera que goza de un verdadero carácter óptimo, liberando el modelo de la necesidad de una valoración directa de aspectos de naturaleza intangible.

Palabras Clave: Curva de Indiferencia, Frontera Eficiente, Conformidad, Utilidad, Multivalencia.

INTRODUCCIÓN

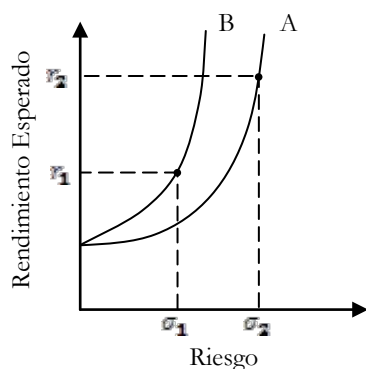
La diversificación es un principio que plantea varios retos cuando se busca la combinación óptima de activos en un portafolio. Y es en su eje vertebral donde deben hacerse extensivos los ajustes preliminares de manera que junto a los arreglos residuales se conserve una armonía y se afecte positivamente la eficiencia y la eficacia de la búsqueda. Este eje es el modelo de media-varianza (Markowitz H. 1952), el cual está diseñado para señalar el portafolio óptimo obedeciendo a los criterios más comunes para distintos agentes, como han de ser: una baja exposición al riesgo y la mayor retribución posible por el riesgo aceptado. Sin embargo, la primera dificultad visible resulta al librar el instrumento de la subjetividad. En primera instancia, el carácter óptimo de un portafolio es subjetivo. Será óptima una disposición de activos si responden a las necesidades del inversionista entendidas como el rendimiento que requiera y la máxima exposición que está dispuesto a asumir. Y en segunda instancia no existe una frontera plenamente definida que permita reconocer a partir de qué punto se llega a abordar las necesidades de un agente determinado y en donde se consigue satisfacer las demandas para cualquier agente.

En su desarrollo el modelo deja de lado por un instante esta realidad y realiza la mediación entre las metas riesgo y rendimiento, sobre la base de una relación positiva. Obteniendo un rendimiento denominado eficiente para cada nivel de riesgo (Sharpe W. 1970, 53). Este rendimiento es llamado así ya que es la mejor retribución que puede obtenerse al combinar un grupo de activos que impliquen una determinada exposición al riesgo.

Pero retomando, la cuestión es ¿Cuál del conjunto eficiente de combinaciones resulta ser el más apropiado? Es cuando se abandona el suelo con el que se identifica aquellos criterios más comunes de entre distintos agentes, para adentrarse en los intereses particulares de un inversionista. Este problema ha sido atendido desde un concepto de microeconomía conocido con el nombre de curvas de indiferencia. Expuesto originalmente por Vilfredo Pareto en 1906 se definen como segmentos que agrupan un conjunto de puntos en el espacio de bienes entre los que el consumidor se siente indiferente (Gould J. *et al* 1994, 68), producto de una adecuada sustitución del defecto o el descenso de las unidades disponibles de un bien por el incremento de las unidades disponibles de otro (Pareto V. 1906, 205). Esta relación de sustitución que es planteada en términos de dos bienes, es adaptada al par riesgo-rendimiento buscando caracterizar el grado de aversión de un agente por medio de la negociación que él admita entre las

variables de decisión, es decir, con que rendimientos el agente llega a permitir un valor de la variable riesgo y ante que combinaciones el agente no manifiesta alguna preferencia (Figura 1).

Figura 1: Curvas de indiferencia para los agentes A y B



En adición, la negativa de un agente por aceptar un portafolio con un rendimiento menor al exigido es una respuesta que varía, como varía su reacción al tener una retribución mayor. Sin llegar a precisar cuán mayor será su satisfacción, se puede afirmar que será superior a la que le causara en el caso de recibir el rendimiento que espera. Ahora, que cuando se asume una escala a lo largo de la que ubicar un grado específico de satisfacción, se podría cuantificar esa diferencia, que así como es positiva en este caso también puede ser negativa en otro en el que pueda ser compensado por un rendimiento menor al exigido. Dependiendo de que tanto difiera el rendimiento requerido del que pueda obtener, mayor será la insatisfacción del agente.

Por otro lado, en medio de los cambios en el nivel de satisfacción se encuentra una actitud de indiferencia, la respuesta a retribuciones mayores o menores pero que también gozan de un ajuste conveniente del nivel de exposición al riesgo. Estos casos en los que distintas combinaciones riesgo-rendimiento proveen igual satisfacción son los que dan forma a la curva de indiferencia, donde cada par riesgo-rendimiento, podrá corresponder a uno, y solo uno de los conjuntos asociados a cada nivel de la escala de satisfacción. Luego, son en realidad una familia de curvas las que caracterizan las preferencias del agente (Latane *et al* 1967, 359-373), y cada una se diferencia por la utilidad o la satisfacción que le provee. A lo largo de una, la utilidad es constante y es cuando se pasa de una a otra cuando la utilidad varía, pero ¿Cuál es la dinámica de esta uniformidad en satisfacción cuando se pasa de una curva a otra? De la inspección de los supuestos originales se obtiene la respuesta. Cuando simultáneamente se mejora la retribución y se reduce el riesgo (paso de A a A'), la satisfacción del agente se mejora positivamente (Figura 2), pero de ocurrir lo opuesto, si el rendimiento es más bajo y el riesgo más alto (paso de A a A'') la satisfacción de agente desmejora.

Puede afirmarse entonces, que será óptima una combinación de activos para un agente dado, si sus características en riesgo y rendimiento se localizan sobre la curva de indiferencia más próxima al noreste del primer cuadrante. Pero la libertad de los desplazamientos de la curva de indiferencia está sujeta a la posibilidad de que una combinación exacta de activos permita aprovechar un punto específico del plano. No a todos los puntos del primer cuadrante del plano le corresponde una combinación de activos de la cartera. Estos limitan su ubicación al denominado conjunto factible (Figura 3). Así, los desplazamientos de la curva de indiferencia están sujetos a que por lo menos un punto de todos los que la integran, se encuentre dentro del conjunto factible. Lo que limita los esfuerzos de maximizar la utilidad hasta que la línea sea tangente al subconjunto eficiente del conjunto factible de portafolios.

Figura 2: Utilidad

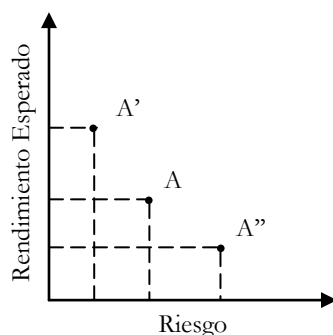
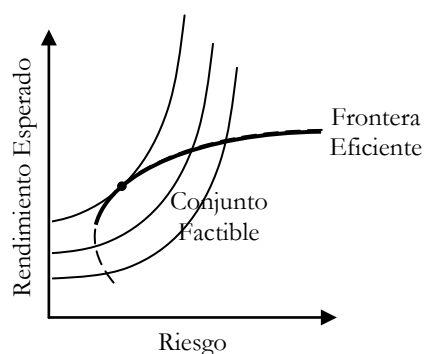


Figura 3. Máximo de Utilidad.



El reto de este artículo consiste en darle la calidad de función a la curva de indiferencia, llevarla al plano cuantitativo ampliando las nociones ordinales que ofrece. Pese a que elevar su calidad ha sido un esfuerzo no muy bien recompensado y altamente cuestionado, hay que reconocer que tal pago es merecido por atar las propuestas a situaciones muy particulares y a rasgos muy complejos de parte de las variables que llegan a afectar las decisiones de un agente. Pero ¿Cómo eludir o reducir esta necesaria idealización? ¿Cómo lograr que las variables en los modelos adopten dinámicas reales y que producto de su interacción se obtengan conclusiones razonables de acuerdo a los fenómenos observados?

Una solución se encuentra en el proceso que traduce todas las influencias externas en decisiones. Ciertamente el término “proceso” abarca una multitud de aspectos, pero es específicamente en el razonamiento en el que volcaremos nuestra atención, dejando de lado los detalles orgánicos. Aun más, nuestro interés permite centrar la revisión en una porción menos extensa del proceso o seguramente en rasgos muy concretos de él. Recordemos que en este punto lo importante es establecer un patrón cuantificable del vínculo que existe entre las variables riesgo y rendimiento cuando proveen un *valor* igual de satisfacción. Patrón que hace parte de otro gran esquema que dicta el ajuste de ese *valor* de satisfacción cuando los pares riesgo-rendimiento no hacen parte del primer grupo descrito. Lo que nos conduce a identificar el modo en que se opera sobre un “sistema de medida” (Vargas C. *et al* 2009) del que se asocia una puntuación en satisfacción a una combinación de determinados aspectos en una cartera y otra a un cambio no compensado entre las variables. En este sentido, el primer paso es caracterizar el sistema en el cual se valorara la satisfacción. Ya de hecho, a lo largo del artículo se ha sugerido algunas de sus propiedades. Cuando se comento el uso de una escala, se reconoce implícitamente un paso gradual entre las calificaciones -aceptable- a -inaceptable-, un flujo regular de una cosa hacia una “no cosa” (Kosko B. 1993, 18), que no encaja con la bivalencia de la lógica booleana sino con la multivalencia desarrollada alrededor de lo que hoy se conoce por *lógica borrosa*, la cual plantea la posibilidad de que

existan tres o más opciones, incluso un espectro infinito, y no solo dos extremos, por lo que prima lo análogo y no lo binario (Kosko B. 1993, 32).

Para incorporarlo, se liberara el objeto de análisis de aspectos que eventualmente son irrelevantes, lo que llega a reducirlo hasta la necesidad de identificar el idioma que manejan en común las variables de decisión. Recordemos que en el espacio de bienes tanto la variable dependiente como la independiente, son valoradas por medio de una unidad común que es la cantidad, el idioma que se pretende identificar será el homologo de este termino que denominaremos *conformidad* (Concepto propio del autor). Cabe precisar que el objeto de la medida de conformidad es el de tener una noción cuantitativa que envuelva el conjunto de posiciones de un agente frente a las variables de decisión aquí tratadas.

BIBLIOGRAFÍA

Copeland T. E. & Weston J. F. (1986). *Managerial Finance*. Chicago. Dryden Press

Gordon J. A., Sharpe W. F. & Bailey J. V. (1995) *Investments: Instructors Manual with Transparency Masters* (5th Edition). Prentice Hall.

Gould J. P. & Lazear E. P. (1989) *Microeconomic Theory* (6th Edition). Boston. Irwin

Hicks J. R. (1939) *Value and Capital*. Oxford, Oxfordshire. Clarendon Press

Hicks J. R. (1956) *A revision of demand theory*. Oxford. Clarendon Press

Hugh G. & Ross R. (1984) *Microeconomía*. Madrid. Alianza.

Kosko Bart. (1993) *Fuzzy Thinking. The New Science of Fuzzy Logic*. New York. Hyperion.

Markowitz H. (1952) *Portfolio Selection*. Journal of Finance. 1952. Vol VII. No. 1.

Merton R. C. & Bodie Z. (2000) *Finance*. Harvard University. Prentice Hall.

Nicholson W. (1995) *Microeconomic Theory* (6th Edition). New York. Dryden Press.

Pareto V. (1909) *Manuel D'Economie Politique*. Paris. V. Giard & E. Brière. Traducción al Español. Guillermo Cabenallas. *Manual de Economía Política* (1945). Buenos Aires. Atalaya.

Pratt J. W. (1964) *Risk Aversion in the Small and in the Large*. Econometrica. Enero/Abril. P. 122-136.

Samuelson P. A. & Nordhaus W. D. (2004) *Economics*. Irwin/mcgraw-hill

Sharpe W. F. (1976) *Portfolio Theory and Capital Markets*. New York. McGraw-Hill

Stiglitz J. E. (1998) *Microeconomía*. Madrid. Ariel Economía.

Vargas C. & Garcia A. (2009) *Criterios Difusos en la Selección de Carteras* (Trabajo de Grado). Bogotá, Colombia: Universidad Piloto de Colombia, Facultad de Ingeniería Financiera

TUNNELING Y GOBIERNO CORPORATIVO EN ECONOMÍAS EMERGENTES. CASO COLOMBIANO

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RESUMEN

Las economías emergentes, debido a sus características propias, tales como la poca intervención estatal en las grandes empresas, el alto nivel de concentración de la propiedad y el dominio de los principales sectores productivos por parte de grandes conglomerados, otorgan incentivos para que se presenten problemas de agencia y que estos grandes conglomerados económicos aprovechen estos incentivos a su beneficio, en detrimento de sus accionistas minoritarios. El presente trabajo analiza estos incentivos para el caso del Tunneling en economías emergentes, y específicamente para el caso Colombiano se hizo una revisión de la estructura de propiedad de las empresas y del marco legal del Gobierno Corporativo con el objetivo de identificar cuales son específicamente estos incentivos y cuales son las perspectivas para las economías emergentes.

PALABRAS CLAVES: Gobierno Corporativo, Conglomerados, Tunneling

ABSTRACT

The emergent economies, due to their own characteristics, such as small state intervention in the big companies, the high property concentration level, principal productive sectors controlled by big conglomerates, give incentives to agency problems to occur and for these big economic conglomerates to take advantage of these incentives for their benefit, in detriment of their minor shareholders. The present work analyzes these incentives for the case of Tunneling in emerging economies focusing on the Colombian case where a review of the companies property's structure and the Corporate Government's legal framework was done, with the objective of identifying which are specifically these incentives and which are the perspectives for the emerging economies.

KEYWORDS: Corporate Government, Conglomerates, Tunneling

INTRODUCCIÓN

Es común ver en la mayoría de las economías a nivel mundial, conglomerados de empresas que aglutinan cierta cantidad de empresas que son manejadas por uno o varios accionistas mayoritarios. Estos conglomerados presentan esquemas de propiedad de forma piramidal en los que el llamado último accionista maneja las empresas del conglomerado. El hecho de que exista esta concentración de la propiedad en uno o más accionistas mayoritarios, sumado a la débil legislación de algunas economías emergentes, permite que se presenten fenómenos como el tunneling. El tunneling es un fenómeno mediante el cual el último accionista de la pirámide interviene en la estructura de reparto de dividendos y desvía fondos de las diferentes empresas en la pirámide para su propio beneficio. El tunneling puede tener varias formas (Johnson, La Porta, López-de-Silanes y Shleifer 2000): Otorgamiento de préstamos con elevadas o bajas tasas de interés entre empresas, venta de insumos o compra de productos o servicios a precios diferentes de los precios de mercado, alquiler de activos, ofrecimiento de garantías de unas compañías para el endeudamiento de otras compañías dentro de la pirámide, entre otras (O'Shee, Mongrut, Nash & Benavides 2008). Estas acciones van en beneficio de los accionistas mayoritarios pero en detrimento de los intereses de los accionistas minoritarios.

Estos fenómenos se presentan con mayor frecuencia en economías emergentes, sin embargo también se hacen presentes en economías de países desarrollados, pero su incidencia es mayor en Latinoamérica y economías emergentes debido como se dijo anteriormente a la ausencia de una legislación clara al respecto. El presente ensayo pretende analizar este fenómeno, sus orígenes y como se presenta en las economías emergentes, para entrar a analizar el caso colombiano, ver como es la legislación al respecto, como se protege al accionista minoritario en el país y en que medida se presenta o existen los incentivos para que se presente este y otros problemas de agencia.

QUE ES TUNNELING?

El tunneling, en su definición mas general, es un tipo de fraude financiero que se conoce como la transferencia de activos y de beneficios fuera de las firmas, para beneficio de los accionistas que la controlan (Johnson, La Porta, López-de-Silanes y Shleifer 2000). Otra interpretación que se da al tunneling es que cuando una firma se encuentra bajo una buena situación financiera, los accionistas que la controlan, tienden a expropiar dicha firma para beneficiar a otra firma del conglomerado o grupo empresarial.

Antecedentes

La palabra tunneling fue usada para referirse a este tipo de fenómenos por primera vez probablemente en Republica Checa (tunelování in Checo, tunelář, la persona que comete fraude). Fue usado con mucha frecuencia desde mediados de la década de 1990, cuando un número considerable de bancos y fábricas privatizadas entraron en bancarrota, y después se descubriera que las administraciones de estas compañías estaban transfiriendo deliberadamente propiedades de la compañía a sus propios negocios.

Así que el término se volvió común a utilizar en este tipo de fraudes en Republica Checa y Eslovaquia, y luego fue adoptado por la literatura especializada en ingles, durante la crisis financiera asiática en 1990.

Formas de tunneling

De acuerdo a la literatura, se puede identificar dos tipos de tunneling por parte de los accionistas mayoritarios:

1. Transferencias internas de la firma al accionista por medio de:
 - Robo o fraude
 - Venta de activos
 - Excesivas compensaciones ejecutivas
 - Garantías de prestamos
 - Expropiar las oportunidades corporativas
2. Incrementar la participación en la firma por medio de:
 - Emisión de acciones
 - Trafico de información privilegiada
 - Adquisiciones rampantes

Este tipo de fenómeno se presenta también en las empresas cuya propiedad es concentrada por familias y que tienen estructuras de poder piramidal como ya se dijo, este tipo de estructuras ofrecen los incentivos para hacer tunneling en los conglomerados para sacar beneficio de esto, podemos ver estos incentivos en el siguiente ejemplo.

Un ejemplo de tunneling

“La separación entre derechos de control y derechos sobre el flujo de caja en la estructura de propiedad piramidal, brinda los incentivos para las operaciones al interior de los conglomerados. Esto significa que el accionista mayoritario puede transferir recursos de una firma en la cadena piramidal a otra firma por lo general de un nivel mas alto, o a si mismo, a expensas de los accionistas minoritarios de la firma de la cual extrae recursos. Las formas de hacer esto son las que se mencionaron anteriormente, el tunneling puede ser rentable para el accionista mayoritario o la familia en la punta de la pirámide. Para ver todo esto por medio de un ejemplo muy sencillo, supongamos que una familia es dueña del 50% de la firma A, y la firma A es dueña del 50% de la firma B. Los derechos de la familia a flujo de caja son del 50% en la firma A y del 25% en la firma B. Asumimos que el 50% es el porcentaje mayoritario de las acciones, por lo tanto la firma B es controlada por la firma A y esta es controlada por la familia. Adicionalmente se asume por simplicidad que los fondos tienen la misma rentabilidad tanto en la firma A como en la B. Denotamos el flujo de caja de la firma i como β_i $i = A, B$. Si la empresa decide no hacer tunneling, sus ganancias son $0,5 \beta_A + 0,25 \beta_B$. Si en cambio la empresa decide hacer tunneling en algún monto $S > 0$ de la firma B a la firma A, sus ganancias serian $0,5 (\beta_A + S) + 0,25 (\beta_B - S)$ este ultimo es superior al obtenido si decide no hacer tunneling. Por lo tanto en el evento de que la rentabilidad sea la misma en las dos firmas, la familia tiene incentivos para hacer tunneling. La razón es bastante simple, la familia tiene mayor derecho a flujo de caja en la firma A que en la firma B, por lo tanto decidirá hacer tunneling de la firma B a la firma A, todo esto a expensas de los accionistas minoritarios de la firma B” (Riyanto & Toolsema 2004)

Como se pudo ver en el anterior ejemplo se ilustra de manera clara como un accionista mayoritario puede hacer tunneling aprovechando su condición de poseedor de la mayoría de las acciones, y como la estructura de propiedad piramidal, otorga los incentivos a estos accionistas mayoritarios de la principal empresa para hacer tunneling y obtener beneficio propio.

TUNNELING EN ECONOMÍAS EMERGENTES

El Tunneling es una practica común en economías emergentes. Debido a que los incentivos están presentes en gran medida y la intervención estatal en estas grandes compañías es baja, es difícil identificar el verdadero impacto del tunneling en la economía, sin embargo un estudio desarrollado para la economía de China plantea: “A pesar de que el daño del tunnelling esta ampliamente discutido y existe una teoría desarrollada alrededor del tema, son pocos los estudios que demuestran la evidencia de su magnitud e impacto, dicho sea el caso de Bae, Kang and Kim (2002), que usan la evidencia de las fusiones de los grupos económicos Coréanos para demostrar que los accionistas mayoritarios tienden a hacer adquisiciones que aumenten el valor de otras firmas en el grupo, en detrimento de los accionistas minoritarios. En ese mismo sentido Mullainathan (2000) utiliza datos de los grupos económicos de la India para demostrar el “tunneling” de recursos por parte del accionista mayoritario entre un grupo económico de la india. Finalmente, Lemmon and Lin (2003) examinan el efecto de la estructura de propiedad en el valor de la firma durante las crisis financieras Asiáticas. Ellos encontraron que los retornos de las firmas en las que los administradores tenían altos niveles de control, pero había separado su control y su propiedad del flujo de caja, eran de 10 a 20 puntos porcentuales menores que los de las otras firmas. Los tres estudios sugieren que la estructura de propiedad juega un rol importante en determinar como los accionistas mayoritarios expropian a los minoritarios.

Existe otro estudio desarrollado por Jiang, Lee y Yue (2005) que estudia y muestra evidencia directa de una forma particular de tunneling que es ampliamente practicada entre las firmas chinas. China ofrece un escenario particular para el estudio del fenómeno del tunneling. Desde que re abrió sus intercambios de valores a comienzos de 1990, alrededor de 1300 firmas se han democratizado en las bolsas de valores de Shanghai y Shenzhen. La mayoría de estas compañías son spin-offs de empresas estatales existentes, en las

que la empresa estatal original, retiene una gran proporción de las acciones totales en circulación. Como resultado, una alta concentración de la estructura de propiedad es la norma. Sumado a esto las acciones de propiedad del bloque titular no son negociables, lo que limita la propiedad de los beneficios de valorización del precio al accionista mayoritario, incrementando su incentivo a obtener beneficios a través de otros canales. Estas características del mercado chino combinadas con un sistema regulador débil, producen un entorno altamente conductivo al tunneling” (Jiang, Lee, & Yue 2005).

Este análisis muestra que los accionistas mayoritarios que controlan las empresas que cotizan en bolsa rutinariamente utilizan préstamos corporativos para expropiar fondos de estas firmas. Típicamente reportados como “otros créditos”, estos préstamos representan una porción sustancial de las acciones reportadas de las empresas que cotizan en bolsa, durante el periodo de prueba del estudio (1996 al 2002), los otros créditos de las firmas estudiadas promediaron entre 6,5% y 11,8% del total de las acciones. Los autores examinan la naturaleza y duración de estos préstamos, evalúan sus consecuencias económicas y discuten sus implicaciones para reguladores e inversionistas. Encuentran que estos préstamos son altamente persistentes. Lo más importante de este estudio es que demuestran que las compañías con grandes balances de “otros créditos” exhiben significativamente un peor futuro (en términos de tasas de retorno).

La evidencia asiática muestra otras formas de practicar el tunneling, en países con economías emergentes. Sin embargo este fenómeno no se hace presente únicamente en países con economías emergentes, sino también en naciones desarrolladas como las europeas, donde el tunneling es legal en algunos casos.

CASOS DE TUNNELING EN PAÍSES DESARROLLADOS

Tal como lo muestra el estudio teórico más importante sobre este tema (Johnson, La Porta, López-de-Silanes y Shleifer 2000) este fenómeno no es propio única y exclusivamente de las naciones con economías emergentes sino también se hace presente en algunos países desarrollados de Europa, estos son algunos casos de tunneling y sus respectivos fallos por parte de la corte.

SARL Peronnet (Francia): SAICO, propietario minoritario, demandó a SCI, filial de Peronnet (propiedad únicamente de la familia Peronnet) por construir y arrendar un almacén a Peronnet. SAICO alegó que la oportunidad corporativa fue expropiada a expensas de los accionistas minoritarios. La corte dictaminó que la decisión de Peronnet de pagar a SCI por almacenar productos no fue en contra del interés social porque Peronnet, pagó durante este tiempo. Por lo tanto la decisión no fue tomada con la única intención de beneficiar a los accionistas mayoritarios y tenía un propósito comercial legítimo. No era cuestión de equidad para las minorías porque estas no habían sufrido ninguna pérdida.

Marcilli (Italia): Sarcem era propietaria del 51%. Dos accionistas minoritarios (49%) alegaron que Sarcem precluyó a Marcilli de exportar productos directamente pero solo se vendían a través de Sarcem. Sarcem sobrecargó a Marcilli de sus servicios prestados. No le pagó a Marcilli por sus bienes a tiempo. La corte dictaminó que el accionista mayoritario tenía una disciplina de negocios bien definida y explícita. Basado en el deber de cuidado: El presidente de Marcilli tenía obligación con Sarcem mas no con sus accionistas. Los hechos fueron producto de las transacciones de negocios del DIA a DIA, mas no de reuniones entre accionistas o directores.

Flambo y Barro (Belgica): Flambo era el accionista mayoritario de Barro. Los accionistas minoritarios de Barro demandaron a Flambo por despojar a Barro de algunos de sus activos. Además Flambo trató de poner a Barro como garantía para asegurar su deuda. Flambo forzó a Barro a adquirir todas las nuevas acciones de Flambo en un incremento de capital. Retiro grandes montos de Barro y nunca los pagó. Desvió varios contratos de Barro a Flambo. La corte sostuvo que la conducta de Flambo era consistente con el interés general del grupo.

En este caso podemos ver como la corte falla a favor de las empresas que incurren en tunneling, validando y haciendo de cierta manera legal este acto, esto se debe a que las leyes aun son muy flexibles en este aspecto. A continuación vamos a analizar los principios generales en los que se basa la legislación.

PRINCIPIOS BÁSICOS DE LEGISLACIÓN

Las leyes de la mayoría de países prohíben ciertos tipos de tunneling. Las cortes por lo general usan dos principios amplios, que aparecen en la mayoría de los sistemas legales. El primero es:

Deber de cuidado: Que en este contexto se refiere a las responsabilidades de los directores corporativos (y aplica a los accionistas mayoritarios en caso de que tambien sirvan como directores). El deber de cuidado, se deriva del concepto romano de *mandatum*, requiere que un director actúe como una razonable, prudente o racional persona actuaría en su posición. En la mayoría de países, las cortes implementan el deber de cuidado usando la “regla de juicio de negocios”, que da a los directores el beneficio de la duda cuando los conflictos de interés están ausentes, a menos que los demandantes demuestren negligencia de los directores.

Deber de lealtad: El segundo principio general es el deber de lealtad, o deber fiduciario que se ocupa específicamente de las situaciones donde hay conflicto de intereses. Este deber exige que las personas no se beneficien a expensas de los accionistas o de la sociedad, tal como sea el caso, dependiendo de a quien legalmente le debe lealtad.

ENTORNO COLOMBIANO

Estructuras De Propiedad De Las Empresas

Los grupos económicos en Colombia poseen estructuras complejas. Se encuentran centralizados alrededor de un negocio núcleo con alianzas estratégicas en actividades que no pertenecen a ese núcleo, junto con participaciones en inversión y fondos fiduciarios que juegan un papel central como controladores, así como actores clave en la formación de coaliciones en las juntas de control.

De acuerdo a un análisis de accionistas mayoritarios en Colombia, alrededor de tres cuartos de las firmas estudiadas, tienen accionistas mayoritarios que las controlan, ese al que llamamos ultimo accionista al comienzo del texto, las familias son la fuente mas importante de poder. Los accionistas mayoritarios fueron descompuestos en 10 tipos de sociedades jurídicas, y se constato que en las empresas de inversión, contratos de fondos fiduciarios, y las empresas que no cotizan en bolsa como las de responsabilidad limitada, las familias son los últimos accionistas. La equidad de control por parte de las instituciones financieras es menos común, y este hallazgo es coherente con lo encontrado en otros mercados de capitales desarrollados y emergentes. Por otra parte, la empresa es de propiedad privada. En ese sentido los propietarios establecen un firme control sobre las políticas.

Marco Legal Colombiano

Hace algunos años, el tema de gobierno corporativo en Colombia no era un tema que tuviera la importancia que debería, sin embargo últimamente y de una manera coherente con el desarrollo que ha tenido este tema en la mayoría de gobiernos a nivel mundial, se ha empezado a prestar mayor atención a la buenas practicas empresariales y específicamente en Colombia, la Confederación Colombiana de Cámaras de Comercio (Confecamaras) ha iniciado un programa tendiente a fomentar las buenas practicas de gobierno corporativo en el país y ha desarrollado varios estudios y foros en torno al tema. Fruto de esos estudios es un libro titulado “Perspectivas legales del Gobierno Corporativo en Colombia” que

plantea algunas directrices y el marco legal correspondiente al Gobierno Corporativo en Colombia, a continuación se presentan algunos apartes importantes para contextualizar el marco legal de Gobierno Corporativo en Colombia.

Responsabilidad Del Miembro De Junta Directiva Por El Abuso De Derecho

“Ahora bien, habiendo establecido que el miembro de Junta Directiva que desconoce los principios orientadores de su gestión y ejerce un derecho propio en detrimento de la sociedad, incurre en una conducta de abuso de derecho, es procedente estudiar qué tipo de responsabilidad se genera para él. En 1994, la Corte Suprema de Justicia, en sentencia del 19 de octubre dijo en torno a la responsabilidad de los agentes de conductas abusivas de derecho que ésta puede estar dentro del régimen previsto para los delitos y cuasidelitos civiles:

“En efecto, hoy en día se tiene por sabido que el dominio de aplicación del postulado en cuya virtud las leyes no le brindan protección de ninguna índole a quien abusa en el ejercicio de poderes emergentes en situaciones particulares que lo favorecen, no lo absorbe con sentido de exclusividad del régimen previsto para los delitos y cuasidelitos civiles, lo que desde luego no es impedimento para que en este contorno se le tenga como uno de los factores posibles de imputación de responsabilidad; el abuso dichas prerrogativas entonces, en un ilícito específico o “sui generis” que sin duda alguna cuenta con suficiente autonomía conceptual y sus alcances superan en mucho lo que la censura en este caso sugiere, habida cuenta que como en la actualidad lo dicen valiosos estudios sobre el tema, el deber jurídico de no excederse en el ejercicio de un derecho subjetivo, de evitar su empleo de manera antisocial o inmoral o que contradiga la finalidad socioeconómica que dicha potestad tiene, es parte integrante de toda situación jurídica individual activa o de poder y de carácter patrimonial, su sustancia es por lo tanto la de un deber genérico que toma pie en el principio general de derecho prohibitivo de abuso de cualquiera de sus modalidades”

Con posterioridad a esta jurisprudencia el Artículo 23 de la Ley 222 de 1995 estableció que el miembro de Junta debe proceder con la diligencia y cuidado de un buen hombre de negocios. En estos términos quedó establecida su responsabilidad por culpa levísima en el ejercicio de las funciones propias del Administrador. La culpa o descuido levísimo conforme la define el Artículo 63 del Código Civil es “la falta de aquella esmerada diligencia que un hombre juicioso emplea en la administración de sus negocios importantes.”

A su turno el Artículo 24 de la Ley 222 de 1995 dice que los administradores responderán solidaria e ilimitadamente de los perjuicios que por dolo o culpa ocasionen a la sociedad, a los socios o a terceros. De la misma manera el citado Artículo 24 de la citada Ley 222 presume la culpa de los Administradores en los casos de incumplimiento o extralimitación de sus funciones y en los casos de violación de la Ley o de los Estatutos Sociales. En consecuencia, es posible presumir una responsabilidad culposa de un miembro de Junta Directiva que haya ejercido un derecho propio, en contravía de los intereses de la sociedad. Indudablemente el ejercicio excesivo de un derecho propio del miembro de Junta podría constituir como mínimo un incumplimiento de funciones con lo cual la presunción de culpa se activaría inmediatamente.

Toda vez que en mi opinión el abuso de derecho de miembros de Junta implica el ejercicio excesivo del derecho y la motivación contraria a los intereses sociales, desvirtuar la presunción de culpa implicaría demostrar que no obstante el ejercicio excesivo del derecho no hubo intención de daño. Existiendo responsabilidad del Administrador, a fin de proceder a la indemnización habría que probar un daño. Debe entonces establecerse la relación de causalidad entre el perjuicio y la acción u omisión de Administrador en el ejercicio de su derecho a fin de establecer cuál es la posible indemnización. Conforme a la Ley,

como ya se mencionó, la responsabilidad de los Administradores es solidaria e ilimitada por los perjuicios a terceros, a la sociedad o a los socios.”

Lo anterior es lo que plantea este estudio de Confecamaras con respecto a la responsabilidad de los miembros de la junta directiva por actuar diligentemente y conforme a los intereses tanto de los accionistas, tanto mayoritarios como minoritarios y los respectivos “stakeholders”, y las sanciones que puede acarrear un comportamiento que favorezca a alguna de las anteriores partes mas que a las demás.

Indicaciones para Crear Buenas Practicas de Gobierno Corporativo

Adicional a lo anterior, este estudio plantea algunas directrices e indicaciones necesarias para poder implementar y fomentar las prácticas de buen gobierno en el país. Con respecto a esto se plantea lo siguiente:

... “El marco para el gobierno corporativo deberá garantizar la revelación oportuna y precisa de todas las cuestiones materiales relativas a la sociedad, incluida la situación financiera, los resultados, la titularidad y el gobierno de la empresa.

La información a divulgar debe incluir, como mínimo, la relativa a:

1. Los resultados financieros y de explotación de la sociedad.
2. Los objetivos de la sociedad.
3. La titularidad de los grandes grupos de acciones y de derechos de voto.
4. La política de remuneraciones aplicada a los miembros del Consejo y directivos principales, así como la información relativa a los miembros del Consejo, incluidos sus méritos, el proceso de selección, los cargos directivos desempeñados en otras empresas y si son o no considerados como independientes por parte del Consejo.
5. Operaciones de partes vinculadas.
6. Factores de riesgo previsibles.
7. Cuestiones relativas a los empleados y otras partes interesadas.
8. Estructuras y políticas de gobierno corporativo, y en particular, el contenido de cualquier código o política de gobierno corporativo y el proceso empleado para su implantación.”

Protección del Accionista Minoritario

Sumado a todo lo anterior el estudio reconoce la superioridad de los accionistas mayoritarios en las empresas y de acuerdo a esta superioridad plantea la necesidad de brindar protección oportuna y adecuada a los accionistas minoritarios para minimizar los incentivos de los accionistas mayoritarios a hacer uso de su mayoría en la propiedad de la empresa para obtener mayores beneficios a costa de los accionistas minoritarios.

... De conformidad con lo anterior, es importante fortalecer en el mercado colombiano dos instituciones que permitan llevar a cabo un desarrollo en los procedimientos de generación de confianza: (i) adecuados mecanismos de revelación de información que den transparencia al mercado y (ii) adecuados mecanismos de protección de los derechos de los accionistas minoritarios que les permitan ejercer los recursos necesarios para proteger sus inversiones, tales como el derecho a votar, los derechos conexos al derecho de voto, el derecho de retiro, y mecanismos judiciales o alternativos eficientes que permitan reclamar el respeto de tales derechos.

Por último, y en relación con el segundo punto señalado en el párrafo anterior, debe mencionarse que los mecanismos de protección no deben ser iguales para todas las compañías, ya que los riesgos varían según se trate del emisor. En realidad, la idea es que a nivel regulatorio se creen las herramientas legales para

que los accionistas puedan ejercer sus derechos de manera adecuada, y promover un mayor activismo por parte de los inversionistas en la negociación de los mercados primarios para que, dependiendo de los riesgos implícitos de una emisión, se puedan exigir mecanismos de protección adicionales a los que prevé la legislación.”

Sin embargo no es claro aun cuales son las sanciones por incurrir en este tipo de acto, tampoco es claro el ente regulador que se encargara de ejercer las labores de vigilancia a los grupos económicos. Lo anterior pone de manifiesto un vacío legal que otorga incentivos claros a que los grandes grupos económicos realicen tunneling dentro de sus organizaciones buscando aumentar sus ganancias individuales en detrimento del accionista minoritario.

Obstáculos a las Buenas Prácticas de Gobierno Corporativo en Colombia

Así como las demás economías emergentes, en Colombia existen obstáculos para la implementación de un programa de buenas prácticas de gobierno corporativo, que se traducen en incentivos para que se del problemas de agencia como el Tunneling, tales como:

- Escaso conocimiento sobre el tema por parte de los accionistas minoritarios y desconocimiento del mismo por parte de los accionistas mayoritarios.
- Alta concentración de la propiedad en los principales grupos económicos que abarcan los principales sectores productivos de la economía nacional.
- Ausencia de mecanismos efectivos y entidades que ejerzan labores de vigilancia y control de buenas practicas de gobierno corporativo.
- Desconfianza internacional en los mercados financieros internos.
- Alto grado de inestabilidad política, económica y jurídica.

CONCLUSIONES

El presente trabajo pretende mostrar el fenómeno del tunneling en las empresas o grupos económicos que son controlados por un accionista mayoritario. Y pretende mostrar como este puede hacer uso de su mayoría accionaria para incidir en el reparto de dividendos a su propio beneficio, cuando se presentan los incentivos.

Se mostró las diferentes formas de hacer tunneling dentro de un grupo de firmas y se evidencio que la estructura de propiedad de la empresa incide directamente en los incentivos para hacer tunneling, ya que la evidencia empírica muestra que en los grupos cuya estructura de propiedad es de forma piramidal, es decir que existe un accionista mayoritario que controla los demás, y las demás empresas a su vez poseen participación en otras firmas del mismo grupo, existen mayores incentivos a hacer tunneling y sacar provecho de esto.

En economías emergentes, como las de América latina, que poseen estructuras de propiedad bastante concentradas y muchas otras economías en el mundo, este proceso se presenta con mucha frecuencia, ya que la concentración del poder es bastante alta en los conglomerados económicos y suceden este tipo de fenómenos porque no se conjugan los intereses de los accionistas mayoritarios con los de los accionistas minoritarios, generando estos problemas de agencia. Un factor que puede incidir en este fenómeno es que los accionistas minoritarios que invierten su dinero en las acciones únicamente buscan una buena rentabilidad por acción más no un verdadero seguimiento de la compañía y sus decisiones, lo que lleva a que de cierto modo se desentiendan de su inversión y se preocupen solo por recibir dividendos.

En Colombia, se ha venido desarrollando por parte de entes estatales, programas de difusión de practicas de buen gobierno, tendientes a fomentar este tipo de practicas en las empresas, debido a la baja

calificación que tiene el país en practicas de buen gobierno pero que se encuentran con un sin numero de obstáculos a la hora de su aplicación.

Este tipo de programas de fomento son importantes, sin embargo cabe destacar también la importancia que tiene la regulación que debe existir para asegurar practicas de buen gobierno, ya que los grandes grupos económicos pueden aprovechar los vacíos existentes en la legislación actual para utilizar estas practicas a expensas de los accionistas minoritarios y maximizar su beneficio propio, ya que no existen los incentivos para propender por el bien común, sino todo lo contrario, ya que como lo evidencia la experiencia empírica, las economías emergentes y sus características otorgan a los accionistas mayoritarios los incentivos para hacer tunneling entre las firmas y propender por el beneficio particular. Por tanto es muy importante que exista una regulación clara y unas instituciones sólidas y fortalecidas, que eviten que estos incentivos se den en la economía, se debe velar por proteger al pequeño accionista para que no sea victima de este fenómeno, así como tambien debe ser clara la legislación y el ente regulador que sancione a las firmas que incurran en tunneling y demás estrategias para obtener beneficios particulares a expensas del bien común de todos los accionistas. Al ser el este un problema de incentivos, las economías sólidas y desarrolladas son pieza fundamental en el desarrollo de estas estrategias para eliminarlos o disminuirlos, un ejemplo de estrategia seria exigir para negociaciones internacionales, que las empresas tengan una buena calificación en practicas de buen gobierno para poder participar de este tipo de negociaciones, ya que esto otorgaría incentivos suficientes a las empresas para mejorar sus practicas y dejar de ver al accionista minoritario simplemente como una fuente de financiación.

REFERENCIAS BIBLIOGRAFICAS

O 'Shee D., Mongrut, S., Nash, M., & Benavides, J. (2008). Estructura propietaria y rendimientos bursátiles en Suramérica. Proyecto de investigación Finanzas corporativas para Latinoamérica, dirigido por la Universidad Técnica Federico Santa María, Valparaíso, Chile.

Riyanto Y., & Toolsema, L. (2004). Tunneling and propping: A justification for pyramidal ownership. National University of Singapore. Department of economics, working paper No. 0409

Jiang G., Lee, C., & Yue, H. (2005). Tunneling in China: The Surprisingly Pervasive Use of corporate Loans to Extract Funds from Chinese Listed Companies.

Perspectivas legales de gobierno corporativo en Colombia en http://www.gobiernocorporativo.com.co/documentos/libros/Perspectivas_Legales_GC_Colombia.pdf
Gutierrez L., Taborda, E., & Pombo, C. (2005). Ownership and Control in Colombian Corporations. Inter-American Development Bank. Latin American Research Network. Research Network Working paper #R-520

Friedman E., Johnson, S., & Mitton, T. (2002). Propping and Tunnelling.

Peng W., Wei, K., & Yang Z, T. (2006). Tunneling or Propping: Evidence from Connected Transactions in China

Gutierrez L., & Pombo, C. (2005). Corporate Ownership and Control Contestability in Emerging Markets: the case of Colombia

Johnson, Simon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, 2000, Tunneling, American Economic Review Papers and Proceedings.

PROCESO DE PLANEACIÓN ESTRATÉGICA EN LAS PEQUEÑAS Y MEDIANAS EMPRESAS

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RESUMEN

El entorno globalizado en el que las empresas se desenvuelven en la actualidad hace necesario que los altos niveles jerárquicos de la organización se encuentren en una constante búsqueda de técnicas y procedimientos que les permitan encausar en el camino adecuado a la entidad, para que ésta logre con efectividad los fines para lo cuál fue creada. Manejar una organización sin los conocimientos básicos para llevar esto a cabo, provoca constantemente la desaparición en poco tiempo de pequeñas y medianas empresas, que no logran sobrevivir en un ambiente altamente competitivo.

Por tal motivo, se hace necesario dar a conocer y acrecentar en propietarios y directivos, las destrezas y habilidades necesarias para que no sean sorprendidos por la constante vorágine de cambios en la que transcurre la vida de este tipo de entidades, logrando así el poder prever situaciones y anticipar soluciones a las mismas.

El Proceso de planeación estratégica proporciona en primera instancia herramientas necesarias para fomentar una cultura visionaria, es decir contribuye a la formulación de planes a corto, mediano y largo plazo, a la par, la elaboración de opciones o alternativas para su consecución, así mismo el desarrollo de competencias gerenciales adecuadas en los encargados de su dirección.

PALABRAS CLAVES: Planeación estratégica, visión y misión empresarial, pequeñas y medianas empresas.

INTRODUCCIÓN

Para toda entidad que realiza actividades económicas su principal finalidad es alcanzar aquellos fines por lo cuál fue creada. Un factor importante para lograr lo anterior consiste en la unión de esfuerzos de todos los niveles existentes en la organización, es decir es necesario involucrar desde los niveles inferiores hasta los más altos mandos, esto sin perder de vista las líneas de autoridad, las tareas y actividades que cada uno de ellos debe de realizar. Uno de los beneficios del proceso de planeación estratégica es la oportunidad que brinda de poder formular, efectuar, verificar y llevar a cabo una evaluación de cada uno de los procesos dentro de la entidad, logrando obtener resultados con eficiencia y eficacia.

El mundo actual en el que vivimos obliga a las organizaciones a prepararse para ser competentes ya que día a día las entidades de todas las magnitudes crecen y se desenvuelven en un ambiente de constante lucha entre unas y otras, dónde es lógico entender que aquellas que no están debidamente estructuradas e integradas terminan por desaparecer. Por todo lo anterior es de vital importancia que pequeñas y medianas empresas solidifiquen su estructura, se preparen para hacer frente a la globalización en que nos encontramos sumergidos, ya que de no ser así poco a poco su permanencia en el mercado se irá desvaneciendo, provocando con esto que la estabilidad económica de este sector vaya perdiendo fuerza, ya que por el número existente de este tipo de empresas llegan a ser parte de un gran porcentaje en relación a otro tipo de entidades.

Dentro de este proceso se hace necesario analizar el medio en que se desenvuelven las empresas, verificar que alternativas de acción pueden llevar a cabo, clarificar prioridades, buscar e identificar estrategias y a su vez planificar programas de acción viables a corto, mediano y largo plazo. Esto trae como resultado formularse una visión a futuro, ubicar a la entidad en determinado panorama que nos permita plantear situaciones y a su vez proponer soluciones a las mismas, de tal manera que en caso de que tales situaciones se hicieran presentes, los encargados de la empresa estén preparados para responder y darles una solución óptima.

El tomar decisiones estratégicas debe estar basado en procesos de análisis tanto internos como externos. El análisis externo implica la recolección y evaluación de información económica, social, demográfica, política, gubernamental, tecnológica y competitiva, con el objeto de identificar las oportunidades y amenazas claves que afronta una organización. El análisis interno consiste en identificar y evaluar debilidades y fortalezas organizativas en las áreas funcionales de la empresa: gerencia, mercadeo, finanzas, producción, investigación y desarrollo.

Por lo tanto es necesario conocer adecuadamente todos los elementos que se tienen a la mano para obtener un juicio debidamente sustentado, ya que una decisión tomada en base al criterio solo de los altos mandos, puede dar como resultado una opción equivocada, por lo que el proceso de planeación estratégica permite a las organizaciones el poder conjugar las opiniones de todos los integrantes de una entidad, obteniendo como resultado en primer lugar, la satisfacción de todos los integrantes por permitirles participar en este proceso y en segundo lugar tener una gama mayor de opciones para tomar en cuenta, es decir diferentes puntos de vista, que en determinado momento pueden ayudar a tomar las decisiones adecuadas y precisas para una situación inesperada.

REVISION LITERARIA

¿Qué son las pequeñas y medianas empresas? La OIT (Organización Internacional del Trabajo) engloba dentro de este concepto, tanto a empresas modernas, con un máximo de 50 trabajadores, como a empresas familiares en la cual laboran tres o cuatro de sus miembros. En México, cuándo se trata de reglamentar este tipo de entidades, usualmente se utilizan los montos anuales vendidos y/o el número de personas ocupadas o el valor de sus activos.

¿Cuáles son las características de las pequeñas y medianas empresas? De acuerdo a Méndez (1996) las características generales de este tipo de empresas entre otras son que el capital es proporcionado por una o dos personas, los propios dueños dirigen la marcha de la empresa aplicando una administración de tipo empírico, el número de trabajadores empleados en el negocio va de 16 hasta 250 personas, dominan y abastecen un mercado amplio, aunque no necesariamente tiene que ser local o regional, ya que muchas veces llegan a producir para el mercado nacional e incluso para el mercado internacional.

¿Qué son los planes estratégicos? Son los que establecen los lineamientos generales de la planeación, sirviendo de base a los demás planes (tácticos y operativos), son diseñados por los miembros de mayor jerarquía de la empresa y su función consiste en regir la obtención, uso y disposición de los medios necesarios para alcanzar los objetivos generales de la organización, son a largo plazo y comprenden a toda la empresa.

METODOLOGIA

Este estudio esta orientado a investigar hasta que punto llevan a cabo el proceso de planeación estratégica las pequeñas y medianas empresas, determinando los resultados obtenidos y analizando las causas por las que otras entidades similares no han implementado este sistema dentro de sus organizaciones.

La metodología que se ha seguido en el desarrollo de este estudio ha consistido en la recopilación y clasificación de información documental sobre estas entidades desde un ámbito internacional hasta llegar al plano local, ya que esto permite compilar resultados y obtener similitudes y diferencias entre las mismas. Así mismo, se han efectuado visitas a las diversas organizaciones en las que se ha observado directamente la manera en que es aplicada la administración y dentro de la misma la planeación, la fijación de objetivos a corto, mediano y largo plazo.

RESULTADOS

Cuándo una pequeña y mediana empresa ha desarrollado el proceso de planeación estratégica es interesante conocer que modificaciones ha efectuado en su estructura y en la forma de organizarse internamente, analizar de que manera se toman las decisiones después de aplicar el proceso y que cambios se han dado en el ambiente organizacional, consistente en verificar las actitudes de los integrantes de todos los niveles de la entidad, una vez que estos se sientan plenamente identificados con la misión y la visión de la empresa.

Los resultados obtenidos de esta investigación servirán de propuesta, para que otras empresas similares adopten este tipo de proceso dentro de su organización. Se propondrá a los dueños, gerentes y directivos el establecimiento del proceso de planeación estratégica, así como su difusión en todos los niveles de la entidad, asegurando con esto beneficios a corto, mediano y largo plazo.

El proceso de planeación estratégica da la oportunidad a las organizaciones de tener un mayor grado de pertenencia en el ambiente en que se desenvuelven, por lo que su implementación es de vital importancia para las mismas.

CONCLUSIONES

La globalización ha provocado que las pequeñas y medianas empresas se encuentren en un ambiente altamente competitivo, por lo que es necesario que los directivos busquen la manera de que todo el personal de sus organizaciones se comprometa con el logro de los objetivos y las metas fijadas a diferentes plazos. El proceso de planeación estratégica permite que los integrantes de todos los niveles participen en la búsqueda de los mismos, ya que una vez que éstos se obtienen el sentido de pertenencia en el personal aumenta de tal manera que se produce un cambio benéfico para la organización completa.

Lograr la implantación y desarrollo de este proceso significa una gran oportunidad de que las entidades logren los objetivos para lo cuál fueron creadas, coadyuvando a un mejoramiento del entorno económico en que se desenvuelven.

BIBLIOGRAFIA:

Anzola, Servulo (2002). "Administración de pequeñas empresas". México.

Barragán Codina, José N. "Administración de las pequeñas y medianas empresas. Retos y problemas ante la nueva economía global". México.

Betancourt Tang, J.R.: (2006) Gestión_Estratégica: Navegando Hacia El Cuarto Paradigma Edición electrónica gratuita. Texto completo en: www.eumed.net/libros/2006c/220/

García de León Camero, S. (1998). "Un plan práctico para la creación y desarrollo de pequeños comercios". México.

J. Wall, Stephen. "Estrategias innovadoras en su negocio". México.

Mercado, Salvador (2008). "Administración de pequeñas y medianas empresas: Estrategias de crecimiento". México.

Pickle, Hal B. "Administración de empresas pequeñas y medianas". México.

Sallenave, Jean Paul (2004). "Gerencia y planeación estratégica". Disponible en:
<http://books.google.com.mx/books> Fecha de consulta: Julio de 2008
<http://www.gestiopolis.com/canales/emprendedora/articulos/pymes.htm>
www.itlp.edu.mx/publica/tutors.htm

<http://www.paho.org/Spanish/HSP/HSE/HSE07/aspgerenciales-suramerica.doc>

www.estrategica.org

DESNUTRICIÓN Y APOYO A COMUNIDADES MARGINADAS: ESTUDIO DE CASO DE UNA EMPRESA Y EL IMPACTO DE SU PROGRAMA DE RESPONSABILIDAD SOCIAL CORPORATIVA EN LA FRONTERA NORTE DE MÉXICO

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RESUMEN

La Responsabilidad Social Corporativa (RSC) ha sido adquirida por numerosas empresas; sus raíces vienen desde la década de los 50's. El libro verde y la norma ISO 26000 son reflejo de la relevancia que ha ido adquiriendo y de la necesidad de que las empresas se responsabilicen con su entorno. En México, son cada vez más las empresas que comienzan a interesarse, evidencia es la entrega del distintivo Empresa Socialmente Responsable (ESR) que otorga el Centro Mexicano para la Filantropía (CEMEFI) que reconoce a las organizaciones que practican la RSC. En el 2000, cuando se otorgó por vez primera, lo obtuvieron nueve empresas. En el 2008, más de trescientas empresas se postularon por él y setenta lo recibieron. El presente estudio de caso descriptivo analiza el programa de RSC, otorgando la constitución de los mismos, su estructura y las experiencias al implementarlo. Otorga la opinión de los beneficiarios directos e indirectos respecto al funcionamiento de dichos programas, experiencias y cambio de vida al ser beneficiados por éstos. Los hallazgos sugieren la necesidad de establecer un sistema de medición para los programas de RSC y un sistema de retroalimentación de los beneficiarios hacia las empresas que implementan estos programas.

INTRODUCCION

La Responsabilidad Social Corporativa (RSC) ha sido adquirida por numerosas empresas; sus raíces vienen desde la década de los 50's. El libro verde y la norma ISO 26000 son reflejo de la relevancia que ha ido adquiriendo y de la necesidad de que las empresas se responsabilicen con su entorno. En México, son cada vez más las empresas que comienzan a interesarse, evidencia es la entrega del distintivo Empresa Socialmente Responsable (ESR) que otorga el Centro Mexicano para la Filantropía (CEMEFI) que reconoce a las organizaciones que practican la RSC. En el 2000, cuando se otorgó por vez primera, lo obtuvieron nueve empresas. En el 2008, más de trescientas empresas se postularon por él y setenta lo recibieron. El presente estudio de caso descriptivo analiza el programa de RSC, otorgando la constitución de los mismos, su estructura y las experiencias al implementarlo.

REVISION LITERARIA

La Empresa

Chiavenato (1998), define a la empresa como una organización social por ser una asociación de personas para la explotación de un negocio y que tiene por fin un determinado objetivo, que puede ser el lucro o la atención de una necesidad social. Por su parte Kotler (1991) indica que la empresa nació para atender las necesidades de la sociedad, creando satisfactorias a cambio de una retribución que compensara el riesgo, los esfuerzos y las inversiones de los empresarios. La empresa al estar formada de hombres alcanza la categoría de un ente social con características y vida propia, que favorece el progreso humano como

finalidad principal al permitir en su seno la autorrealización de sus integrantes y al influir directamente en el avance económico del medio social en el que actúa. Relacionado con lo anterior, el enfoque de la contingencia destaca que son las características ambientales las que condicionan las características organizacionales. Los sistemas culturales, políticos, económicos, etc. afectan intensamente a las organizaciones al mismo tiempo al que están íntimamente relacionadas en una dinámica interacción con cada organización (Chiavenato, 2006).

Responsabilidad Social Corporativa

La idea de "la responsabilidad social empresarial", desde finales de los años noventa, comenzó a ser asumida por numerosos actores del contexto político y económico mundial, incluidos instituciones financieras, empresas, organizaciones, agencias de desarrollo, escuelas de negocio, inversionistas y algunos gobiernos. En tiempo recientes, han ido apareciendo en el contexto internacional diversas experiencias e iniciativas que promueven el establecimiento e implementación de nuevos códigos y normas como el libro verde o la norma ISO26000, orientados al logro de un comportamiento empresarial ético y respetuoso con la sociedad y el medioambiente, que contribuya por tanto, al desarrollo sostenible. "La mayoría de estas recomendaciones, pretenden animar al desarrollo de políticas y estrategias empresariales que incorporen estos criterios argumentando su necesidad desde diferentes puntos de vista: morales, económicos y sociales" Bull (2004). Uno de los grandes avances en cuanto a la definición, justificación y aplicación de la RSC es el Libro Verde, publicado por la Unión Europea en julio de 2001, surgido de los acuerdos de la cumbre de Lisboa realizada en marzo de 2000, cuyos objetivos eran, en primer lugar, estimular el debate sobre el concepto de responsabilidad social de las empresas y, en segundo lugar, definir los medios para desarrollar una asociación con vistas a la instauración de un marco europeo para la promoción de la RSC. Por su parte, En septiembre de 2004 se estableció dentro de ISO, un grupo de trabajo para desarrollar una Norma Internacional que fuera una guía para la responsabilidad social. El objetivo de este grupo es realizar un documento guía, escrito en un lenguaje simple que sea entendible y utilizable por no-especialistas, y no un documento de especificación previsto para certificaciones de terceras partes.

Existen algunas definiciones más populares que otras como "solo la obtención de utilidades", "ir más allá de obtener utilidades", "actividades voluntarias", "preocupación por el sistema social más amplio" y "sensibilidad social". De acuerdo a Robbins (1994) la mayor parte del debate se enfoca en los extremos. Por un lado, está el punto de vista clásico – o puramente económico - de que la única responsabilidad social de la administración es maximizar las utilidades. En el otro extremo está la posición socioeconómica, que sostiene que la responsabilidad de la administración va bastante más allá de la obtención de utilidades, e incluye la protección y la mejoría del bienestar de la sociedad. La responsabilidad social corporativa consiste en que las empresas mismas definan, unilateral y voluntariamente, políticas sociales y ambientales mediante instrumentos alternativos que no sean ni acuerdos colectivos ni legislación, y que ofrezcan, en búsqueda de sus metas, asociarse a actores múltiples (Fonteneau 2003). De acuerdo a este mismo autor, en el punto de vista clásico, la única responsabilidad social de la administración es la de maximizar las utilidades.

El punto de vista socioeconómico nos dice que, la responsabilidad social de la administración llega bastante más allá que la simple obtención de utilidades, para incluir la protección y mejoramiento del bienestar de la sociedad. En este punto de vista se defiende que los tiempos han cambiado y con ellos las expectativas de las empresas por parte de la sociedad. Las corporaciones no son entidades independientes, responsables solamente ante los accionistas. También tienen responsabilidad ante una sociedad más amplia, que las crea y las sostiene. Al mismo tiempo las corporaciones dependen de una autorización de los gobiernos y así mismo como se las otorgan se las pueden quitar (Robbins 1994). "Cuando una empresa está realmente interesada en la RSC comprende que la obligación, va más allá de lo que

requieren la ley y la economía, para que una empresa persiga metas a largo plazo que sean benéficas para la sociedad” (Buchholz 1990).

La temática actual de la Responsabilidad Social Corporativa (RSC) reconoce dos posiciones dentro de esta literatura. Estas posiciones han surgido de la teoría de la agencia y de la teoría de los inversionistas o también llamados en conjunto *stakeholders*. “Stakeholder” fue utilizado por primera vez por R. E. Freeman en su obra: “Strategic Management: A Stakeholder Approach” (Ed. Pitman, 1984), para referirse a quienes pueden afectar o son afectados por las actividades de una empresa y que además deben ser considerados como un elemento esencial en la planeación estratégica de negocios (accionistas, asociaciones empresariales, industriales o profesionales; clientes, competidores, comunidades donde la empresa tiene operaciones: asociaciones vecinales, dueños, empleados, gobierno nacional, gobiernos locales, gobiernos provinciales, inversores, organizaciones no gubernamentales, proveedores/vendedores a la empresa, sindicatos y familia).

La teoría del inversionista señala que más allá de la junta directiva y de los accionistas de una compañía hay una gran cantidad de inversionistas que son afectados por las operaciones de la firma; y que estos inversionistas merecen algún gesto de buena voluntad y de solidaridad por parte de las organizaciones de negocios y que alternadamente impactara positivamente en sus operaciones. Otro aspecto a analizar es “la teoría obligatoria” de la RSC, la cual simplemente señala que una organización de negocios está obligada a ser socialmente responsable con el ambiente donde opera. La figura 1 muestra un comparativo de los diferentes enfoques que se aplican en un programa de RSC entre los diferentes niveles que tiene dicho programa.

Figura 1 Comparativo de los diferentes enfoques que se aplican en un programa de RSC entre los diferentes niveles.

Enfoque/Nivel	Análisis de la situación		Cumplimiento de desempeño	Generación de alternativas	Análisis de consecuencias	Evaluación del programa
	¿Quiénes?	Debe de ser				
Enfoque de la obligación social	Solo reconoce las exigencias legales	Conforme a las obligaciones sociales	Cumple con las obligaciones legales	Las alternativas para solo cumplir con las obligaciones legales	Acepta las alternativas que cumplan con las obligaciones legales, o satisfagan las obligaciones legales	¿Ha resuelto la empresa los problemas sociales actuales que le afectan directamente?
	Decisiones basadas en maximización de utilidades y patrimonio					
Enfoque de la responsabilidad social	Reconoce las obligaciones legales y sociales	Conforme a las obligaciones legales y resuelve los problemas sociales actuales	Cumple con las obligaciones legales	Alternativas para satisfacer las exigencias legales	Acepta alternativas que cumplan con las obligaciones legales, y resuelvan los problemas sociales actuales	¿Ha cumplido la empresa con sus obligaciones legales?
	Decisiones basadas en maximización de las utilidades, y del patrimonio y las costas sociales					
Enfoque de sensibilidad social	Reconoce las obligaciones legales y sociales	Conforme a las obligaciones legales y futuros problemas sociales anticipados	Cumple con las obligaciones	Alternativas para cumplir con las exigencias legales	Acepta alternativas que cumplan con las obligaciones legales, y resuelvan los problemas sociales futuros	¿Ha resuelto la empresa los problemas sociales futuros que le afectan más directamente?
	Decisiones basadas en maximización de las utilidades, y del patrimonio y las costas sociales futuras					

Fuente: Montana y Charnov 2002.

Conflictos Entre Empresa y la Sociedad

De acuerdo a Canessa y García Vega (2001) mucho de lo que se relaciona con la RSC es de cuestión moral. En este sentido los temas morales bien pueden ser definidos por quien los invoca. Por ejemplo, las empresas no pueden establecer parámetros de lo que ellas consideran que debe ser la participación social. Algo más adecuado sería que el sector al que se hace referencia sobre dicha participación -en este caso sectores sociales- defina por sí mismo los parámetros con los que entiende que debería ser esa participación social. Algunos sectores de izquierda son críticos de las corrientes que promueven la RSC por considerar que ésta sirve sobre todo como una forma de publicidad empresarial. Ellos destacan la paradoja de empresas nocivas para la salud o para el ambiente que pretenden mejorar su reputación mediante un discurso retórico acerca de la RSC (por ejemplo, una empresa de cigarrillos que compra el tabaco a campesinos pobres para contrarrestar las críticas sobre el cáncer de pulmón). Otras críticas provenientes de los sectores sindicales toman parte de esta visión sobre RSC, y a ello suman su crítica centrada en el paulatino abandono por parte de las empresas transnacionales del "tripartismo" dentro de los organismos internacionales como la Organización Internacional del Trabajo (OIT), donde funciona dicha práctica basada en la participación de los sectores empresarios, de los trabajadores y del Estado en el mencionado organismo para el dictado de resoluciones vinculantes. Por otra parte algunos economistas liberales, consideran que la única responsabilidad social de la empresa debe ser la generación de ganancias en favor de sus dueños, accionistas y trabajadores en un marco de competencia libre y abierta. Si la empresa sacrificase ganancias en nombre de la responsabilidad social -piensa Friedman- sería menos atractiva para inversionistas, trabajadores y consumidores, y a la larga perecería frente a los competidores (Friedman 1970 citado en Canessa y García Vega 2001).

Canessa y García Vega (2001) consideran que la RSC no constituye necesariamente una forma de responsabilidad jurídica, porque bien puede no estar prevista en las leyes y descansar simplemente en la libre decisión de las empresas. Sin embargo, incluso cuando no está respaldada en la ley, la violación de un compromiso social puede costarle a las compañías fuertes reproches por parte de la opinión pública (sanciones mediáticas) e incluso una pérdida de accionistas (sanciones bursátiles). Algunos estudios de caso ilustran la manera cómo una empresa suele tener interés comercial en ser socialmente responsable. Ello no constituye una respuesta a la crítica de Friedman (pues el principio de Friedman, el del lucro, sigue cumpliéndose), sino que la modifica, pues es posible obtener más ganancias al administrar de manera socialmente responsable. En las empresas modernas, la Responsabilidad Social Empresarial es más que un conjunto de prácticas puntuales, es más bien un programa integrado y reconocido de prácticas y políticas "socialmente responsables", que soporta la toma de decisiones y conlleva al éxito del negocio a largo plazo. La empresa, sin embargo, sigue funcionando como una entidad cuyo principal objetivo es el lucro, pero adaptándose a las exigencias de un nuevo mercado cada vez más preocupado por los problemas sociales y ecológicos que la misma produce. El objetivo final no sería alterar los modos de producción, sino integrar sistémicamente sus efectos nocivos y contenerlos.

Opciones de Aplicación de RSC

Existen varias alternativas para practicar la RSC, Kotler y Lee (2005) proponen 6 opciones distintas, las cuales se describen a continuación:

- a) Marketing con causa: La organización provee fondos, con aportaciones altruistas o recursos de la organización para incrementar la atención e interés hacia una causa social; para apoyar fundaciones, participación o reclutamiento de voluntarios.
- b) Causas relacionadas con el mercadeo: Compromiso para crear contribuciones o donativos de porcentajes de ganancias para causas específicas dependiendo de las ventas del producto.

c) Mercadeo social: Patrocinio para apoyar campañas sociales con el fin de modificar conductas o hábitos del público.

d) Filantropía corporativa: Se realiza mediante una contribución directa a personas o asociaciones de beneficencia o a una causa, la mayor parte del tiempo con dinero en efectivo, donaciones materiales o proporcionando un servicio.

e) Voluntariado Comunitario: Apoya y motiva a empleados, asociados corporativos y público en general a donar parte de su tiempo o talento, en apoyo de causas y organismos de ayuda social.

f) Prácticas empresariales de responsabilidad social: Adopta y realiza prácticas dentro y fuera de la empresa que apoyan causas sociales destinadas al mejoramiento de la comunidad en general, protección y mejoramiento del medio ambiente, derechos humanos y derechos de los animales. Por ejemplo: el no uso de grasas trans en ciertas cadenas de restaurantes de comida rápida, luego de que estudios revelaran que son dañinas para el organismo.

Dependerá de cada empresa, determinar cuál de estas opciones es la más adecuada para su entorno, presupuesto y objetivo.

Impacto de un Programa de RSC E Información Social de las Empresas

La importancia de contar con indicadores para medir la RSC de una empresa es para que la misma tenga conocimiento de sus impactos y de cómo puede hacer la implementación de buenas acciones en sus gestiones. Una vez implantada la estrategia de RSC y las acciones planificadas, la empresa debe verificar los resultados obtenidos y comprobar en qué medida se cumplen los requisitos y objetivos fijados. Según Osorio (2004), los sistemas de verificación y control de RSC, se componen de tres elementos básicos: una estructura organizacional dividida en áreas de responsabilidad, un proceso de verificación (auditoría) y un sistema de información (comunicación). La verificación y control del desempeño económico, social y ambiental de la empresa exige de un sistema de información que junto con los registros financieros ofrezca, tanto en una dimensión interna como externa una información integral sobre los resultados sociales y ambientales de la empresa. El Informe de RSC es el instrumento de control fundamental, además de ser la herramienta de comunicación más importante.

La mayoría de las compañías grandes, emiten informes anuales referentes a las actividades del año y la situación financiera. Sin embargo, muchas han respondido a la necesidad de más información social. Se utilizan varios términos para describir este proceso, como el de revisión social corporativa, información social corporativa, recuento social corporativo e informes de actuación social. Estos sistemas de información han sido creados en respuesta al avance hacia una mayor RSC. Kast y Rosenzweig (2004) mencionan que la información social de las corporaciones puede ser definida como el esfuerzo sistemático para medir, evaluar e informar sobre el desempeño de aquellas actividades corporativas que tienen impacto social. Está encaminado a mostrar específicamente las áreas en las que la corporación afecta a los interesados. Algunos propósitos específicos que tienen los informes sociales de las corporaciones son:

a) Ofrecer un parámetro para la evaluación de las actividades corporativas sobre la base de la actuación social y económica.

b) Lograr que todos los empleados tengan un mayor entendimiento de las misiones de la compañía y sus objetivos sociales.

c) Sentar la base para evaluar el impacto de las actividades corporativas sobre la sociedad.

Así, Chiavenato (1994) define el balance social como un instrumento para delimitar y definir la RSC de la empresa. El balance social deja de ser sólo un instrumento de información-comunicación y se transforma en un sistema de administración. Los objetivos sociales se tratan de igual manera que los objetivos económicos, lo cual va a afectar la toma de decisiones en la empresa. En esencia, el balance social no pretende expresar un estado financiero con partidas de activo y pasivo, sino mostrar indicadores que expresan el nivel de cumplimiento de su responsabilidad social. El balance social muestra si la organización está o no, haciendo un buen desempeño desde el punto de vista de los empleados, accionistas, clientes, público en general y de la comunidad.

ACTUALIDAD DE LA RSC EN MÉXICO

La RSC debe ser vista como la actitud de mejora continua en los negocios, cumpliendo con los objetivos económicos y sociales de la empresa, que le hacen posible mantener su competitividad y cumplir con las expectativas sociales, éticas, económicas y ambientales de sus participantes, respetando la dignidad de las personas, de las comunidades en las que opera y de su entorno. En el marco de la RSC debe mencionarse la creación en 1990 del Consejo Empresario de América latina (CEAL), integrado por 17 países de la región y en el que participan importantes hombres de negocio de México. Dicho Consejo el cual se aboca sobre todo a la promoción de la educación básica para contribuir así al desarrollo de América Latina, postula a la empresa “como agente de cambio” (Greaves 2006). Este mismo autor menciona que en México la RSC cuenta con iniciativas muy autónomas bajo planteamientos como los de la Unión Social de Empresarios de México (USEM), la Confederación Patronal de la República Mexicana (COPARMEX), el Consejo Coordinador Empresarial (CCE), acciones que se generan a título personal como son fundaciones y grandes empresas, también son importantes las posturas de líderes empresariales y las teorías de la administración de las escuelas de negocios. En 1988 nace como asociación civil el Centro Mexicano para la Filantropía (CEMEFI), el cual promueve la cultura filantrópica y la responsabilidad social en México.

El Diario Oficial de la Federación (2007) muestra, dentro del Programa Nacional de Normalización del 2007, la revisión o actualización de la Norma NMX-SAST-004-IMNC-2004, directrices para la implementación de un sistema de gestión de responsabilidad social, cuyo objetivo es: actualizar la Norma directriz y hacerla compatible con la futura Norma de responsabilidad social internacional ISO26000. Además está en proceso de desarrollo el ISO26000RS, independientemente de la Norma Oficial Mexicana de Responsabilidad Social, la cual se espera su publicación para diciembre de 2008, dentro de su contenido se encontrará compatibilidad con ISO 26000; contendrá principios deontológicos, contará con una guía sobre los temas de responsabilidad social y una cláusula sobre la implementación de RSC (Cárdenas 2008).

ESTUDIO DE CASO

El Grupo Agroindustrial Zaragoza está constituido por más de 30 empresas dedicadas en su mayoría a la producción, pasteurización y comercialización de leche fresca de vaca. El grupo tiene presencia en gran parte de la República Mexicana. El Grupo Agroindustrial Zaragoza, en Ciudad Juárez Chihuahua, en el año 2005 inauguró la Fundación “Pedro Zaragoza Vizcarra, A.C.”, con el propósito de ayudar a los más necesitados, como su eslogan lo menciona “Porque todos los sueños merecen la misma oportunidad”. Cabe precisar que la responsabilidad social para esta empresa se venía dando desde su origen como empresa, mediante apoyos de diferente índole a la comunidad, pero su estructura era aquella conocida como filantropía empresarial, no como un programa de RSC.

Figura1: Fachada de la Fundación Pedro Zaragoza Vizcarra, A.C.



Los programas con los que actualmente la Fundación trabaja son:

- a) (PRONUT) el programa de apoyo a niños en estado desnutrición.
- b) (PROALIE) el programa de apoyo a albergues infantiles.
- c) (PROAM) el programa de apoyo al adulto mayor.

Estos programas se sostienen mediante el apoyo de las empresas del mismo grupo las cuales apoyan con: Leche, jugos, yogurt, donas de dulce, queso y carne.

El “PROALIE” (desde el 2006) nace como resultado de la preocupación del dueño y fundador de la empresa en participar de forma mas cercana a la comunidad, brindando apoyos en especie. El programa cuenta con la aceptación y participación del personal de las empresas del grupo y de las afiliadas de la Fundación. El objetivo del PROALIE es “contribuir a mejorar la calidad de vida a través de la satisfacción de sus necesidades básicas que es la alimentación”.

Dentro de las actividades del PROALIE se encuentran las siguientes:

- Día de la familia (Marzo 2008); objetivo: Proporcionar servicios médicos y asistenciales a la población de las colonias cercanas a los albergues.
- Día Mundial del Agua (Abril 2008); objetivo: Ayudar a los más necesitados.
- La Nasa visita YVASA (abril 2008); objetivo: Proporcionar a los niños conocimientos del espacio.
- Día del Niño en Lomas de Poleo (Abril 2008); objetivo: Ofrecer a los niños de escasos recursos un día del niño que nunca olviden.
- Anita la Huerfanita (Junio 2008); objetivo: Ayudar a alumnos de escuelas primarias de bajos recursos.
- Día mundial del medio Ambiente (Julio 2008); objetivo: Participar, aprender y concientizarse en el cuidado del medio ambiente.
- Dotando Agua a quien más lo necesitan (Julio 2008); objetivo: Proporcionar agua a niños y adultos mayores de escasos recursos que aun no cuentan con el servicio básico que es el agua potable.
- Viaje al mundo Museo Interactivo (Octubre 2008); objetivo: Aprender de la vida en el espacio vía Videoconferencia.

- Posadas Navideñas (Diciembre 2008); objetivo: Brindar alegría a sus corazones a los niños y al adulto mayor de las comunidades más vulnerables.

Algunos de los requisitos que solicita la fundación para poder proporcionar el apoyo son:

- Estudio socioeconómico
- Ser una Asociación Civil

Posteriormente las instituciones que se registran pasan por un proceso de selección para que sean consideradas y sujetas a apoyo, bajo la autorización de un comité el cual esta conformado por los dueños de la empresa. Después se evalúa la situación, se comprueba la necesidad y si cumplen con los requisitos de la Fundación, se solicita el apoyo por parte de las empresas involucradas, bajo las condiciones y procedimiento de la Fundación para lograr el objetivo. Las mediciones para obtener resultados son por medio de evidencias que hay dentro del programa es mediante estudios que les realizan a cada niño del albergue para ir monitoreando su nivel de nutrición, se apoyan con estudiantes de la carrera de nutriología en el cual ellos hacen un estudio con cada niño.

El programa PROALIE ha considerado algunos puntos principales como obstáculos en el desarrollo del programa de forma externa como la falta de comunicación debida principalmente por que las encargadas de los albergues no quieren dar información, a las supervisoras de la Fundación dentro del programa de PROALIE. Dentro del Grupo ha existido la imagen y la ayuda a la comunidad, como responsabilidad social, realmente poder ayudar a los más necesitados, una prioridad es buscar ayuda a través de otras empresas y buscar en el extranjero.

Los resultados de forma interna se dan a conocer a través de la intranet, en forma de boletín quincenal. De forma externa, se organizan conferencias informativas con los diferentes actores del PROALIE, ruedas de prensa con medios locales y estatales, participación en entrevistas de radio y televisión y por medio de la divulgación de los informes anuales del programa a través de su página de Internet, www.agroindustrialzaragoza.com

Actualmente el programa cuenta con un sistema de medición para visualizar su madurez, el impacto del programa en la comunidad y resultados, esto se entrega directamente al corporativo, tales como actividades realizadas, eventos, donativos, gastos en los que se incurrió para el desarrollo de las mismas, personas que fueron beneficiadas, número de participantes en las actividades, porque fue seleccionado este beneficiario, etc. Asimismo se debe reportar la logística que fue utilizada y se incluyen fotografías de los eventos, el boletín interno del evento, etc. Estas evidencias forman parte de la información que se considera para que la empresa concurse y haya sido merecedora al distintivo Empresa Socialmente Responsable (ESR).

La Fundación desarrolla un informe anual, se realiza a través de reuniones con el corporativo de la empresa en las que participan los dueños, los encargados de este programa, al menos un representante de cada una de las áreas de la Fundación, en la cual se da a conocer los resultados del programa (¿cómo, cuándo, cómo, dónde, se realizaron?), numero de beneficiarios del mismo y el uso de los recursos (¿cuánto se gastó?), y se da a conocer al corporativo con el fin de dar transparencia al manejo de recursos por parte de la Fundación hacia el programa PROALIE. En la figura 2 se observa las cantidades que, en especie y como parte del enfoque hacia la nutrición adecuada de la población infantil de los albergues, las empresas del grupo donan hacia el PROALIE.

Actualmente se apoya con alimentos básicos a 23 Casas cuna y albergues para niños, 4 instituciones para adolescentes, 5 instituciones para el adulto mayor y 10 centros de rehabilitación entre otros. En la figura 3 se observa el número de integrantes de familias de escasos recursos que forman parte del programa de PROALIE.

Figura 2: Donativos en especie hacia el programa PROALIE



Fuente: Informe anual 2008, Fundación Pedro Zaragoza Vizcarra

Figura 3 Familias beneficiadas por el PROALIE



Fuente: Informe anual 2008, Fundación Pedro Zaragoza Vizcarra

Los resultados del programa son los siguientes:

- Reconocimiento del programa por parte de las instituciones beneficiadas.
- Participación e involucramiento del personal de la empresa y de fundación.

RECOMENDACIONES RESULTANTES DEL ESTUDIO DE CASO

Con fundamento en la información recopilada de este estudio de caso se pueden generar los siguientes puntos a modo de recomendaciones para el PROALIE:

- Formalizar aun más la selección del beneficiario, incluyendo toda la información general de éste.
- Implementar una supervisión de las entregas y aplicación de los donativos a las instituciones, para validar que el apoyo llegue a los beneficiarios.
- Desarrollar un proceso de retroalimentación por parte de las instituciones hacia la fundación “Pedro Zaragoza Vizcarra, A.C.”.
- Crear un sistema de medición para estos programas no solo por parte de la fundación, sino también por las empresas involucradas y de los beneficiarios.

CONCLUSIONES

De acuerdo al punto de vista clásico, la única responsabilidad social de la administración es la de maximizar las utilidades (Fonteneau 2003). Sin embargo la Fundación “Pedro Zaragoza Vizcarra, A.C.” cuenta con varios proyectos enfocados a la Responsabilidad Social Corporativa y están enfocados a mejorar la calidad de vida de los niños y el compromiso con la comunidad. En el programa PROALIE sus resultados se miden a corto plazo, ya que constantemente se realizan estudios a los niños para ver su estado de Nutrición, por varios factores y antecedentes han hecho que este programa este vigente y haya mucha aceptación por parte de las empresas.

Los hallazgos del estudio de caso sugieren que las actividades de Grupo Agroindustrial Zaragoza se encuentran rumbo a lo que Chiavenato (1994) señala como el balance social de la empresa, en donde ésta, de participar en la comunidad bajo los esquemas de filantropía empresarial y de marketing con causa (Kotler y Lee 2005), ha comenzado a darle estructura a sus programas de apoyo a la comunidad bajo un esquema de RSC más amplia. Los sistemas información-comunicación que la empresa ha establecido dan cuenta de ello, según lo señalado por Kast y Rosenzweig (2004).

Sin embargo, falta mejorar la gestión del PROALIE mejorando los sistemas de administración del mismo, como el sistema de retroalimentación sugerido por Osorio (2004) y llegar a la etapa de alineación de objetivos empresariales y sociales que Chiavenato (1994) comenta la RSC de una empresa debe poseer y en donde los objetivos sociales se tratan de igual manera que los objetivos económicos, lo cual va a afectar la toma de decisiones en la empresa. La futura implementación de la Norma NMX-SAST-004-IMNC-2004, del gobierno mexicano sugiere alentara a las empresas hacia esta dirección.

BIBLIOGRAFIA

- Buchholz, R.: (1990) *Essentials of Public Policy for Management*, Segunda edición, Estados Unidos Americanos, Prentice Hall, p. 01, consultada 5 enero 2009,
http://www.allacademic.com/meta/p_mla_apa_research_citation/1/1/2/4/1/pages112414/p112414-1.php
- Bull, B.: (2004) Responsabilidad social de las empresas: ¿Una solución para el desarrollo en América Latina? *Revista Venezolana de Gerencia* ISSN 1315-9984, consultada 5 noviembre 2008,
http://www.serbi.luz.edu.ve/pdf/rvg/v9n28/art_02.pdf

Canessa, G. y García E.: (2001) EL ABC de la responsabilidad social empresarial en el Perú y en el Mundo; (2aed.), Asociación Perú 2001.

Cárdenas, L.: (2008) Norma Mexicana de Responsabilidad Social., México 2008, p. 6, consultada 16 Septiembre 2008, www.ur.mx/Portals/82/8LeonardoNMX.pdf

Chiavenato, I.: (1994) La gestión de personas: el paso decisivo hacia la gestión participativa, São Paulo: Makron Libros.

Chiavenato, I.: (1998) Iniciación a la organización y técnica comercial 1998. México, Editorial McGraw-

Chiavenato, I.: (2006) Introducción a la Teoría General de la Administración, (7ª ed.) McGraw-Hill Interamericana: México.

Fonteneau, G.: (2003) Responsabilidad Social Corporativa (E002) Lagjs/Lisdinys Ensayo, consultada 5 septiembre 2008, <http://www.jussempor.org/Inicio/Resources/RSCimplicacionessoc.pdf>

Greaves, P.: (2006) Empresarios Mexicanos ante la Responsabilidad Social, Este estudio fue realizado gracias al apoyo recibido por el Instituto de Investigaciones sobre Desarrollo Sustentable y Equidad Social (IIDSES) y la Red Puentes-México. Universidad Iberoamericana, A.C., México, 2008, p. 10-13, 15; visitada 10 septiembre 2008, www.uia.mx/campus/publicaciones/IIDSES/pdf/desarrollo/5_empresarios_mexicanos.pdf

Kast, F. y Rosenzweig, J.: (2004) Administración en las organizaciones: enfoque de sistemas y de contingencias (4ªed.).

Kotler, P.: (1991) Dirección de Mercadotecnia, Editorial Prentice Hall.

Kotler, P. y Lee, N.: (2005) Corporate Social Responsibility: Doing the Most Good for Your Company and Your Cause, Wiley.

Libro Verde de la Comisión Europea: (2008) Edición impresa en el Diario Oficial de las Comunidades Europeas. ESADE. IPES. Instituto Persona, Empresa y Sociedad, consultada 5 septiembre 2008, <http://ec.europa.eu/social/main.jsp?catId=331&langId=en>

Montana P. y Charnov B.: (2002) Administración (1aed.) México: Editorial Cultural.

Osorio, M.: (2004) Empresa y ética: La responsabilidad social corporativa, (1ªed).

Robbins, S.: (1994) Administración, Teoría y Práctica, (4aed.) Editorial Prentice Hall.

BIOGRAFIA

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LA ENCRUCIJADA, ENTRE LA POLÍTICA AMBIENTAL Y LA COMERCIAL.

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RESUMEN

Dada la creciente preocupación por el desarrollo sostenible es de vital importancia revisar los actuales patrones de comercio y los obstáculos que ellos presentan debido al establecimiento de barreras no arancelarias (BNA), especialmente las referidas al medio ambiente. Este tipo de barreras que hacen parte de las políticas estatales se han fortalecido al tiempo que los aranceles han disminuido su efecto sobre el comercio internacional a través de acuerdos internacionales como el GATT (General Agreement on Tariffs and Trade) o específicos como el NAFTA u otro tipo de negociaciones bilaterales. El propósito de este trabajo es en primer lugar identificar los impactos de las barreras no arancelarias en el comercio internacional a través del estudio de algunos casos; y posteriormente reflexionar sobre los impactos de este tipo de políticas en el desarrollo sostenible de los países, teniendo como marco el cambio climático. Concluimos que la implementación de barreras no arancelarias afecta principalmente la competitividad y la localización de las industrias a nivel mundial. Surge además el cuestionamiento sobre el carácter proteccionista de este tipo de iniciativas y su incidencia en la recuperación de la economía global.

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EFFECTOS DE LA NORMATIVIDAD AMBIENTAL NO INTEGRAL EN LA COMPETITIVIDAD DE LA CADENA PRODUCTIVA DEL CUERO COLOMBIANA

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RESUMEN

La ponencia tiene como objetivo presentar los efectos en la competitividad de la cadena productiva del cuero en Colombia a causa de una legislación ambiental compartimentada y no integral orientada solo en resultados de final de tubo. El documento pretende describir cómo que se han venido implementando políticas y esfuerzos en búsqueda del fortalecimiento de cadenas productivas pero los efectos de la legislación ambiental inciden negativamente en la competitividad de la cadena. Se tomará como ejemplo paradigmático el caso de Villapinzon (provincia de Cundinamarca Colombia). En Colombia la región de Villapinzon tiene como principal actividad económica la curtiembre, su ventaja competitiva es el conocimiento tradicional del proceso del cuero, sin embargo su desventaja es la contaminación del río Bogotá por el vertimiento de cromo y otras sustancias contaminantes. La legislación ambiental aplicada a los industriales Colombianos incentiva la aparición de cuestionamientos sobre la eficacia de las medidas adoptadas y una revisión de las posibles dinámicas establecidas en torno a la búsqueda del mejoramiento de la Competitividad. De esta manera, las cifras sobre el sector económico indican que si bien éste no tiene una alta participación en la producción nacional, comienza a mostrar un nivel superior en la generación de empleo, con la cual se podrían cimentar interrogantes sobre la calidad y el verdadero sentido de la legislación ambiental que debería contribuir al desarrollo sostenible.

BIOGRAFIA

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GESTIÓN DEL APRENDIZAJE A TRAVÉS DE LAS TIC DESDE EL SECTOR COOPERATIVISTA: CASO APLICADO

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RESUMEN

La formación de los estudiantes universitarios ha entrado en un nuevo nivel gracias a la nueva identificación de los créditos ECTS, y a la aplicación de forma mayoritaria en cualquier área del conocimiento de las Tecnologías de la Información y la Comunicación (TIC). Está claro que la modernidad siempre ha ido a remolque con el conocimiento del ser humano, en cambio hemos llegado a un momento histórico en el que ocurre lo contrario, por primera vez la tecnología va por delante del conocimiento de la mayoría de la población. Es necesaria la explicación de la cantidad de medios que tenemos a nuestra disposición, pero a su vez, es muy necesario publicitar aquellas medidas que han tenido, tienen y tendrán éxito con sus experiencias en el sector cooperativo. Es así como mostramos el modelo de la Universidad Corporativa de la Caja Rural de Toledo y su experiencia en convenio con la Universidad de Castilla-La Mancha y la importancia que se le ha dado a los métodos docentes más innovadores como es el e-learning.

Palabras clave: TIC, e-learning, sector cooperativo, modelo, innovación.

INTRODUCCIÓN

¿Vivimos en una época de cambios o un cambio de época? ¿Cómo reconocer los profundos cambios que vienen con la acelerada introducción en la sociedad de la de las nuevas tecnologías de la información y la comunicación (TIC)? ¿Se trata de una nueva etapa de la sociedad industrial o estamos entrando en una nueva era? “Aldea global”, “era tecnológica”, “sociedad postindustrial”, estos términos se han acuñado en el intento de identificar y entender el alcance de estos cambios.

Todas estas preguntas antes mencionadas surgen ante la necesidad de la educación actual para adaptarse necesariamente a una nueva concepción de alumnos-usuarios, y establecer cambios de rol en los profesores y cambios administrativos en relación con los sistemas de comunicación, con el diseño y la distribución de la enseñanza. Siempre hemos pensado que el principal aporte de la tecnología al sistema educativo sería la solución a todos los problemas que este nos plantea, pero conociendo la tecnología podemos decir que no es la solución final al problema, debido a que la enseñanza no se puede automatizar y el profesor no se puede reemplazar, no obstante los procesos tecnológicos aplicados a la educación tienen la misión de abrir espacios en los que el estudiante pueda vivir experiencias difíciles de reproducir con los medios tradicionales como el lápiz y el papel.

En referencia a las instituciones de educación superior estas han experimentado cambios en el conjunto del sistema educativo de la sociedad actual, dando lugar a desplazamiento de procesos de formación desde entornos cotidianos hasta otros ámbitos más complejos, el concepto generalizado de que los estudiantes reciban las competencias necesarias para un aprendizaje continuo y la comercialización del conocimiento genera simultáneamente oportunidades a las instituciones de educación superior para una flexibilización de sus procedimientos de formación alternativa más acorde con las necesidades que este nuevo concepto de sociedad de la información presenta. La existencia de la oferta on-line de cursos en

Internet, o proyectos de departamentos o profesores no suponen una universidad más flexible, sino una universidad más informatizada y más cercana a las TIC, apostando por un tipo de sociedad donde la información sea un bien público, no una mercancía, la comunicación es un proceso participativo e interactivo, el conocimiento una construcción social compartida, no una propiedad privada, y las tecnologías es un medio para todo ello, sin que se conviertan en un fin en sí.

La herramienta que la mayoría de los expertos coinciden en señalar será de gran relevancia es el eLearning o educación en línea, es una tendencia que cada día nos envuelve más, por esa razón es necesario que los profesores de la universidad deben tener claros algunos conceptos que guían el trabajo docente, sin embargo, surgen muchas incertidumbres cuando se evalúan las ofertas del mercado y se tiene que elegir la más adecuada para la educación, esta inexperiencia sobre los sistemas y plataformas e-learning conllevan, una multiplicidad de criterios de evaluación, a través de esto podemos destacar los aspectos más importantes que deben tenerse en cuenta y que pueden servir para que cada uno evalúe las principales variables a considerar de acuerdo a las necesidades de la educación. Un sistema de e-learning que favorece el desarrollo de la cultura del aprendizaje, puede dinamizar la posición de una organización o del sector educativo donde se aplique estableciendo estándares de calidad donde la competitividad es el factor clave, siendo así el sector educativo un sector más productivo.

La plataforma del e-learning abre muchas puertas a nuevos usuarios en continua interactividad, por tanto requieren una completa integración en la organización que la promueve y mantiene, si eres consumidor de la misma la plataforma es la herramienta que posibilita alcanzar el objetivo formativo, es así por lo que debe establecer unos objetivos principales de partida sin el e-learning y graduar las necesidades a cubrir con el e-learning para alcanzar los objetivos finales que nos planteamos en el sistema educativo.

Haciendo referencia a las TIC, y a todas sus herramientas como el e-learning, vemos que nos introducimos en una nueva era donde la comunicación y la tecnología tendrán mucha importancia hasta el punto de ser un posible sustento de todos nuestros conocimientos en un futuro no muy lejano, es ahí donde el hombre debe saber aprovechar todos los recursos que nos brinda la tecnología para poder crecer como civilización, esto ya lo sabían en el siglo XVIII donde no existía tanta tecnología como hoy día, y lo podemos apreciar haciendo referencia a una cita del economista y filósofo escocés Adam Smith:

“Cada individuo está siempre esforzándose para encontrar la inversión más beneficiosa para cualquier capital que tenga [...] Al orientar esa actividad de modo que produzca un valor máximo, él busca sólo su propio beneficio, pero en este caso como en otros una mano invisible lo conduce a promover un objetivo que no entraba en su propósitos [...] Al perseguir su propio interés frecuentemente fomentará el de la sociedad mucho más eficazmente que si de hecho intentase fomentarlo.”

METODOLOGÍA

La Sociedad de la Información ha supuesto la incorporación masiva de tecnologías de la información y comunicación (TIC) a todos los sectores sociales, desde económicos, culturales, y no con menos importancia el sector educativo.

Los cambios tecnológicos han afectando a la manera de concebir el aprendizaje en la sociedad del conocimiento son los siguientes:

- Generalización del acceso a internet de banda ancha, especialmente en economías más desarrolladas.
- Los weblogs, adquieren gran importancia como fuente de información y comunicación.
- El podcasting puede ser un gran instrumento para el aprendizaje móvil (Mobile Learning).
- El software libre privado tradicional y a los desarrolladores de contenido, incluidas las instituciones educativas.
- Las empresas que han emergido en internet tras la crisis de las punto.com y que dominan el mercado, ofrecen nuevos e innovadores servicios.

Las Tecnologías ofrecen una serie de posibilidades que pueden ser aplicadas en el terreno educativo, de las que podemos destacar las siguientes:

- Ampliación de la oferta informativa.
- Creación de entornos más flexibles para el aprendizaje.
- Eliminación de las barreras espacio-temporales entre el profesor y los estudiantes.
- Incremento de las modalidades comunicativas.
- Potenciación de escenarios y entornos interactivos.
- Favorecer tanto el aprendizaje independiente y el autoaprendizaje como el colaboratorio y en grupo.
- Romper los clásicos escenarios formativos, limitados a instituciones escolares.
- Ofrecer nuevas posibilidades para la orientación y la autorización de los estudiantes.

No podemos pensar que la utilización de las TIC en la educación son todo ventajas y posibilidades, también nos encontramos con una serie de limitaciones o inconvenientes, entre ellas destacamos:

- Acceso y recursos necesarios por parte del estudiante.
- Necesidad de infraestructuras específicas.
- Necesidad de personal de apoyo técnico y de determinada formación para su uso.
- Necesidad de adaptarse a nuevos métodos de enseñanza y aprendizaje (su utilización requiere que el estudiante y el profesor sepan trabajar con otros métodos diferentes).
- Falta de recursos educativos de calidad.
- Muchos entornos son demasiado estáticos y simplemente consisten en formato de texto o pdf.

De todas formas no debemos olvidarnos que la gran mayoría de las limitaciones vienen por la falta de formación del profesorado para su incorporación de estas nuevas tecnologías a sus clases de alumnos.

Las Nuevas Tecnologías Aplicadas A La Enseñanza

Las TIC aplicadas a la educación, tienen varios enfoques:

- Compensador, permiten la personalización de la enseñanza, adaptándose a los distintos ritmos de los alumnos y alumnas.
- Potenciador, de capacidades tanto personales, cognitivas como sociales, en cuanto que incrementan la participación y autonomía del alumnado, además de su motivación.
- Fuente de información, herramienta de comunicación, herramienta de gestión y producción de información.

La situación actual respecto a las NTIC en la universidad es que nos encontramos con un fácil acceso a cualquier fuente de información y conocimiento, el procesamiento es rápido y fiable de todo tipo de datos con canales de distribución inmediata, existe una gran capacidad de almacenamiento de datos, automatización de trabajos, interactividad y digitalización de datos, estos aspectos definen que nos ofrece las universidades respecto a la tecnología, además de haber generado cambios en la filosofía universitaria, dando lugar a una necesidad de formación continua, donde se impone una mayor exigencia de calidad y flexibilidad, transformación de la función docente, gestión universitaria más descentralizada, investigaciones multidisciplinares y una mayor presión competitiva, estos cambios en su filosofía de trabajo nos definen la universidad del futuro, donde las que hasta ahora eran funciones tradicionales de la universidad se ven ubicadas dentro de una nueva realidad.

Revisión De La Educación Superior Según La UNESCO

En materia de educación, y por consiguiente lo relacionado con la innovación tecnológica en ella, el organismo oficial más importante, es UNESCO, dependiente de las Naciones Unidas.

Los docentes que muestren competencia en el marco del enfoque de generación de conocimiento podrán:

- Diseñar recursos y ambientes de aprendizaje usando las TIC
- Utilizarlas para apoyar el desarrollo de generación de conocimiento y habilidades de pensamiento crítico de los estudiantes.
- Aprendizaje permanente y reflexivo.
- Crear comunidades de conocimiento.
- Creación e implementación de una visión de su institución educativa como comunidad basada en la innovación y en el aprendizaje permanente, enriquecidos por las TIC.

Nuevas Estrategias Didácticas en la Educación Superior

Las nuevas estrategias didácticas en la E.S, han dado lugar a diferentes respuestas por parte de las universidades siguiendo un nuevo concepto de realidad, esto es así hasta tal punto que siguiendo una propuesta realizada por Sangrá (2001) podemos clasificar y diferenciar estas respuestas según su grado de virtualidad:

- Universidad Virtual; es un concepto global e integral que suponen una realidad educativa universitaria totalmente virtual tanto para alumnos como personal docente e investigador.
- Campus virtual; Según Van Dusen (1997) “El campus virtual es una metáfora de enseñanza, aprendizaje e investigación creado por la convergencia de las poderosas nuevas tecnologías de la instrucción y la comunicación”.
- Cursos on line; se encuentran en un tercer estadio de concreción, se trata de una oferta directa de contenido, sin pretender establecer una relación de pertenencia con la institución que los ofrece.
- E - Learning; puede definirse como “el uso de tecnologías basadas en internet, para proporcionar un amplio abanico de soluciones que aúnen adquisición de conocimiento y habilidades o capacidades” (Rosenberg, 2001) Rosenberg establece distintos criterios para considerar eLearning:
 - que se realice en red
 - que se haga llegar al usuario final a través de un ordenador utilizando estándares tecnológicos de internet
 - este centrado en la más amplia visión de soluciones al aprendizaje que vayan más allá de los paradigmas tradicionales de la formación.

Por otro lado tenemos la clasificación de estas respuestas y experiencias de utilización de las redes en las instituciones de enseñanza según las realidades observadas en la universidad, Aoky, Fasse y Store (1998):

- Catálogos de Cursos on line, son catálogos y bases de datos a través de las redes ofrecidas por universidades.
- Acuerdos universitarios, instituciones que reúnen a universidades o centros de formación superior de una determinada zona geográfica para ofrecer titulaciones sin campus, sin cursos, sin profesorado. Definen destrezas, comprueban y otorgan titulación.
- Consorcios virtuales entre universidades, son consorcios entre universidades que ofrecen cursos formando una red de aprendizaje.
- Universidades virtuales: Universidades similares a las tradicionales que ofrecen sus programas de formación, disponen de un núcleo docente, y ofrecen sus propias certificaciones, aunque no existe un campus físico.
- Campus on line: Universidades que existen físicamente ofreciendo cursos presenciales y que además ofrecen parte de sus programas o programas a través de la red.
- Campus on line no acreditados, son instituciones no acreditadas que ofrecen cursos en forma de seminarios, como complemento a la formación superior.

Según el tipo de iniciativa. Farell (1999) en un informe para “The Commonwealth of Learning”, institución que analiza la situación de la educación superior en el ámbito anglosajón, identifica cinco modelos. (No se trata de un análisis exhaustivo y se deben considerar modelos híbridos)

- Universidad presencial que introduce elementos de virtualidad en su dinámica educativa. Situación que se caracteriza como la realización de actividades de carácter puntual: realización de asignaturas (habitualmente de libre elección) en entornos virtuales o semipresenciales, facilitar aplicaciones como herramientas de creación de páginas web, listas de distribución, etc. a los profesores. Ordinariamente se produce una repetición de parámetros educativos: didácticos, de evaluación... tradicionales.
- Universidad presencial con una extensión universitaria virtual. Una respuesta cada vez más frecuente por parte de las instituciones universitarias es la creación de una extensión universitaria virtual separada organizativamente o, incluso, jurídicamente del funcionamiento ordinario de la Universidad. Habitualmente se trata de cursos de extensión universitaria o de formación continua para el público en general o para antiguos alumnos; en ocasiones el objetivo de estas experiencias es servir de banco de pruebas a la implantación de mayores grados de virtualidad en la institución que los ofrece.
- Espacios compartidos de cursos virtuales que ofrecen las universidades presenciales. Una respuesta a la introducción de las NTIC en la Universidad es la oferta de cursos virtuales por parte de diferentes universidades compartiendo un espacio común. La forma organizativa que se suele emplear es el Consorcio en el que participan las diferentes universidades implicadas y, en ocasiones, el sector empresarial o industrial.
- Universidad adosada a la universidad tradicional. Algunas universidades tradicionales han creado universidades virtuales en su propio entorno. Han constituido espacios virtuales gestionados independientemente con los mismos elementos básicos de la universidad tradicional. Muchas de estas experiencias realizadas hasta ahora utilizan los mismos profesores y/o la misma administración que la universidad tradicional que las acoge, aunque debido a diversos problemas de carácter organizativo han provocado que algunas hayan creado equipos docentes y de gestión diferenciados.
- Universidad virtual como organización virtual. Se trata de aquellas que han estado creadas específicamente para ser universidades virtuales. La mayoría, aunque no todas, provienen del ámbito de universidades abiertas o a distancia. Disponen de un modelo organizativo y pedagógico diferenciado.
- Espacios virtuales interuniversitarios comunes. Aquí se pueden encontrar colaboraciones que se producen entre universidades que disponen de un entorno virtual y deciden ofrecer cursos de sus planes de estudios a las diferentes comunidades universitarias.

EL APRENDIZAJE UNIVERSITARIO INTEGRADO EN LAS NUEVAS TECNOLOGÍAS

La Introducción de las tecnologías de la información, documentación y comunicación, en la dinámica docente universitaria, empezó siendo el motivo de muchos proyectos de innovación, y se ha convertido en una constante que marca el desarrollo de la actual docencia universitaria. Tanto es así, que en los últimos años, el uso de internet se ha generalizado de tal modo, que la mayoría de las comunicaciones impresas han desaparecido, generando la obligación del uso del ordenador al profesorado.

La integración de las tecnologías en la docencia universitaria es tal, que modifica la naturaleza del medio, debería modificar el proceso, y por supuesto la tarea del profesor. En la dinámica docente y, en especial, en la actividad del profesorado, puede facilitar un cambio en el modelo de formación universitaria que desplace el centro de atención que actualmente descansa en la actividad instructiva del profesorado hacia la actividad del que aprende, el estudiante. Este cambio viene acompañado por el factor de que el estudiante ya es un usuario entrenado en el uso de las nuevas tecnologías.

Se puede afirmar que hoy la universidad debe generar fundamentalmente condiciones y espacios de aprendizaje, donde integrar no solo contenidos informativos y conceptuales, sino también contenidos procedimentales que posibiliten al estudiante desarrollar su inteligencia práctica en relación al dominio de los conocimientos propios de los estudios que curse y también su inteligencia actitudinal, ética y moral. La integración de las tecnologías en los procedimientos docentes puede contribuir a incrementar de forma eficaz los aprendizajes informativos, procedimentales y actitudinales antes citados, si se aprovechan las potencialidades pedagógicas que las tecnologías ofrecen.

También requiere la definición de algunos objetivos centrales y el diseño de estrategias, puesto que este cambio afecta al profesorado y al conjunto de estudiantes, contribuyendo a generar un nuevo estilo y perfil profesional, tanto para docentes como para estudiantes.

Los establecimientos de educación superior han de dar ejemplo en materia de aprovechamiento de las ventajas y el potencial de las nuevas tecnologías de la información y la comunicación, velando por la calidad y manteniendo niveles elevados en las prácticas y los resultados de la educación, con un espíritu de apertura, equidad y cooperación internacional, por los siguientes medios:

- constituir redes, realizar transferencias tecnológicas, formar recursos humanos, elaborar material didáctico e intercambiar las experiencias de aplicación de estas tecnologías a la enseñanza, la formación y la investigación.
- crear nuevos entornos pedagógicos, que van desde los servicios de educación a distancia hasta los establecimientos y sistemas "virtuales" de enseñanza superior, capaces de salvar las distancias y establecer sistemas de educación de alta calidad, favoreciendo así el progreso social y económico.
- aprovechar plenamente las tecnologías de la información y la comunicación con fines educativos, esforzándose al mismo tiempo por corregir las graves desigualdades existentes entre los países, así como en el interior de éstos en lo que respecta al acceso a las nuevas tecnologías de la información y la comunicación y a la producción de los correspondientes recursos.
- adaptar estas nuevas tecnologías a las necesidades nacionales y locales, velando por que los sistemas técnicos, educativos, institucionales y de gestión las apoyen.
- facilitar, gracias a la cooperación internacional, la determinación de los objetivos e intereses de todos los países, especialmente de los países en desarrollo, el acceso equitativo a las infraestructuras en este campo y su fortalecimiento y la difusión de estas tecnologías en toda la sociedad.
- seguir de cerca la evolución de la sociedad del conocimiento a fin de garantizar el mantenimiento de un nivel alto de calidad y de reglas de acceso equitativas.
- teniendo en cuentas las nuevas posibilidades abiertas por el uso de las tecnologías de la información y la comunicación, es importante que quede claro que ante todo son los establecimientos de educación superior los que utilizan esas tecnologías para modernizar su trabajo, y no son que las TIC sustituya a estos centros para impartir la enseñanza.

El Aprendizaje Basado En Las Tecnologías: E-learning

El concepto de e-learning es el suministro de programas educacionales y sistemas de aprendizajes a través de medios electrónicos, caracterizada por una separación física entre profesor y alumno. Se basa en el uso de una computadora u otro dispositivo electrónico, como un teléfono móvil, para proveer a las personas de material educativo.

Entre profesor y alumno, predomina una comunicación de doble vía asíncrona donde se usa preferentemente Internet, aunque también comprende la entrega de material educativo a través de

cualquier medio electrónico como pueden ser Internet, Intranet, Extranet, audio, video, red satelital, televisión interactiva, CD y DVD, como medio de comunicación y de distribución del conocimiento, de tal manera que el alumno es el centro de una formación independiente y flexible, al tener que gestionar su propio aprendizaje, generalmente con ayuda de tutores externos.

La educación a distancia creó las bases para el desarrollo del e-learning que resuelve dificultades en cuanto a tiempos de sincronización de agendas, asistencia y viajes, problemas típicos de la educación tradicional además de poder involucrar una mayor variedad de equipo. Este término engloba un amplio conjunto de aplicaciones y procesos como el aprendizaje basado en la Web, capacitación basada en ordenadores, salones de clases virtuales y colaboración digital.

Algunas de las ventajas que ofrece este sistema son, una mayor productividad, entrega oportuna, capacitación flexible, y ahorros en los costos por participante. Una vez introducido el concepto general de e-learning, es obligatorio que exponamos que significa este concepto dentro del contexto que nos ocupa, el aprendizaje basado en las tecnologías. Tras las dos dimensiones que ofrece García Peñalvo del e-learning, se dispone a definir este como: “capacitación no presencial que, a través de plataformas tecnológicas, posibilita y flexibiliza el acceso y el tiempo en el proceso de enseñanza-aprendizaje, adecuándolos a las habilidades, necesidades y disponibilidades de cada discente, además de garantizar ambientes de aprendizaje colaborativos mediante el uso de herramientas de comunicación síncrona y asíncrona, potenciando en suma el proceso de gestión basado en competencias”.

Haciendo referencia a otro autor español, Salinas escribió en 2005, el e-learning ha atravesado tres etapas básicas:

- Etapa con enfoque tecnológico: la sofisticación del entorno es la clave para la calidad del proceso de enseñanza y aprendizaje.
- Una segunda etapa, donde la perspectiva es que el contenido es el centro.
- Una tercera etapa, con un enfoque metodológico centrado en el alumno, partiendo de criterios pedagógicos y con una adecuada combinación de los elementos implicados. Con el e-learning, hemos pasado a una educación a distancia definida por la Western Cooperative for Educational Telecommunications, como:

“Educación a distancia es la enseñanza que ocurre cuando el profesor y estudiante están separados por distancia, tiempo o ambos”.

Y también por Moore, en 1996, como:

“Educación a distancia es el aprendizaje planeado que normalmente ocurre en lugares diferentes y que requiere de tecnología especial para desarrollar los cursos, instrucciones especiales para la tecnología a usar, métodos especiales de comunicación, así como otro tipo de tecnología”.

A la formación virtual, e-learning, formación on-line, teleformación... entendidas como la modalidad de formación a distancia no presencial o semipresencial que utiliza una metodología específica basada en las TIC.

La American Society of Training and Development (ASTD), es la Asociación más grande a nivel mundial destinada al adiestramiento corporativo y al rendimiento de sus miembros. Esta asociación se pronuncia sobre el e-learning definiéndolo como

“término que cubre un amplio grupo de aplicaciones y procesos, tales como aprendizaje basado en web, aprendizaje basado en ordenadores, aulas virtuales y colaboración digital.

Incluye entrega de contenidos vía Internet, intranet/extranet, audio y vídeo grabaciones, transmisiones satelitales, TV interactiva, CD-ROM y más”.

Rosenberg escribió en 2001 que el e-learning es “el uso de tecnologías Internet para la entrega de un amplio rango de soluciones que mejoran el conocimiento y el rendimiento. Está basado en tres criterios fundamentales:

- El e-learning trabaja en red, lo que lo hace capaz de ser instantáneamente actualizado, almacenado, recuperado, distribuido y permite compartir instrucción o información;
- Es entregado al usuario final a través del uso de ordenadores utilizando tecnología estándar de Internet.
- Se enfoca en la visión más amplia del aprendizaje que van más allá de los paradigmas tradicionales de capacitación”.

En todas las definiciones que hacen referencia al concepto de e-learning, se hace mención ya sea implícita o explícitamente a lo que se conoce como el triángulo del e-learning, formado por la tecnología (plataformas, campus virtuales...), los contenidos (calidad y su estructuración, que se toman como elementos referenciales para el éxito de una iniciativa de e-formación), y los servicios (elementos de gestión, elementos de comunicación...). Variando el peso de estos tres componentes se obtienen diferentes modelos de e-formación, de igual forma que variando las variables y recursos con los que cuenta un profesor se obtienen diferente políticas de docencia presencial.

CASO DE LA UNIVERSIDAD CORPORATIVA FUNDACIÓN CAJA RURAL DE TOLEDO

Este tipo de iniciativas de las empresas privadas suponen un valor añadido para el elemento formativo dentro de las características de la empresa. Los caracteres formativos de las empresas van encaminados a crear líneas de formación continua dentro de la disciplina empresarial, el corporativismo, para crear unos nexos de unión dentro de la empresa y un continuo reciclaje en los procedimientos de la empresa.

En este punto es en el que aparecen plataformas de formación repletas de contenidos para que los potenciales usuarios puedan elegir aquellos contenidos más idóneos para su uso. El caso de la Universidad de la Fundación Caja Rural de Toledo es un verdadero escaparate de las opciones que se pueden elegir para tener una formación continua en cualquier campo.

Para que los contenidos sean completos es indispensable que la Plataforma tenga un importante respaldo de proveedores de contenidos y de instituciones dedicadas a la Formación Superior y que a través de la Universidad Corporativa puede llegar a un mayor número de personas a través de los cauces de las Nuevas Tecnologías.

la Universidad Corporativa Fundación Caja Rural de Toledo (UCFRT), diversas actividades formativas destinadas al fomento del tejido sociolaboral de la región, gracias a los acuerdos estratégicos establecidos con diversas instituciones educativas, entidades y asociaciones.

Proyectos

- Cátedra de Estudios Cooperativos: Fundación Caja Rural de Toledo y la Universidad de Castilla-La Mancha firmaron el 24 de enero de 2005 el convenio por el que se constituía la Cátedra de Estudios Cooperativos, desde entonces y a través de esta institución, se han desarrollado numerosas iniciativas y un apoyo constante a la generación de estudios, artículos, intervenciones y ponencias con el objetivo de desarrollar el entorno en el que se encuentra la Fundación. La Cátedra de Estudios Cooperativos creaba además en 2006 como fruto del acuerdo firmado entre la Universidad de Castilla-La Mancha y Fundación Caja Rural de Toledo el Master en Dirección de Empresas Cooperativas (MBA+COOP) impartido en la Facultad de Ciencias Jurídicas y Sociales de Toledo.

- Cursos para la Asociación Nacional de Profesores de Enseñanza (ANPE): Fundación Caja Rural de Toledo organiza para la Asociación Nacional de Profesores de la Enseñanza (ANPE TOLEDO) una serie de cursos con los que han formado hasta el momento a más de 760 profesores mediante metodología eLearning y a través de UCFCRT. Materias homologadas por la Consejería de Educación:
 - Derechos y deberes de los alumnos
 - Procedimiento Administrativo de los centros educativos
 - Ordenación de educación Infantil y Primaria
 - Ordenación de Educación Secundaria
- Cursos de Inglés: Fundación Caja Rural de Toledo ha firmado un acuerdo con la Federación de Empresarios de Toledo (FEDETO) para organizar la oferta formativa de varios cursos de inglés de nivel avanzado.
- Curso de Experto en Administración Local y Electrónica: Fundación Caja Rural de Toledo y el Departamento de Derecho Administrativo de la Universidad Nacional a Distancia (UNED) organizan anualmente el Curso de Experto en Administración Local y Electrónica.

Un Equipo Docente formado por expertos de reconocido prestigio en la materia, imparte este curso que tiene el objetivo de desarrollar un pormenorizado estudio de la Administración local en todos sus niveles, y en especial, de su organización y funcionamiento. Se hace especial hincapié en la gestión de los municipios, concretamente en lo que se refiere a la gestión y relación con las entidades locales a través de medios telemáticos.

- Desarrollo de Programas de eLearnig para América Latina: Fundación Caja Rural de Toledo ha firmado un convenio con la Universidad del Pacífico encaminado a fomentar el desarrollo de iniciativas, proyectos y nuevas oportunidades de negocio, principalmente en el ámbito de la educación virtual.

Este proyecto está impulsado por el Fondo de Desarrollo de la Educación Superior de Colombia (FODESEP) y pretende además promover la realización de investigaciones científicas sobre el inmenso patrimonio del contexto socio cultural de la región.

- Acuerdo con Fundación ADECCO para la Integración Laboral: Fundación Caja Rural de Toledo ha firmado un acuerdo con la Fundación Adecco para la Integración Laboral que consiste en desarrollar una plataforma eLearning que de soporte a la realización del proyecto Formación y Sensibilización Ambiental a Colectivos Desfavorecidos.
- Online Educa: Fundación Caja Rural de Toledo participa en esta feria que se celebra anualmente y en la que se dan cita representantes del sector educativo de todo el mundo constituyendo un marco de referencia para conocer las últimas tendencias e innovaciones de la educación virtual, establecer alianzas y desarrollar negocios
- Instituto de Tecnología en Conhecimento (ITC). Empresa que desarrolla productos y servicios educacionales, y que actúa en consultoría de formación corporativa.
- NET LEARNING. Comenzaremos trabajando con dos cursos en implementaciones de e-learning -uno de ellos en portugués-. Estos cursos se sumarán al catálogo de la Universidad Corporativa de la Fundación Caja Rural de Toledo.
- Gobierno del Callao/ Proyecto Redes Educativas. Sistema de administración de las escuelas de la región, que incorporará el módulo de e-learning con el catálogo de cursos de la Universidad Corporativa de la Fundación Caja Rural de Toledo.

- Universidad de Belgrano. Se firmó un convenio de colaboración orientado a desarrollar proyectos de e-learning y soluciones multimedia, que también contempla la posibilidad de generar oportunidades de IPTV. Los cursos virtuales que se generen en el marco de este convenio, pasarán a formar parte del catálogo de la Universidad Corporativa de la Fundación Caja Rural de Toledo.

CONCLUSIONES

Como conclusión podemos resumir que los sistemas que promueven los procesos de enseñanza-aprendizaje a través de sistemas de *e-learning* tienen una gran importancia para consolidar la denominada Sociedad del Conocimiento. Estos medios introducen a un número elevado de personas en la formación básica o avanzada, además de poder mejorar su cualificación personal o su situación profesional. Estos sistemas tienen un campo enorme de aplicación ya que la formación puede orientarse de forma complementaria a nivel de educación primaria y secundaria, de forma complementaria o exclusiva a nivel universitario, de postgrado o de formación continua, y de formación especial a medida en las empresas.

No obstante, el campo del *e-learning* está en sus fases iniciales y aun le falta largo recorrido hasta alcanzar un desarrollo óptimo. En este camino se presentan diferentes líneas de investigación en el campo pedagógico y en el campo tecnológico, enriqueciéndose cuando se produce una mezcla de los intereses de ambos colectivos por conseguir unos mejores productos, y empobreciéndose cuando los actores de un extremo se empeñan en ignorar a los del otro.

Aunque nos referimos a lo largo de este artículo a la importancia y uso de las nuevas tecnologías en la educación, no podemos olvidarnos del factor humano, que se convierte en la pieza más importante cuando se quiere acometer una estrategia basada en la e-formación. En un proceso de enseñanza-aprendizaje ni las plataformas tecnológicas, ni los modelos pedagógicos son el fin sino el medio para conseguir el objetivo último del proceso, esto es, aumentar el conocimiento y la formación de las partes implicadas. De forma que se tiene que tener presente que en los extremos de estos medios se encuentran personas que son los destinatarios de estas nuevas formas de enseñanza con el objetivo de facilitarla, y son ellos los que han de creer en los beneficios que pueden aportar estas soluciones. Sin su aceptación, compromiso y entrega será imposible que el *e-learning* triunfe en una organización.

BIBLIOGRAFÍA

BOWEN, J. y HOBSON, M. (2004). Teorías de la educación. México: Editorial Limusa, S.A.

FERRO BAYONA, J. (1985). La investigación como base del desarrollo científico y tecnológico. Anuario científico. Barranquilla, Universidad del Norte, Vol. IV, pp. 99 – 110.

GÓMEZ, C. La investigación como estrategia de aprendizaje. Eureka. Barranquilla, Instituto de Estudios Superiores en Educación-Universidad del Norte, Edición No. 3.

HABERMAS, J. (2000). Nuestro Breve Siglo (Documento en red: [http://www.latinamerica.dpi.org/documents/](http://www.latinamerica.dpi.org/documents/HABERMANSJ-NUESTROBREVESIGLO.doc)

HABERMANSJ-NUESTROBREVESIGLO.doc).

HEIDEGGER, M. (1997). Caminos de Bosque. Madrid: Editorial

HORKHEIMER, M. (1973). Crítica de la razón instrumental. Buenos Aires: Sur.

HORKHEIMER, M. y ADORNO, Th. (1998). *Dialéctica de la Ilustración: fragmentos filosóficos*. Madrid: Trotta.

HOYOS, G. y VARGAS GUILLÉN, G. (1997). *La teoría de la acción comunicativa como nuevo paradigma de investigación en ciencias sociales: las ciencias de la discusión*. Bogotá: Icfes.

HOYOS, G. et al. (2002). *Educación superior: sociedad e investigación*. Bogotá: Colciencias-Ascun.

HOYOS, G. (2003). *El ethos de la universidad*. Monografías virtuales: ciudadanía, democracia y valores en sociedades plurales. OEI, Número 3, octubrenoviembre.

MAJMUTOV, M. (1983). *La enseñanza problemática*. La Habana: Editorial Pueblo y Educación.

RAWLS, J. (1989). *Liberalismo político*. México: Fondo de Cultura Económica.

REICH, R. (1996). *The Paradoxes of Education in Rorty's Liberal Utopia*, Philosophy of education. StanfordUniversity. (Documento en red: http://www.ed.uiuc.edu/eps/PES-Yearbook/96_docs/reich.html).

SMITH, R. (2004). *Abstracción y finitud: educación, azar y democracia*. IX Congreso Bienal de INPE. Madrid: Universidad Complutense.

THIEBAUT, C. (1989). «La Escuela de Francfort», en Victoria Camps (ed), *Historia de la Ética*, Vol. III., Grijalbo, Barcelona.

VARGAS GUILLÉN, G. (2004). «Kant y pedagogía; fenomenología de la génesis individual y colectiva del imperativo moral», en: *Inmanuel Kant: Tratado de pedagogía*, Universidad del Valle, Cali.

VASCO, C. (1990). *Tres estilos de trabajo en las ciencias sociales*, CINEP, Bogotá, 1990.

WAIN, K. (2004). *Contingencia, educación y necesidad de seguridad*, IX Congreso Bienal de INPE – Universidad Complutense, Madrid.

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LA DIRECCION ESTRATEGICA EN LAS EMPRESAS COOPERATIVAS ALMAZARAS. PROPOSICIÓN DE UN MODELO EXPLICATIVO DE LOS DETERMINANTES DEL RESULTADO EMPRESARIAL COOPERATIVO

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RESUMEN

En la actualidad, en un mundo en constante cambio, rodeadas e inmersas en un proceso, ya realidad, que es la globalización, las empresas cooperativas agrarias almazaras necesitan cuestionarse de qué forma van a afrontar la creciente competencia derivada de dicha globalización económica. De ahí nace la justificación del por qué la estrategia debe ser un instrumento fundamental y crucial que ayude a la alta dirección en su toma de decisiones, la dirección estratégica y el planeamiento estratégico se convierten en el referente principal de la gestión empresarial y más aún, en técnica fundamental para poder responder exitosamente a esa pregunta básica para mantener los principios intrínsecos de cualquier organización empresarial: subsistencia, fortaleza y crecimiento. La estrategia empresarial es uno de los temas estrella en el campo de la organización y dirección de empresas. No obstante, existen dificultades teóricas para una rigurosa delimitación del concepto y el escaso conocimiento de las posibilidades existentes para su medición, dificultan el contar con una base de datos donde el directivo pueda embeberse de conocimiento para que este sea un input que le ayude a no tomar decisiones erráticas, más aún en el campo de la Economía Social y dentro de este en el área de las empresas cooperativas agrarias almazaras.

Palabras clave: Dirección Estratégica, Economía Social, almazaras, cooperativa y aceite.

INTRODUCCIÓN Y OBJETIVO DE LA INVESTIGACIÓN

Dentro del área de organización y dirección de empresas, no cabe duda de que el tema de la estrategia empresarial ha sido y sigue siendo un tema fundamental. Además, la preocupación tradicional por los aspectos estratégicos se ha visto cada vez más reforzada por las circunstancias de un entorno repleto de situaciones de crisis económicas y de procesos de gran expansión de las empresas (Bueno, 1996). Sin embargo, a pesar de las dificultades existentes en el avance teórico de los temas estratégicos y aún con la empírica en el campo de la dirección de empresas, los avances que este tipo de investigación están teniendo en lo referido a temas estratégicos marchan a un ritmo lento y sin duda menor al de los estudios realizados por los teóricos de la estrategia (Hambrick, 1980; Venkatraman y Grant, 1986). En este nuevo escenario macroeconómico, social y cultural destaca el factor de la globalización, esto es, de la alta adaptabilidad y flexibilidad empresarial, debido a la eliminación de barreras arancelarias, oscilación que hacen todavía más vulnerable a las cooperativas agrarias. En este sentido la Dirección Estratégica se ha convertido en la principal herramienta utilizada por las empresas para el establecimiento sólido de sus negocios en entornos vez más cambiantes, lo que exige empresas con estructuras ágiles y adaptables a las transformaciones sociales, económicas y políticas. Este estudio pretende constituirse en una herramienta imprescindible para la reflexión estratégica en el marco de la dirección estratégica y de la calidad total en el que debe desenvolverse las cooperativas agrarias almazaras para desarrollar al máximo sus capacidades y ventajas competitivas sobre la competencia.

La Dirección Estratégica En La Empresa Cooperativa

La sociedad cooperativa se diferencia del resto de las sociedades mercantiles en su gestión democrática, manifestándose la misma en la participación de todos los socios en la toma de decisiones; es una sociedad de empresarios que participan en los flujos reales (participación en la producción y distribución de bienes y servicios) actuando como proveedores y/o consumidores; en los flujos financieros (de cobros y pagos, consecuencia de la traducción de los flujos reales) aportando recursos financieros; y en los flujos de información. Decisión, estableciendo democráticamente los objetivos que ha de perseguir la organización. En las características de estos flujos de información-decisión en las almazaras habrá que detenerse para tratar de explicar cómo se toman las decisiones y quién controla la gestión de la organización.

El reparto de poder y del controles una de las características de la almazara como sociedad cooperativa y que la diferencia de otras formas organizativas y cuyas funciones recaen en los socios. El poder se ejerce por todos los socios desde la ásamela general a la hora de fijar los objetivos de la organización, al igual que el control, desde el punto de vista en que los socios exigen unos resultados acordes con sus expectativas, por lo que piden explicaciones y cuentas a los miembros encargados de llevar la dirección de la almazara cooperativa con cierta regularidad. Los flujos de información y decisión suponen la base de la organización de la sociedad cooperativa. En ellos, están incluidos la distribución de la información necesaria entre todos los miembros de la organización y el posterior proceso de toma de decisiones, en el que se fijarán las estrategias, políticas y tácticas a seguir en la organización. También es interesante para el socio la información referente a la realización de nuevas inversiones en la almazara, pues es éste, el que en última instancia decidirá en asamblea general la realización o no de dichas inversiones. El problema con el que nos encontramos al proporcionar esta información es que la opinión del socio obre la viabilidad de la inversión estará en función de cómo sea presentado el proyecto por el consejo rector a la asamblea general, pues el socio no suele tener conocimientos suficientes para analizar en profundidad la rentabilidad económica y financiera de la inversión, confiando en la información proporcionada por el consejo rector para tomar la decisión. La participación en la toma de decisiones: instrumento de generación de información para la dirección estratégica.

En la sociedad cooperativa de primer grado como sociedad de personas, todos los socios-empresarios participan por igual y de manera democrática en le proceso de toma de decisiones y de fijación de políticas de actuación de la organización. La participación de los socios en la estructura organizativa obedece al hecho de pertenecer a la organización, es decir, ser propietario y proveedor de aceituna y no tiene como base el puesto que desarrollan los individuos en la misma o los conocimientos que éstos poseen. Por tanto, la sociedad cooperativa está basada en la voluntad de los socios (Rosembuj, 1982), los cuales se reúnen como mínimo una vez al año, estando legitimados para establecer democráticamente lo que pretenden conseguir, de esta forma ejercen su derecho a participar en la gestión. La democracia e el sistema a través del cual la participación toma sentido, haciendo que los individuos se sientan identificados con la marcha de la sociedad. Dicha participación democrática se canaliza a través de la Asamblea General. En el cuadro siguiente, se muestra como es contemplado el principio democrático en la toma de decisiones en diferentes legislaciones

La participación de los socios en la gestión hay que entenderla como la participación en la toma de decisiones, es decir, la fijación de los objetivos generales de la organización, ya que los objetivos operativos y concretos, que han de permitir la consecución de los generales, corresponden al Consejo Rector, el cual se ha elegido democráticamente, representando a un consejo de administración tradicional, que supervisa la labor de los directivos profesionales, quienes le han de suministrar resultados de forma periódica.

Aunque los socios que forman la Asamblea General tengan el poder de decisión, se han de atener al contenido de la s leyes y reglamentos emanados de los órganos competentes, así como al contenido de los estatutos fijados en su día por la propia asamblea general, a partir de aquí es ésta la que elige

democráticamente en su seno a un conjunto de personas que formarán el Consejo Rector y sobre el cual, se delegará el cumplimiento de los objetivos fijados en la Asamblea General por el conjunto de socios. Por último, está la dirección de la almazara cooperativa, que en ocasiones es ocupada por un directivo profesional, designado por el consejo rector, sobre el que recae la responsabilidad de obtener unos buenos resultados para la empresa satisfacer las necesidades de los socios. En otras ocasiones esta dirección es ocupada por uno o alguno de los miembros del Consejo Rector, bien porque en la almazara cooperativa no existen medios para contratar a un directivo profesional, o el Consejo Rector o estima necesario la presencia de esta persona en la organización.

De todas formas, la participación no podría llevarse a cabo si no existiera en la sociedad cooperativa una comunicación continua, frecuente y rápida entre todos los socios, que en la mayoría de las ocasiones se desarrolla verbalmente y de un modo informal entre las distintas personas implicadas en el proceso de decisión, por lo que las noticias, las decisiones adoptadas, y los problemas de la organización son conocidos rápidamente por todos los socios, sin necesidad de tener que enviar ninguna comunicación, ni realizar una ásamela general. Este comportamiento de los socios es más frecuente en aquellas localidades de reducida dimensión, al ser tanto la almazara cooperativa como sus instalaciones el único punto de encuentro en la localidad (García Martí, 2002). Dicha comunicación es conveniente desde el punto de vista que mejora el funcionamiento interno de la sociedad , al estar todos los socios informados de los problemas existentes y de las actuaciones que han de llevar a cabo, cobrando la democracia una nueva dimensión, al hacer que los socios se sientan identificados con la marcha de la sociedad y despertando su interés en la participación en la organización, que en ocasiones aunque no se desarrolle esta de forma directa, el socio participa con su opinión e ideas de forma indirecta a través de otros , ya sea por vínculos familiares o de amistad. “La comunicación, es base de la democracia en el contexto de las sociedades cooperativas, y ha de entenderse como un medio de integración de los recursos humanos en las políticas y en la gestión de la realidad socio-empresarial” (Goienetxa, 1993).

En segundo lugar, el sistema de dirección-participación es complejo por la existencia de relaciones de participación múltiples: en propiedad, en los beneficios, en las decisiones y en la gestión. En algunos casos se dan las cuatro relaciones en una misma persona, complicando aún más la situación. Las cooperativas que poseen socios de trabajo, el socio-trabajador participa en la propiedad mediante la aportación de un capital obligatorio inicial, en los beneficios en su calidad de trabajador, en las decisiones al formar parte de la Asamblea General y en la gestión cuando el empleado forma parte del Consejo Rector. Así, el principio de administración democrática, que tradicionalmente se ha caracterizado por el lema de un socio, un voto, se está modificando con la aplicación del voto proporcional. Igualmente, se está concediendo una mayor libertad de acción al gerente y al Consejo Rector con el fin de facilitar la flexibilidad y la capacidad de respuesta a los cambios del entorno con mayor rapidez a costa de una pérdida de poder de decisión de la Asamblea General y, por tanto, de los socios (Thordarson, 1992).

EL MÉTODO DEL CASO CÓMO INSTRUMENTO DE INVESTIGACIÓN EN LA DIRECCIÓN ESTRATÉGICA DE LAS ALMAZARAS COOPERATIVAS DE LA PROVINCIA DE TOLEDO

La metodología del caso como estrategia de investigación pretende, poner de manifiesto su conexión con lo que es el auténtico objetivo de la ciencia, es decir, explicar los fenómenos que ocurren en las organizaciones objeto de estudio. Una de las razones por las que se elige la aplicación del método de casos, es por su capacidad para derivar una serie de conclusiones generales a partir de un número de casos seleccionados, tratando de descubrir los factores que inciden, condicionan o determinan las características del problema objeto de estudio. Se entiende el estudio de casos como: "una investigación empírica, que estudia un fenómeno contemporáneo dentro de su contexto real, cuando las fronteras entre el fenómeno y el contexto no son evidentes, y en los que se utilizan múltiples fuentes de evidencia" (Yin, 1994).

El tipo de estudio de casos utilizado, siguiendo la clasificación de Stake (1994) se puede considerar como un estudio colectivo de casos de carácter instrumental. Intentando explicar el proceso de profesionalización de las almazaras cooperativas andaluzas, para lo cual se utilizan varios casos, con la finalidad de que proporcionen una mayor comprensión y quizás una mejor teorización, del comportamiento de los socios, dado el bajo grado de elaboración de las teorías precedentes que explican el fenómeno estudiado. Si utilizamos la clasificación que realiza Yin (1994), es un estudio de casos exploratorio, pues el objetivo es descubrir hipótesis susceptibles de generalización respecto a las actuaciones observadas, para ello se trabaja con casos múltiples, aunque puede, también, el resultado final obtenido satisfacer propósitos explicativos, proporcionando explicaciones convincentes de las prácticas observadas en el mundo real.

La entrevista utilizada no es una herramienta neutral sino que está profundamente influenciada por el entrevistador y por sus características, así como por las del entrevistado y su contexto, teniendo la información carácter individual entre el entrevistador y el entrevistado. Igualmente, su carácter es holístico pues recorre el mundo de significados del actor social; es una información no directiva, al desarrollarse bajo el control y la dirección del entrevistador sin implicar esto rigidez ni en el contenido ni en la forma de desarrollar la conversación, manteniendo esta con preguntas abierta, apoyada siempre en la capacidad de iniciativa particular del individuo. Todo ello implica que la información ha sido experimentada y absorbida por el propio entrevistado y se proporciona con una orientación e interpretación significativas de la experiencia del mismo.

Se busca interpretar un mundo exterior objetivo que no coincide totalmente con la descripción del entrevistado. El mundo subjetivo que este ha propuesto sirve para profundizar en su riqueza de contenido, para lo cual es necesario combinar preguntas abiertas y cerradas, adquiriendo la comunicación no verbal tanta o mayor importancia que la comunicación oral. Por tanto, la comunicación que se ha desarrollado, en muchas ocasiones tiene como canales y código de símbolos, gestos, movimientos del cuerpo y sonidos que sustituyen a la expresión verbal. Es necesaria la realización de entrevistas en profundidad, abiertas y semidirigidas. En las mismas, en un primer momento, se intenta descubrir la motivación del individuo para entrar a formar parte de una almazara cooperativa, en lugar de intentar conseguir ingresos por su cosecha de forma aislada; de esta forma se puede conocer que el objetivo que persiguen las partes al entrar en colaboración con otros socios es el incremento de la utilidad individual de cada uno de ellos. Esto puede dar lugar a un comportamiento oportunista por parte de los diferentes socios, debido a la divergencia existente entre los objetivos perseguidos por los mismos al integrarse en la sociedad cooperativa, derivados dichos objetivos de las distintas funciones de utilidad que poseen los socios. El comportamiento oportunista existente en el interior de la empresa se puede ver disminuido en la medida en que se consigan alinear los objetivos de ambas partes, es decir, llegar a un consenso. Por otra parte, se intenta observar la estructura organizativa de las sociedades cooperativas almazareras toledanas objeto de estudio y cual ha sido su evolución en el tiempo, estudiando las características de cada uno de los participantes en la organización y el papel que desempeñan en la misma. También se observa la evolución en la gestión de dicha sociedad, es decir, el proceso de profesionalización de la gestión que es necesario acometer para ser competitivas en el entorno en el que esta inmersa la cooperativa.

Se quiere conocer como los socios delegan en la dirección para que esta adopte las decisiones que crea oportunas para el logro del correcto funcionamiento de la almazara cooperativa, tratando de evitar los problemas de agencia o morales, que se presenta en los casos en los que la acción de la dirección no es verificable o en las situaciones en las que esta recibe información privada una vez que se ha iniciado la relación (Macho y Pérez, 1994). Puesto que los socios no pueden verificar el esfuerzo que realiza la dirección en su labor ni conocen si sus actos se orientan efectivamente en beneficio de sus intereses.

También se intenta observar la capacidad que sobre la toma de decisiones y sobre la dirección de la sociedad tienen cada uno de los miembros de la almazara cooperativa. Tratando de solucionar el conflicto

de competencias que puede aparecer entre el directivo, el consejo rector y la asamblea general de socios. Esta capacidad puede depender, por una parte, de las características personales y conocimientos especializados que tenga la persona en cuestión y, por otra, de la capacidad de actuación que sea concedida por la sociedad. Las características personales y los conocimientos especializados que tenga el directivo van a poner de manifiesto el problema de señalización, que se presenta ex-ante en la relación entre ambas partes, cuando la parte mejor informada realiza algún acto verificable, que si es correctamente interpretado por su contrapartida, puede indicar la presencia de otras características deseables, pero no directamente observables (Acs y Gerlowski, 1996), en un primer momento de la relación. La manifestación más común de la señalización se produce cuando el directivo desea informar al socio de que sus cualidades son las idóneas para que deposite en él su confianza, llevando a cabo acciones que de algún modo ponen de manifiesto este hecho.

En cualquier caso, en este punto se debe observar que, independientemente la modalidad del problema de agencia, el resultado final es la posibilidad de que una de las partes se comporte de manera oportunista, persiguiendo metas particulares y lesionando los intereses de la otra parte. Por lo que ante la imposibilidad material de formalizar las relaciones de agencia en contratos explícitos, que especifiquen el modo en que ha de comportarse cada una de las partes, el socio debe incurrir en un coste con la finalidad de supervisar las actividades de la dirección, para intentar eliminar los comportamientos oportunistas de alguna de las partes de la relación.

Método Del Caso: Almazaras Cooperativas De La Provincia De Toledo

El trabajo de campo realizado para la presente investigación se materializó mediante entrevistas a directivos y personal de las almazaras cooperativas toledanas con el fin de abordar temas como la composición del consejo rector, la profesionalización de la gestión mediante la figura de un gerente profesional, la comercialización, las innovaciones así como la introducción de las tecnologías de la información (TIC) en el sector. También se realizaron entrevistas directas con el gerente de la cooperativa de segundo grado Oleotoledo, que centraliza la comercialización y gestión de 39 cooperativas almazaras de la provincia de Toledo. La evolución del número de cooperativas almazaras en la provincia de Toledo ha ido creciendo, a pesar de las dificultades por las que ha ido atravesando el sector. El éxito de su crecimiento y permanencia en el mercado está en las personas, que son grandes conocedoras de su negocio

El tamaño de las almazaras es pequeño, lo que va a dificultar llevar a cabo grandes inversiones, y poder estar presente en mercados y canales donde la competencia comercial es alta, y hay grandes grupos que dominan importantes cuotas de mercado. Dos indicadores se han tenido en cuenta en esta investigación para medir el tamaño de las cooperativas:

Número de socios: 475 socios (media socios 2006).

Número de trabajadores: el 81,59 % tienen menos de tres trabajadores fijos (sobre la media de los últimos cinco años).

La importancia de las cooperativas no solo tiene que ver con la producción, siendo la cooperativa un instrumento de arraigo a la localidad, ya que genera rentas para el agricultor además de dar trabajo directo e indirecto a muchas personas, que de otra forma se verían obligadas a emigrar hacia las grandes ciudades en busca de trabajo

Se ha comprobado la alta implicación del Consejo Rector, en especial del presidente y el secretario en las actividades directivas, llevando a cabo las acciones propuestas por el Consejo Rector, que fueron aprobadas por los socios democráticamente. En general no existe la figura de un gerente, pero si la de un líder o líderes dentro del Consejo Rector, que marcan las pautas o el camino a seguir.

Socios

La edad media de los socios supera los 50 años, siendo una de las características del mundo cooperativo en general. Ya que en muchos se nota la dificultad para tener recambio generacional.

La participación de las mujeres en el mundo cooperativo almazarero es muy reducida, sólo un 8% de los miembros del consejo rector son mujeres, y cerca del 2% el número de mujeres contratadas por las almazaras del sector cooperativo de la provincia de Toledo.

Diversificación

Aunque el negocio principal es producir aceite, un 41 % de las almazaras, está ofreciendo otro servicio más a sus socios o están dedicándose a otra actividad. Aunque un 9 % tiene una actividad compartida, siendo el 90 % de ella la bodega, para transformar la uva en caldos, en vino y derivados. Entre los servicios accesorios o actividades secundarias de la cooperativa se encuentra como el principal el suministro de carburante. El 30 % de las Almazaras ofrecen a sus socios carburantes a un precio inferior al que se ofrece a mercado. Seguido por un 19 % de venta de abonos.

BIBLIOGRAFÍA

ACS, ZOLTAN J. Y GERLOWSKI, DANIEL A. (1996): *Managerial Economics and Organization*, Prentice Hall, Upper Saddle River, New Jersey.

ALONSO, L. E. (1998): *La mirada cualitativa en Sociología*, Fundamentos, Madrid.

ANSOFF, H. I. (1985): *La dirección y su actitud ante el entorno*, Deusto, Bilbao.

BARNEY, J.B. (1991): *Firm resources and sustained competitive advantage*, Journal of Management, nº 1, págs. 4-12.

BROWN, S. y BLACKMON, K. (2005): *Aligning manufacturing strategy and business-level competitive strategy in new competitive environments: The case for strategy resonance*, Journal of Management Studies, Vol. 42, n.4.

BUENO CAMPOS, E., (1996): *Dirección estratégica de la empresa*, Metodología, técnicas y casos, Pirámide, Madrid.

CAMPBELL-HUNT, C. (2000): *What have we learned about generic competitive strategy? A meta-analysis*. Strategy Management Journal, vol.21, n.2.

CLEVELAND, G., SCHROEDER, R.G. Y ANDERSON, J.C (1989): *A theory of production competence*. Decision Sciences, vol. 20, n.4.

DEAN, J.W. y SNELL, S.A. (1996): *The strategic use of integrated manufacturing: An Empirical examination*. Strategic Management Journal, vol.17, n.6.

DE MEYER, A. NAKANE, MILLER, J. G. y FERDOWS, K (1989): *Flexibility: the next competitive battle the manufacturing futures survey*. Strategic Management Journal. Vol. 10, n.2.

Edwards, C.; Ward, J. y Bytheway, A. (1998). *Fundamentos de Sistemas de Información*. Prentice-Hall. Madrid.

DESS, G.G. y DAVIS, P.S. (1984): *Porter's (1980) generic strategies as determinants of strategic group membership and organizational performance*. Academy of Management Journal. Vol.27, n.3.

FERDOWS, K. y DE MEYER, A. (1990): *Lasting Improvements in manufacturing Performance: In Search of a new theory*. Journal of Operations Management, vol.9, n.2.

GARCÍA MARTÍ E. (2002): Cooperativas: La necesidad de una dirección adecuada, Universidad de Jaén.

GOIENETXEA, J. (1993): La información: base del ejercicio de la cooperación, Revista de trabajo y unión, nº 370.

GRANT R. M. (1986): «Toward a knowledge-based theory of the firm», *Strategic Management Journal*, 17, Winter.

GUPTA, Y.P. Y SOMERS, T.M. (1996): Business strategy, manufacturing flexibility, and organizational performance relationships: A path analysis approach, *Production and Operations Management*, Vol. 5, n.3, pp. 204-233.

GUPTA, Y.P. y LONIAL, S.C. (1998): Exploring linkages between manufacturing strategy, business strategy and organizational strategy, *Production and Operations Management*, Vol. 7, n.3.

HAMBRICK, D.C. (1983): *High profit strategies in mature capital goods industries: A contingency approach*, Academy of Management Journal, Vol. 26, n.4.

HAYES R. y WHEELWRIGHT S. (1984): *Restoring our Competitive Edge: Competing Through Manufacturing*, John Wiley and Sons, New York.

HILL, C. W. L., y JONES, G. R. (1996): Administración estratégica. Un enfoque integrado. 3.^a ed. McGraw-Hill, Santafé de Bogotá.

JONES, G.R. Y BUTLER, J.E. (1988): “Costs, revenue, and business-level strategy”, *Academy of Management Review*, Vol. 13, n.2, pp. 202-213.

KATZ, D. Y KAHN, L. (1966): *The Social Psychology of Organizations*, New Cork: Wiley.

KHOTA, S. Y VADLAMANI, B.L (1995): *Assessing generis strategies: An empirical investigation of two competing typologies in discrete manufacturing industries*, *Strategic Management Journal*, Vol. 16, n.1, pp. 75-83.

KLASSEN, R.D. Y WHYBARK, D.C. (1999): *The impact of Environmental Technologies on Manufacturing Performance*, Academy of Management Journal, Vol. 42, n.6, pp. 599-615.

MILLER A. Y DESS, G.G. (1993): “Assessing Porter's (1980) model in terms of its generalizability, accuracy and simplicity”, *Journal of Management Studies*, Vol. 30, n.4, pp. 553-585.

MILES, R. E. y SNOW, CH. C. (1978): *Organizational Strategy, Structure and Process*, McGraw-Hill Inc.

PÉREZ, G. (1994): Investigación cualitativa. Retos e interrogantes, editorial Muralla, S. A., Madrid.

PRESCOTT, E.C.(1986): Theory Ahead of Business Cycle Measurement. *Federal Reserve Bank of Minneapolis Quarterly Review*, vol. 10, no. 4, Fall.

SKINNER, W. (1969): *Manufacturing-missing link in corporate strategy*, Harvard Business Review, Vol. 47, n.3.

STAKE, R. E. (1994): Investigación con estudio de casos. Ed. Morata, Madrid.

THORDARSON, B. (1992): La adaptación de los principios cooperativos al nuevo entorno europeo, Ciriec-Valencia.

VENKATRAMAN, N. Y RAMANUJAN, V. (1987): *Measurement of Business Economic Performance: An examination of method convergence*, Journal of management, Vol. 13, n.1, 109-123.

WARD, J.; GRIFFITHS, P. Y WITMORE, P. (1990): *Strategic Planning for Information Systems*, John Wiley & Sons.

WARD, P.T. y DURAY, R. (2000): Manufacturing strategy in context: environment, competitive strategy and manufacturing strategy, Journal of Operations Management

BIOGRAFIA

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INCORPORACIÓN DE LA CÁTEDRA CALIDAD DEL SERVICIO EN LA FORMACIÓN DE PROFESIONALES EN VENEZUELA

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RESUMEN

El presente trabajo tiene como principal objetivo explicar los fundamentos teóricos que sustentan la importancia, integración y pertinencia de la enseñanza de aspectos relacionados con la calidad del servicio en la formación de los futuros profesionales en Venezuela, lo cual permite promover el desarrollo de una cultura de calidad de servicio como agente diferenciador en la formación de los profesionales del futuro. Esta reflexión es el resultado de un trabajo de investigación de campo realizado en una primera fase en liceos bolivarianos y escuelas técnicas Robinsonianas y orientado hacia la formación de los futuros profesionales en Venezuela, donde se determinó que la Calidad del Servicio es parte integral del valor y reviste especial importancia como estrategia de servicio y de negocio en la economía cada vez más globalizada, la cual exige mayor y mejor preparación del talento humano. Igualmente, la incorporación de la cátedra Calidad de servicio en la formación de los nuevos profesionales en Venezuela queda sustentada en las propuestas del modelo educativo del Gobierno Bolivariano de Venezuela en por y para el trabajo, adecuados a la realidad del entorno y amparada por la constitución y las leyes.

Palabras Clave: Calidad de servicio, cultura de calidad de servicio, Liceos Bolivarianos

INCORPORATION OF THE CLASS QUALITY OF THE SERVICE IN THE FORMATION OF PROFESSIONALS IN VENEZUELA

ABSTRACT

The present work has as a main objective to explain the theoretical foundations that sustain the importance, integration and relevancy of the teaching of aspects related with the quality of the service in the formation of the professional futures in Venezuela, that which allows to promote the development of a culture of quality of service like differentiating agent in the formation of the professionals of the future. This reflection is the result of a work of field investigation carried out in a first phase in secondary schools bolivarians and technical schools Robinsonianas and guided toward the formation of the professional futures in Venezuela, where it was determined that the Quality of the Service is integral part of the value and you had special importance like strategy of service and of business in the economy more and more global, which demands bigger and better preparation of the human talent. Equally, the incorporation of the class Quality of service in the formation of the new professionals in Venezuela is sustained in the proposals of the Government's educational pattern Bolivarian of Venezuela in for and for the work, appropriate to the reality of the environment and aided by the constitution and the laws.

Keywords: Quality of service, culture of quality of service, Secondary schools Bolivarians

INTRODUCCIÓN

La formación de las nuevas generaciones debe girar en torno a los beneficios de ideales sociales que contribuyan a la elevación del profesionalismo, comprendiendo la necesidad de profundizar en los

métodos y acciones que contribuyan a formar una cultura de calidad de servicio e intrínsecamente, en la formación de valores ciudadanos, aplicados en la universidad y en la vida. Es necesario consolidar la preparación integral de los profesionales, con el objetivo de formar y desarrollar en ellos valores como: la confianza, responsabilidad, seguridad, solidaridad, trabajo en equipo, para fortalecer el desarrollo de su perfeccionamiento individual y profesional, en la seguridad de que lo aprendido le sea útil en todos los periodos de su vida, sin menoscabo de su vocación, sus creencias o nivel social.

Aporta métodos importantes desde el punto de vista teórico, al ofrecer elementos diferenciadores como guías para lograr una cultura orientada hacia la calidad de servicio, permitiendo ventajas competitivas entre las organizaciones. Desde el punto de vista científico la investigación aborda elementos teóricos relacionados con una cultura de calidad de servicio, referida a la educación superior, asumiendo así valor agregado a su vida profesional, la cual se traduce en bienestar para la organización y para su entorno. Desde el punto de vista práctico, aporta mecanismos que permiten enseñar patrones de cultura de servicio y propiciar una formación para el trabajo. A su vez, la orientación social va dirigida hacia la educación de valores con la formación de ciudadanos más responsables conscientes de su rol en la sociedad, que contribuyan en los planes de desarrollo de su región y del país.

REVISIÓN LITERARIA: LA CALIDAD DEL SERVICIO EN LATINOAMÉRICA Y EUROPA

Es importante mencionar las experiencias y/o relaciones de la Calidad del servicio en el ámbito educativo y algunos temas similares, para fundamentar las bases de la presente propuesta: Se puede afirmar que la idea sobre la calidad, la perfección y la mejora continua han existido en todas las culturas a lo largo de la historia, pero su aplicación dentro del contexto educativo está dando sus primeros pasos, y su enseñanza como parte del proceso de aprendizaje es casi nula. En este sentido, es importante realizar un esbozo general sobre los antecedentes de la calidad del servicio, para luego adentrarse en su aplicación dentro del contexto educativo en Venezuela, Latinoamérica y el mundo (Espinosa, 2006).

De acuerdo a Cruz (2006) los primeros estudios sobre la calidad se hicieron en los años 30 antes de la Segunda Guerra Mundial, en Estados Unidos. Cuando en 1939 estalló la Segunda Guerra Mundial, el control estadístico del proceso se convirtió poco a poco y paulatinamente en un arma secreta de la industria. Por su parte, Ortiz (2006) propone la aplicación de la mercadotecnia educacional, como una forma de organizar el intercambio y la comunicación entre profesores y alumnos, entre directivos educacionales y empresarios, en fin, entre la Universidad y la Empresa, la familia, la comunidad y otras escuelas u organizaciones.

Actualmente en Venezuela se ha propuesto dentro de los programas de la Educación Bolivariana la aplicación de programas de educación para el trabajo, como parte de la cultura de los estudiantes que integran las comunidades y de su idiosincrasia para la formación profesional e intelectual integral (Resolución N° 64 MED). Es bueno resaltar que en las fuentes consultadas no se consiguió ninguna investigación que reseñe la importancia de crear una Cultura de Calidad de Servicio en la formación de profesionales en Venezuela.

Basamentos Legales para la Inclusión de la Cátedra Calidad del Servicio

El Sistema Educativo Bolivariano ha enfocado sus planes hacia planes, políticas, programas y proyectos que permitan la inclusión, permanencia, prosecución, culminación y aumento de la cobertura de todos y todas en el sistema, en este sentido desde el año 2002 se ha enfocado hacia una educación emancipadora y dignificante en el marco de los principios constitucionales. Por su parte, las orientaciones que soportan la presente investigación se fundamentan en la idea de que el proceso educativo debe estar vinculado al trabajo, conforme a lo establecido en los artículos 7°, 21, 23 y 39 de la Ley Orgánica de Educación. En este mismo orden de ideas, se pueden describir otros aportes sobre la necesidad de contenidos novedosos

en los programas educativos, así tenemos el documento rector de la Universidad Bolivariana de Venezuela, el cual señala que los componentes de los programas de formación deben mantener un equilibrio para evitar la reproducción de las prácticas tradicionales en las cuales se excluyen aspectos de importancia para la formación integral, como por ejemplo, los programas de formación en los campos científicos-tecnológicos y considerar sin importancia los conocimientos socio-culturales y humanísticos. Finalmente es importante destacar que el nuevo paradigma que se construye, tiene como centro al humano como ser social y capaz de responder y participar activamente en la transformación de la sociedad en la que vive.

METODOLOGÍA

El enfoque de investigación es descriptiva, bajo la modalidad de campo, con un diseño no experimental transeccional. El proceso de recolección de información se realizó con una encuesta, conformada por veintidós (22) preguntas cerradas, atendiendo el escalamiento de Likert. La validez del instrumento se determinó a través de la técnica de juicio de expertos; para la confiabilidad se utilizó el método de estabilidad, revelando altamente confiable (r_{tt} :0.81). Los resultados fueron analizados mediante la estadística descriptiva.

RESULTADOS DEL ESTUDIO

La situación actual de una empresa u organización puede ser evaluada a través del análisis externo e interno que realice el investigador, en este sentido, el análisis de fortalezas y debilidades internas de la organización, y las amenazas y oportunidades que enfrenta, son enmarcados en la definición de diagnóstico estratégico, realizado por Serna (2003), quien señala la importancia de obtener y procesar información sobre el entorno, para definir estrategias organizacionales aprovechando las fortalezas y previniendo el efecto de las debilidades, anticipándose para aprovechar las oportunidades y prevenir oportunamente el efecto de las amenazas. Como resultado de la investigación, se pudo detectar que la propuesta se ve favorecida por la constitución y las leyes y reglamentos en materia educativa. Apuntando las amenazas hacia una marcada crisis de valores, quedando claro que existe un arraigado proceso de enseñanza que impide la puesta en práctica de métodos innovadores especialmente orientados a promover una cultura de Calidad del Servicio.

CONCLUSIONES

Tomando en cuenta que el servicio es un elemento clave y diferenciador entre las estrategias competitivas de cualquier negocio y la atención al cliente atribuye un valor adicional a los productos tangibles, se puede afirmar que estos elementos deben formar parte inequívoca dentro de cualquier actividad o negocio que se desee desempeñar, no sólo desde el punto de vista laboral, sino también personal, pero muy especialmente en la formación de las nuevas generaciones. Al mismo tiempo, es necesario guiar la cultura de calidad de servicio bajo un enfoque de dirección estratégica de las instituciones de educación superior, fundamentadas en su visión y las tácticas para alcanzarla, su misión, objetivos, atendiendo a su vez, el análisis de sus fortalezas, debilidades, oportunidades y amenazas, orientados siempre hacia la calidad del servicio como una cultura corporativa de actuación y formación de profesionales en Venezuela.

REFERENCIAS BIBLIOGRÁFICAS

Constitución de la República Bolivariana De Venezuela (1999).

Cruz R. José (2006). Historia de la Calidad Total. Alojamiento Grupo Hispanista. Disponible en monografias.com

Espinosa (2006). Calidad Total. Disponible en:
<http://www.ilustrados.com/publicaciones/EpykZkVFEAgyQYqqlL.php>

Ley Orgánica De Educación (1980) . Gaceta Oficial De La República De Venezuela 2635
(Extraordinaria) Julio 28, 1980

Microsoft Encarta (2006). La Calidad De La Educación En España. Microsoft Corporation. Venezuela.

Ministerio De Educación Y Deporte Del Gobierno Bolivariano De Venezuela. (2006) Página Web En Línea. Disponible: [Http://Www.Me.Gov.Ve/](http://Www.Me.Gov.Ve/) (Consulta: 2006, Junio 25).

Ministerio Del Poder Popular Para La Educación. (2007). Currículo Nacional Bolivariano. Diseño Curricular Del Sistema Educativo Bolivariano. Documento En Línea. Caracas- Venezuela. Disponible En: [Http://Www.Me.Gov.Ve/Media/Eventos/2007/DI_908_69.Pdf](http://Www.Me.Gov.Ve/Media/Eventos/2007/DI_908_69.Pdf)

Ortiz O. Alexander L. (2006). La Mercadotecnia Educacional. Formas De Aplicación. Artículo De Monografías.Com. (Profesor Asistente. Decano De La Facultad De Ciencias Técnicas. Universidad Pedagógica "José De La Luz Y Caballero". Holguín/ Disponible En: Alex@Isp.Holguin.Inf.Cu)

Reglamento De La Ley Orgánica De Educación (1999). Gaceta Oficial De La República De Venezuela, 36787, Septiembre 15, 1999

Serna, Humberto (2003). Gerencia Estratégica. Bogotá. 3r Editores.

BIOGRAFÍA

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ESTRATEGIAS PARA EL APRENDIZAJE DEL CAPITAL HUMANO PYME

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ABSTRACT

El aprendizaje organizacional permite a la organización mantenerse actualizada frente a los cambios del entorno y en esta sociedad del conocimiento tiene mucha importancia por ser la base del mejoramiento y la innovación, pilares de la competitividad contemporánea. En este sentido se pretende identificar el proceso de aprendizaje y evaluar los tipos de mecanismos utilizados para el aprendizaje del capital humano de la Pyme. La metodología fue descriptiva y explorativa, bajo un diseño no experimental, con una encuesta dirigida a treinta (30) gerente de Pyme entre cinco (05) y cien (100) empleados inscritas en la Cámara Petrolera de la Península de Paraguaná del estado Falcón. Develando los resultados una escasa cultura formativa y a pesar de utilizar nuevas tecnologías, demuestran debilidad en la combinación de métodos para lograr excelentes resultados en el aprendizaje. Por ello, se recomienda un aprendizaje enfocado a las necesidades individuales y organizacionales para crear una cultura formativa bajo elementos estimulantes, orientados hacia el auto aprendizaje, la metodología de aprender a aprender, captación, explotación de conocimientos basados en la experiencia del personal y fomento del trabajo en equipo, dando así valor al conocimiento del capital humano en estas organizaciones.

Palabras clave: Aprendizaje, Capital humano, Estrategias y Pyme.

INTRODUCCIÓN

Las Pyme deben orientarse hacia una visión prospectiva, con participación social, consciente y voluntaria, bases fundamentales para su supervivencia y desarrollo, por tanto, están obligadas a aprovechar las propias capacidades de sus recursos, en especial del humano, asumiendo como centro de todos los esfuerzos del desarrollo las personas que la conforman. Y si a lo anterior se suma el entorno que rodea a la Pyme, lleno de avances tecnológicos, colmado de nuevos mercados con alta tecnología, donde por su flexibilidad y capacidad de respuesta rápida puede acceder, pero si no se incorpora inteligentemente puede ser muy afectada. Obliga a este tipo de organizaciones a preparar su capital humano para prever los impactos y condicionamientos de escenarios diversos, identificando e interpretando la información que le rodea, desarrollando capacidad para generar relaciones facilitadoras de competitividad global. Entonces, este logro dependerá en gran parte de aprovechar el conocimiento de su gente, mediante un aprendizaje conjunto, dinámico, permanente, comprometido y armonioso del individuo y de la organización a la cual pertenece (Benavides, 2002).

En búsqueda de esta transformación, se entiende el aprendizaje del individuo, como proceso continuo y constante de información, capacitación y entrenamiento producto del aprendizaje organizacional, mediante el cual se compromete la empresa y el individuo en una visión integradora y humanista. Donde la Pyme prevea de técnicas, medios y herramientas adecuadas para impartir el aprendizaje. Por lo tanto, se plantea la presente investigación cuyos objetivos son: 1) Identificar el proceso de aprendizaje del capital humano de la Pyme de la Península de Paraguaná del estado Falcón y 2) Evaluar los tipos de mecanismos utilizados para el aprendizaje del capital humano de la Pyme de la Península de Paraguaná del estado Falcón.

EL APRENDIZAJE

Hay diferentes e importantes beneficios los cuales se obtienen del aprendizaje en las organizaciones y explican los esfuerzos e inversiones aplicadas. No todos estos beneficios son visibles a simple vista, ni son efectivos en el corto plazo, de hecho, su importancia radica en tener perfilado el objetivo del proceso para permitir su desarrollo, por lo tanto, la aprendizaje debe ser coherente con el desarrollo del proceso, utilización de medios y mecanismos adecuados (Chiavenato, 2000; Enebral, 2005). Por ello, es importante incorporar el aprendizaje como protección básica contra la extinción empresarial, como un medio para estar preparadas para la cruzada empresarial del siglo XXI, donde se da valor al conocimiento, gestionando o tramitando la capacidad de aprender, lo cual permite fomentar el pensamiento creativo dentro de las organizaciones. Permitiendo un aprendizaje rápido y eficaz mediante el cual el capital humano accede a conocimientos necesarios para ser efectivo en mercados altamente competitivos, centrándose más en la práctica que en la teoría, lo cual Druker llama rendimiento del conocimiento (Álvarez, 2000; Pérez y otros, 2001).

Por lo tanto, afirma Chiavenato (2002) cualquier iniciativa de aprendizaje debe dar respuesta a las necesidades de la organización, pero sin olvidar la del individuo, en este sentido, debe establecer objetivos de formación, identificar los mecanismos adecuados y utilizar técnicas modernas para alcanzar los objetivos planteados. A su vez, enfocar el aprendizaje a orientar a las personas de manera adecuada en las diversas actividades de la organización, posesionarlas en sus labores y clarificarles su papel y objetivos. Luego, la orientación debe ser enfocada al área de formación, estableciendo programas para transmitir información para aumentar el conocimiento de las personas, sobre la empresa, sus productos o servicios, políticas y directrices, reglas y reglamentos y clientes. Igualmente, puede tener la finalidad de desarrollar las habilidades del talento humano, capacitando para la ejecución y operación de tareas, manejo de equipos, máquinas, entre otros.

En este sentido, las empresas utilizan como nuevas tecnologías según Chiavenato (2002): a) Recursos audiovisuales contentivas de imágenes visuales e información en audio, videograboras, CD-ROM y DVD, b) Tele conferencia, c) Comunicaciones electrónicas, d) Correo electrónico o e-mail, y e) Tecnología multimedia. Por su parte, en cuanto a los tipos de mecanismos utilizados para el aprendizaje, se utilizan técnica de lectura, de recursos audiovisuales, instrucción programada e instrucción asistida por computador, estas dos últimas también se denominan técnicas de auto instrucción. Si son orientadas al proceso, son diseñadas para cambiar actitudes, desarrollar conciencia acerca de sí mismo y de los demás y desarrollar habilidades interpersonales. Existen también, las técnicas mixtas, las cuales no sólo se emplean para transmitir información, sino también para cambiar actitudes y comportamientos, para transmitir conocimientos o contenido y para alcanzar algunos objetivos establecidos por técnicas más orientadas al proceso. Entre las mixtas sobresalen las conferencias, los estudios de casos, las simulaciones y juegos, y varias técnicas en el cargo (Enlaces, 2005).

Estas técnicas, para Chiavenato (2002) son: a) Conferencias, b) Instrucción programada, c) Dramatización, implica actuar como determinado personaje o participar en la solución de problemas orientados a personas, que se deben resolver en la organización, y d) Ejercicio de simulación. También existen mecanismos, los cuales pueden administrarse en el lugar del trabajo o fuera de éste, estos tipos de mecanismos, clasificados de acuerdo al lugar de aplicación, Chiavenato (2002) los define de la forma siguiente: a) Entrenamiento en las tareas, b) La rotación de cargos, y c) Juegos administrativos.

En concordancia con los mecanismos mencionados, se puede afirmar la no existencia de un recurso de formación único, o mejor dicho, de distintos recursos que alcanzan distintos niveles de eficacia dependiendo del objetivo del aprendizaje, los antecedentes, actitudes del empleado y pericia del instructor. Por lo tanto, a la hora de impartir formación, se deben desarrollar combinaciones de técnicas

adecuadas, siempre tomando en consideración la necesidad específica de la empresa y utilizando varios recursos simultáneos; la combinación de los mismos contribuye al éxito del programa.

METODOLOGÍA

El enfoque metodológico fue descriptivo y explorativo con un diseño no experimental o Expost-facto según Tamayo y Tamayo (2003) y Sampieri y Otros (2003). Para recolectar los datos se utilizó un cuestionario estructurado bajo la escala de Likert, dirigido al director o gerente de treinta (30) Pyme entre cinco (05) y cien (100) empleados, inscritas en la Cámara Petrolera de la Península de Paraguaná del estado Falcón.

RESULTADOS Y ANÁLISIS DEL ESTUDIO

Con respecto al análisis de los resultados de los indicadores finalidad y nuevas tecnologías, las respuestas de los sujetos encuestados refiere la importancia del aprendizaje en la empresa como mecanismo para aumentar el conocimiento de las personas, igualmente su utilización para desarrollar o modificar comportamientos; también para provocar cambios de actitudes, de toma de conciencia y sensibilidad de las personas llevándolos a pensar en términos globales y amplios. Finalidades coherentes con los planteamientos del autor Chiavenato (2002) al referirse a los programas de aprendizaje utilizados en las empresas, en este ámbito, señala la utilización de varias finalidades en los programas de formación, los cuales provocan diferentes tipos de comportamiento, al desarrollar habilidades en las personas, transmitir aprendizaje incentivar el desarrollo de actitudes y conceptos. Cambiando actitudes reactivas y conservadoras de las personas por actitudes proactivas e innovadoras las cuales mejoran el espíritu de equipo y creatividad.

De igual manera, la posición neutral de los sujetos encuestados en cuanto a la utilización de nuevas tecnologías, demuestra una debilidad en las Pyme, de acuerdo a la respuesta de los sujetos por no estar de acuerdo ni de acuerdo con el indicador, considerada debilidad por lo planteado por Chiavenato (2002) al reafirmar la necesidad de promover el uso de estos mecanismos actualizados, por la fluidez del aprendizaje y reducción de costos operacionales para la empresa. Aseveración, sustentada por Álvarez (2000) al señalar como factor de competitividad una disciplina enfocada al aprendizaje de manera continua y usando las nuevas tecnologías, convirtiéndose en fuente de ventaja competitiva en la empresa. Y el hecho de lograr un aprendizaje rápido y eficaz, en esta época o era del conocimiento, porque se requiere de seres humanos flexible, capaz de adaptarse a cambios continuos, y para aprender rápidamente, utilizando para ello, mecanismos apropiados, novedosos y de alta tecnología. En este ámbito, a pesar de observarse resultados promedio de estar ni de acuerdo ni desacuerdo con el indicador, se observa que están de acuerdo en la utilización de CD-ROM y DVD. Demostrando estos resultados una posición neutra de los sujetos, no obstante están de acuerdo con la utilización de los mecanismos de instrucción programada, desarrollo de grupos y entrenamiento de tareas, mostrando una orientación coincidente con lo manifestado por Chiavenato (2002).

CONCLUSIONES

Hay una escasa cultura de aprendizaje, reflejando una debilidad presente en las mismas. Esta cultura formativa en las Pyme, se debe al hecho de no establecer claramente el objetivo a las necesidades de aprendizaje en la empresa; en atención al uso de nuevas tecnologías para formar el capital humano, sólo utilizan CD-ROM y DVD, obviando el uso de multimedia, tele conferencias, correo electrónico y comunicaciones electrónicas. En lo referente a los tipos de mecanismos utilizados para el aprendizaje, se inclinan hacia el uso de conferencias, entrenamiento en tareas, instrucción programada y desarrollo de grupos. Prescindiendo de la dramatización, juego de empresas, simulación de papeles, rotación de cargos, juegos administrativos, películas y paneles. Reflejando debilidad en la utilización de diversidad de

métodos para lograr excelentes resultados en el aprendizaje del capital humano en la empresa. Por lo tanto el aprendizaje para el capital humano en las Pyme debe ir enfocado a las necesidades de la empresa y el individuo, buscando así una estrategia integradora y humanista que permita una actitud favorable en el desarrollo del capital humano, hacia ideas y conceptos los cuales ayuden a pensar en términos amplios.

Para ello, se debe implementar una estrategia de aprendizaje donde se tome en cuenta: a) el lugar donde se llevará a cabo la capacitación, presencial o a distancia, b) el medio o mecanismos para proporcionar la capacitación, con uso intenso o no de la tecnología, c) el timing en el cual los participantes acceden a la capacitación recibiendo los mismos contenidos o a su propio ritmo, y d) el quién impartirá la capacitación, si es por auto estudio o por medio de un instructor. Así, como la incorporación de recursos didácticos novedosos, con avances tecnológicos de aprendizaje y comunicación, como el uso de Internet, multimedia, videos conferencias, entre otros; aunque algunas Pyme los manejan, se debe aumentar el número de empresas que los utilizan, porque los mismos proporcionar flexibilidad, oportunidad de temas y contenidos amplios. A su vez, se sugiere tomar en consideración las estrategias producto del resultado de la presente investigación

REFERENCIAS BIBLIOGRÁFICAS

ALVAREZ, R. (2000). eChange. El lado humano de la Economía Digital. Las nuevas reglas del cambio. Ediciones Granica, S.A. México.

BENAVIDES, O. (2002). Competencias y competitividad. Diseño para organizaciones latinoamericanas. Editorial Mc Graw Hill Interamericana S.A. Colombia.

CHIAVENATO, A. (2000). Administración de Recursos Humanos. Quinta Edición. Editorial Mc Graw Hill. Venezuela.

ENEBRAL, F. (2005). Tras una formación más completa en la empresa. Disponible en: <http://www.gestiopolis.com> En la red 17/04/2005.

ENLACES. (2005). Entrenamiento de los recursos humanos. Disponible en: <http://www.enlacesnet.com.ar/entrenamientodelosrecursoshumanos.htm> En la red 06/06/2005.

PÉREZ LÓPEZ y otros. (2001). Paradigmas del liderazgo. Claves de la dirección de personas. Editorial Mc Graw Hill Interamericana Editores, S.A. España.

SAMPIERI, R; COLLADO, C Y LUCIO, P. (2003). Metodología de la Investigación. Tercera Edición. Editorial Mc Graw Hill Interamericana Editores, S.A. México.

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TAMAYO Y TAMAYO, M. (2003). El proceso de la Investigación Científica. Editorial Limusa. S.A. México.

BIOGRAFIA

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PERFILES Y CARACTERÍSTICAS DE LA GERENCIA DE RECURSOS HUMANOS EN UNA MUESTRA DE GRANDES Y MEDIANAS EMPRESAS DE BARRANQUILLA, SANTA MARTA, CARTAGENA Y SINCELEJO-COLOMBIA

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INTRODUCCIÓN

En el mundo actual, el Departamento de Recursos humanos de las organizaciones deben apoyar y liderar procesos que promuevan a las personas que la conforman, a la consecución de los objetivos estratégicos a través de conocimientos, habilidades y actitudes que lleven a la empresa a un desarrollo ideal, teniendo en cuenta sus competencias y capacidades para llevar a cabo dichas estrategias y alcanzar las metas propuestas por la organización.

En Colombia, la Gerencia de Recursos Humanos ha evolucionado de manera lenta en medio del auge industrial y las crisis económicas y sociales. No todas las empresas han adoptado modelos de gestión que sean óptimos, que potencialicen las competencias de sus trabajadores y se proyecten realmente a la sociedad, cambiando las condiciones de vida de los habitantes.

En este sentido, el interés fundamental de la presente ponencia es presentar los resultados de la investigación relacionada con los perfiles y las características de la gerencia de Recursos Humanos en las empresas medianas y grandes de las ciudades de Barranquilla, Santa Marta, Cartagena y Sincelejo.

Entiéndase por perfil todas aquellas aptitudes, habilidades, destrezas que apuntan al desempeño exitoso de un oficio, al igual que los rasgos socioeconómicos y demográficos (sexo, edad, estado civil, nacionalidad...) y actitudes que estimulan al gerente a cumplir con las actividades centrales del recurso humano.

Por su parte, las características se refieren a las condiciones en que dicho gerente realiza su labor (número de empleados, presupuestos, funciones, retos del área, nivel que ocupan en la estructura organizacional, entre otros), elementos que dan cuenta de la actuación del gerente de recursos humanos en las organizaciones de la Región Caribe.

Es importante anotar que la presente investigación nace como inquietud de la Coordinación de la Especialización en Gerencia de Recursos Humanos de la Universidad del Norte, frente a una investigación realizada por estudiantes de la Especialización en Gerencia de Recursos Humanos de la Universidad de Manizales entre Diciembre de 1996 y Marzo de 1998, titulada “La gerencia del recurso humano en las empresas medianas y grandes del occidente Colombiano (Características, perfil y proyecciones)”, donde se pretende ampliar los resultados a algunas ciudades de la Costa Atlántica, para obtener un perfil nacional del gerente del recurso humano en las empresas colombianas, que pueda servir de aporte a todas aquellas instancias interesadas en la temática de la gestión del recurso humano.

Los estudiantes de la Especialización en Gerencia de Recursos Humanos de la promoción XII de la Universidad del Norte que participaron en el proceso de recolección de información para la investigación fueron : Liliana Alvarez, Patricia Anacona, Jorge Luis Beracaza , Brigitte Eugenia Better, Silvana Maria Botero, Beatriz Cecilia Carbonell, Lorena Encinales , José Bernardo González, Martha Lucia Hernández , Inés Tatiana López, Nancy Patricia Manjares, Pedro José Muñoz, Martha Leonor Peña

, Martha Inés Sánchez , Víctor Manuel Solano, Martha Cecilia Vitola ,actuando como Directora general de la investigación y coautora Olga Lucia Jaramillo Naranjo.

ESTRATEGIA METODOLÓGICA

El estudio fue de carácter descriptivo, y se orientó a las empresas medianas (entre 50 y 200 empleados) y grandes (más de 200 empleados) de las ciudades de la Costa Atlántica Colombiana : Barranquilla, Santa Marta, Cartagena y Sincelejo. Fueron seleccionadas 140 empresas, aprovechando la accesibilidad a la información por la residencia de los estudiantes en las ciudades mencionadas, por la consulta a la base de datos de egresados de la Especialización en Gerencia de Recursos Humanos de la Universidad del Norte, consulta a los registros de las empresas inscritas en Cámara de Comercio de cada ciudad en mención y a la base de datos de la Asociación Colombiana de Gestión humana (ACRIP) capítulo Atlántico en Barranquilla. El estudio se realizó entre junio del 2004 y abril del 2005. El procesamiento de la información se hizo a través del software SPSS.

OBJETIVO GENERAL

Establecer los perfiles y principales características de la gerencia del recurso humano en una muestra de medianas y grandes empresas de las ciudades de Barranquilla, Santa Marta, Cartagena y Sincelejo.

RESULTADOS DEL ESTUDIO

Características Socioeconómicas y Demográficas del Gerente de Recursos Humanos.

GÉNERO: Respecto al género tenemos que el área de gestión humana es ocupada en un 66% por el sexo femenino y en un 34% el sexo masculino, lo que denota la alta participación de las mujeres en la dirección de las áreas de gestión humana en las empresas de la muestra.

EDADES: El 70% de la muestra arroja que las edades se concentran entre 30 y 49 años y las edades poco representativas oscilan entre 20 y 29 años (16%), y en un 14%, entre 50 y más de 60 años de edad

ESTADO CIVIL: Es de anotar que el 64% de los gerentes de Recursos Humanos son casados, el 22% solteros, el 9% personas separadas y el 5% se encuentran en unión libre.

NÚMERO DE HIJOS: El 6% de gerentes de recursos humanos tienen más de tres hijos, mientras que el 45% registran entre dos y tres hijos, el 21% un hijo y el 28% no tienen hijos.

PERSONAS A CARGO: Se tiene que un 29% de los gerentes no tienen personas a cargo, mientras que el 71% sí lo tienen. Frente a dicho porcentaje, el 58% tienen a cargo entre 1 y 2 personas, y el 42% restante, tienen más de dos personas a cargo.

PERSONAS CON LAS QUE VIVE: El 60% de las personas encuestadas vive con su cónyuge, el 16% vive con padres y hermanos, el 11% vive solo, el 9% vive con familiares, el 2% con familia del cónyuge, el 1% vive pensionado y otro 1% vive solo.

ESTRATO SOCIOECONÓMICO: La mayor concentración de gerentes de Recursos Humanos se encuentra entre los estratos 4 y 6, correspondiente al 81%, y el 19% restante entre los estratos 2 y 3.

FORMACIÓN ACADÉMICA: Es importante destacar que el 95% de los Gerentes de Recursos Humanos han culminado su formación universitaria, de los cuales el 39% han realizado estudios de postgrado, el 7% maestría y 1% doctorado.

Con relación a realización de cursos, seminarios y diplomados se encontró que el 59% de la muestra de gerentes ha tenido la oportunidad de adelantar alguno relacionado con el área de Recursos Humanos.

De acuerdo con la información anterior, se nota que el porcentaje de gerentes de recursos humanos especializados es relativamente bajo, lo mismo que el porcentaje que recibe cursos, seminarios y otros, teniendo en cuenta el entorno dinámico y cambiante tanto interno como externo dentro del que se mueve el área, que requiere de una permanente actualización de conocimientos en la materia.

PROFESIÓN : Es relevante anotar la transformación que ha sufrido el área con relación a las profesiones que registran las personas que tienen a su cargo recursos humanos. Anteriormente las profesiones líderes en el campo eran abogados, psicólogos, trabajadores sociales, y todos aquellos relacionados con las ciencias sociales.

El entorno globalizado y los retos que se presentan día a día en las empresas obligan a que sean además de las profesiones citadas, nuevas carreras las que incursionen en el campo. Es así como encontramos gerentes con formación de Administradores de Empresas, Psicólogos, Ingenieros, contadores y de otras áreas profesionales que poseen un conocimiento integral de la organización.

IDIOMA: El estudio refleja que el 19 % de la muestra maneja un segundo idioma, así: el inglés, 16%; alemán, 2%, y el francés y otros idiomas el 1% cada una. Dicho porcentaje es bajo si se tienen en cuenta las exigencias y desafíos a los que diariamente se ven enfrentadas las organizaciones globalizadas.

CONOCIMIENTOS BÁSICOS REQUERIDOS: Se puede apreciar que los conocimientos básicos requeridos para un buen desempeño del gerente de recursos humanos, corresponden a: 24%, en psicología organizacional (reclutamiento, selección, inducción, entrenamiento, capacitación y evaluación del desempeño); en derecho laboral, un 23%; en manejo de conflictos, en un 18%; en administración estratégica, un 15%; en compensación, un 11%, y en salud ocupacional, un 9%.

Las respuestas otorgadas en este ítem, corroboran que los conocimientos requeridos obedecen a los procesos cotidianos desarrollados en el área, dejando de lado la importancia que representa poseer otro tipo de conocimientos que agreguen valor a la gestión del gerente, como los relacionados con administración estratégica, finanzas, calidad, procesos, servicio al cliente, sistemas de información, idiomas, entre otros

CIUDAD DE PROCEDENCIA: Es importante anotar que el 67% de los gerentes son de la ciudad de Barranquilla; el 7%, de la ciudad de Santa Marta; 5%, de la ciudad de Sincelejo; 5% de la ciudad de Cartagena, y 16% de otras ciudades del país

SALARIO DEVENGADO: Se puede observar que el 72% de los gerentes de recursos humanos de las empresas devengan salarios que oscilan entre un \$ 1.000.000 y \$ 3'900.000. Sin embargo, es de anotar que de éste porcentaje, que si bien es representativo, el 38% devenga entre 1 y 2 millones de pesos.

TIPO DE CONTRATO: En la muestra se observa que el 79% de los gerentes de recursos humanos tienen un tipo de contrato a término indefinido, lo que demuestra seguridad laboral.

TIPO DE SALARIO: Según la información, el 79% devenga salarios básicos y el 21% tiene salario integral asignado. De alguna manera estos resultados demuestran que la mayoría de los gerentes de RRHH, registran un alto índice de estabilidad laboral.

ANTIGÜEDAD EN LA EMPRESA: Un 40% de los gerentes de recursos humanos encuestados están vinculados a las empresas por un tiempo mayor a 8 años, reflejando así que las personas asignadas a estos cargos son preferiblemente aquellas que conocen muy bien la organización, a las personas que están dentro de ella y sus procesos. El resto de la muestra está representado de manera muy pareja entre 0 y 5 años de antigüedad en promedio.

CARGO DESEMPEÑADO ACTUALMENTE: En la muestra se evidenció que los nombres de las posiciones del “Gerente de Recursos Humanos” varían de acuerdo con cada organización. Podemos ver que el 26% de estas posiciones se denomina Director de Recursos Humanos; el 21%, Jefe de Personal, y el 40%, tiene nombres diferentes tales como Coordinador de Recursos Humanos, Superintendente de Recursos Humanos, Director Administrativo, etc.

TIEMPO EN EL CARGO: El 47% de la muestra tiene una antigüedad en el cargo de entre 0 y 3 años; el 29%, entre 4 y 7 años y solo el 10% tiene más de 12 años en el cargo, lo que continua reflejando la permanencia de dichos ejecutivos al frente del área.

CARGOS RELACIONADOS CON RRHH ANTERIORMENTE OCUPADOS EN LA EMPRESA: La muestra nos enseña que el 49% de los gerentes de RRHH encuestados han ocupado otras posiciones en el área de Recursos Humanos, antes de tener la posición actual. Esta información reitera que la mayoría de ellos han hecho carrera dentro del área.

Los cargos ocupados han estado relacionados con Salud Ocupacional, Desarrollo, Bienestar Social, Selección, Capacitación y Nómina.

CARGOS DIFERENTES A RRHH OCUPADOS EN LA EMPRESA: El 31% de los gerentes encuestados han ocupado posiciones en áreas administrativas y financieras y el 10% en áreas operativas. Esto les da una mayor fortaleza en el conocimiento integral de la organización y del talento humano que la compone.

EXPERIENCIA EN RRHH EN OTRAS EMPRESAS: Se observa en la muestra que el 54% no ha laborado anteriormente en otra empresa en el área de RRHH, mientras que el 46% sí lo ha hecho. Del porcentaje que sí ha trabajado anteriormente en Recursos Humanos, el 84.3% registra antigüedad de entre 0 y 7 años, lo que denota su experiencia en el campo. La mayoría de los encuestados ha ocupado posiciones de Asistente de RRHH, Jefe de Selección, Jefe de Nómina, Jefe de Bienestar, de Capacitación y Salud Ocupacional.

CARGOS DIFERENTES A RRHH EN OTRAS EMPRESAS: El 33% de los encuestados ha trabajado en áreas diferentes a Recursos Humanos en otras empresas. Han ocupado cargos en áreas Administrativa, Operativa, Financiera, Comercial y Jurídica.

CARACTERÍSTICAS PSICOLÓGICAS Y ACTITUDINALES Y HABILIDADES ESPECIALES Y APTITUDES

De las 140 encuestas analizadas, se puede observar que las cinco (5) características psicológicas y actitudinales más sobresalientes en los gerentes de recursos humanos son en su orden: liderazgo, relaciones interpersonales, responsabilidad, objetividad y proactividad.

Así mismo, las cinco características que menos sobresalen son: autonomía, discernimiento, ética, adaptabilidad y trabajo bajo presión.

Se observa que las cinco (5) habilidades más comunes en los Gerentes de Recursos Humanos, son: trabajo en equipo, solución de problemas y conflictos, relaciones interpersonales, capacidad de dirección y vocación de servicio.

Las habilidades y aptitudes menos puntuadas fueron: concentración, tolerancia a la frustración, resolución de problemas abstractos, pensamiento abstracto (numérico, lógico) y manejo de sentimientos.

ROL EJERCIDO Y ACTIVIDADES CENTRALES REALIZADAS POR EL GERENTE DE RECURSOS HUMANOS

Se observa que los dos (2) roles principales que asume el Gerente de Recursos Humanos, son los de líder con un 23% seguido por el rol de facilitador con un 19%.

Otros roles identificados como importantes fueron: gestor, prestador de servicios y conciliador.

Es importante destacar que teniendo en cuenta que las áreas de recursos humanos deben actuar como socias estratégicas de la organización, el rol que menos puntaje obtuvo fue el de estratega.

La elaboración de planes de inducción, entrenamiento y capacitación son los procesos más importantes dentro de las 16 actividades centrales realizadas por los gerentes de recursos humanos.

Las actividades de reclutamiento y selección de personal, medición del desempeño laboral, administración de la disciplina, programas de bienestar social y administración de las compensaciones, comparten porcentajes similares, seguido de programas relacionados con salud ocupacional, que se han abierto camino al interior de las organizaciones.

Se observa que el diseño de diversas actividades enfocadas a dar atención, soporte y seguimiento es motivo de atención permanente por parte del área.

Lo anterior puede significar que los gerentes de recursos humanos están concentrados en procesos propios del área y en mínimo porcentaje a actividades estratégicas que agregan valor a la organización (planeación corporativa y financiera, aseguramiento de calidad, diseño de procesos y procedimientos, programas de transformación organizacional, servicio al cliente y responsabilidad social), lo que corrobora el resultado obtenido en el rol ejercido por el gerente de Recursos Humanos.

CARACTERÍSTICAS DE LA GERENCIA DE RECURSOS HUMANOS

En lo que corresponde a las Características de la Gerencia de Recursos Humanos al interior de las empresas seleccionadas, se determinaron los siguientes resultados:

NÚMERO DE EMPLEADOS DEL ÁREA: En las organizaciones objeto de estudio se encontró que el 68% de las áreas de recursos humanos tienen asignados entre uno y cuatro empleados. El 19% de la muestra, tiene asignados más de siete empleados al área de recursos humanos.

SECCIONES QUE LA COMPONEN: Con relación a las secciones que componen las áreas de recursos humanos las que más comúnmente se encuentran establecidas es Nómina con un 17% del total de la muestra; Bienestar Social, Salud Ocupacional y Selección de Personal, con un 12% cada una, seguidas de Capacitación y Relaciones Laborales.

Cabe destacar que un 14% de la población no tiene secciones establecidas al interior del área de recursos humanos.

Estos resultados ratifican que es necesario que dichas áreas cuenten con varios empleados, que puedan cubrir las necesidades que se registran al interior de la organización, asociado a los procesos de gestión del talento humano.

PRESUPUESTO ASIGNADO AL ÁREA: En términos de presupuesto se encontró que en el 63% de estas empresas no se asigna un porcentaje específico anual de inversión al área de recursos humanos.

Se percibe que al 30% de la muestra se le asigna un porcentaje entre el 1 y el 5%, y más del 10%, del presupuesto general de la compañía.

Esta cifra es preocupante si tenemos en cuenta que los procesos cotidianos que debe desarrollar el área, demandan de una consistente asignación presupuestal para poder obtener resultados que verdaderamente impacten los objetivos estratégicos del negocio.

DEPENDENCIA A LA QUE PERTENECE Y POSICIÓN DENTRO DE LA ESTRUCTURA ORGANIZACIONAL: El 48% de las áreas de recursos humanos de las empresas de la muestra, dependen directamente de la Gerencia General de la organización y el 43%, de la Dirección Administrativa.

En este orden de ideas, se encontró que el 68% de las áreas de recursos humanos está ubicado en el tercer y cuarto nivel de la estructura organizacional. Esto se debe a que las empresas que formaron parte de la muestra, en su gran mayoría son sucursales o subsidiarias de empresas con sede en otras ciudades del país como Bogotá, Cali o Medellín, donde las direcciones administrativas vienen después de Presidencia y Gerencia General.

NIVEL DE LA GERENCIA DE RECURSOS HUMANOS EN LA EMPRESA: En éste ítem, los resultados arrojaron que el 34% de gerentes de recursos humanos se ubica en el nivel Directivo Estratégico; el 24%, en un nivel Profesional, y el 19%, como Asesor.

El depender de la Gerencia General en algunas organizaciones otorga la posibilidad al ejecutivo de recursos humanos de poseer un nivel directivo, que le permite toma de decisiones ágiles, autónomas y estratégicas.

FUNCIONES DEL ÁREA DE RECURSOS HUMANOS: Dentro de las funciones prioritarias del área de recursos humanos se destaca en importancia: selección y capacitación con un 17% cada una, bienestar social 14%, desarrollo organizacional, con el 13% y relaciones laborales con el 11%, nómina y salud ocupacional con el 10% cada una y compensación, el 8%.

Como se puede observar, se conservan como funciones prioritarias los procesos que ordinariamente debe desarrollar el área de recursos humanos, dedicando sólo el 13% a procesos de desarrollo organizacional.

LOGROS OBTENIDOS POR EL ÁREA : Los principales logros obtenidos por el área de recursos humanos son los relacionados con desarrollo organizacional y de personal representados con un 67%, seguido del posicionamiento del área con un 20% y una mínima parte (6 y 7% respectivamente), corresponde a Certificación de Calidad y Reducción de Costos.

PAPEL DEL ÁREA FRENTE AL LOGRO DE OBJETIVOS ORGANIZACIONALES: El papel que juega el área de recursos humanos en el logro de los objetivos y estrategias organizacionales se califica como muy importante en el 40% de los encuestados; 35% decisiva y 19% como importante.

De acuerdo con lo anterior, se hace manifiesto que los gerentes de recursos humanos participantes en la muestra, tienen una percepción de que las acciones desarrolladas en el área, agregan valor a la organización.

IMPACTO DE LOS PROGRAMAS DE RECURSOS HUMANOS EN LOS RESULTADOS DEL NEGOCIO: Los programas que se destacan por generar impacto en los resultados de la compañía son: clima organizacional, capacitación, optimización de recursos, salud ocupacional y certificación de calidad.

RETOS Y PROYECTOS DE LA GERENCIA DE RECURSOS HUMANOS PARA EL NUEVO SIGLO: Dentro de los retos que contemplaron los gerentes de recursos humanos para el nuevo siglo se encuentran: mejoramiento de la calidad de vida de los empleados, el posicionamiento del área, implementación de modelos de competencias, planeación estratégica e implementación de nuevos sistemas de información.

CONCLUSIONES GENERALES

Características Socioeconómicas y Demográficas

Tanto en el análisis general como en el análisis por ciudades, prevalece la presencia de la mujer ocupando estas posiciones y no se identifican extranjeros desempeñando estas funciones en las ciudades donde se realizó la investigación.

En cuanto a la formación académica de los responsables de las áreas de recursos humanos es preocupante el hecho de no registrarse un porcentaje importante de personas con especialización o maestría, dado que ésta área exige actualización permanente en temáticas relacionadas con la gestión del talento humano. Además, con las características del entorno actual de los negocios se requiere dominio del idioma inglés y no se tiene, lo que no hace competitiva a las personas que desempeñan estas posiciones.

Otro elemento que vale la pena mencionar es que los responsables de las áreas de recursos humanos continúan orientando su quehacer a actividades de tipo operativo y no estratégico, que realmente le agreguen valor a las organizaciones y los posicione como verdaderos socios estratégicos (así ellos se ubiquen en un nivel estratégico directivo).

Con relación al salario, se encontró diferencias sustanciales frente a lo devengado por otras gerencias de áreas funcionales de la empresa (producción, finanzas y mercadeo).

El Gerente de Recursos Humanos tiene la responsabilidad de administrar el Recurso Humano en las organizaciones, consigue los candidatos ideales para cada una de las posiciones, que hacen posible el desempeño y logro de los objetivos de la organización. En la actualidad la mayoría de los gerentes devengan entre \$1.000.000 y \$3.900.000. Claro está que este rango salarial, se ve bastante influenciado con el hecho de que gran parte de las empresas son sucursales que tiene su casa matriz en Bogotá, Medellín o Cali, donde la Gerencia principal de Recursos Humanos está en otras ciudades y en las sucursales simplemente se ejecuta los programas o actividades desarrollados por la casa matriz.

Características de la Gerencia de Recursos Humanos

Con referencia a las actividades centrales realizadas por los Gerentes de Recursos Humanos, se encontró que en su mayoría, se dedican a dar atención, soporte y seguimiento a los procesos de reclutamiento, selección de personal, la elaboración de planes de inducción, entrenamiento y capacitación,

administración a las compensaciones y los programas de salud ocupacional y Bienestar Social, lo que nuevamente ratifica su quehacer operativo y poco estratégico, situación que puede verse reflejada en un bajo posicionamiento del área a nivel estructural.

Los principales logros obtenidos por el área de Recursos Humanos en las empresas de la muestra, están dados en: Desarrollo Organizacional principalmente en la ciudad de Barranquilla y Desarrollo de Personal en las ciudades de Sincelejo, Cartagena y Santa Marta.

Con el ánimo de identificar el porcentaje del presupuesto asignado al área de Recursos Humanos, en cada una de las ciudades y empresas de la muestra, se evidenció que en un pequeño porcentaje hay una cifra real asignada, pero en la mayoría o no conocen el monto o lo asignan dependiendo de los programas diseñados de acuerdo a las necesidades detectadas y son aprobados por la Gerencia General.

Los retos y proyectos de la Gerencia de Recursos Humanos para el siglo XXI, se enfocan al mejoramiento de la calidad de vida de los empleados y al posicionamiento del Área.

Esto demuestra el cambio de actitud frente a la responsabilidad social que están adoptando las diferentes empresas en el país y en la región, en el sentido de privilegiar la importancia del talento humano para la consecución de la competitividad y el éxito de las organizaciones y el papel de las empresas en lo relacionado con su aporte a la comunidad y a la sociedad en general.

BIBLIOGRAFÍA

ARIAS GALICIA, Fernando. Administración de Recursos Humanos. Editorial Trillas. 2000

ARIZA M, José Antonio y otros. Dirección y Administración integrada de personas. Editorial Mc graw Hill. 2004.

CHIAVENATO, Idalberto. Gestión del Talento Humano. Editorial Mc Graw Hill. Año 2002.

CHIAVENATO, Idalberto. Administración de Recursos Humanos. El capital humano de las organizaciones. Editorial Mc Graw Hill. Octava edición. Año 2007

DESSLER, Gary. Administración de personal . Editorial Prentice Hall. Octava edición. Año 2001.

DE CENZO y otros. Administración de Recursos Humanos. Editorial Limusa. Año 2003.

DOLAN, Simon L y otros. La Gestión de los Recursos Humanos. Tercera Edición. Mc graw Hill. 2007.

GOMEZ MEJIA, Luis R; BALKIN, David; CARDY, Robert. Gestión de Recursos Humanos. Editorial Prentice Hall. Año 2000

IVANCEVICH, John M. Administración de Recursos Humanos. Mc graw Hill. Novena edición. Año 2004.

KLINGNER , Donald. La Administración del personal en el sector público. Contextos y estrategias. Editorial Mc Graw Hill. Cuarta edición. Año 2001

MARISTANY, Jaime. Administración de Recursos Humanos. Editorial Prentice Hall. Año 2000

MONDY, Wayne; NOE Robert. Administración de Recursos Humanos. Novena edición. Editorial Pearson Educación. Año 2005

RODRÍGUEZ v, Joaquín. Administración moderna de personal. Séptima edición. Editorial Thomsom . 2007.

SASTRE C, Miguel Angel y otro. Dirección de Recursos Humanos. Un enfoque estratégico. Mc graw Hill. 2003.

SHERMAN, Arthur y otro. Administración de Recursos Humanos. Editorial Thompson Learning. Año 2001

WERTHER, William; DAVIS Heith. Administración de personal y Recursos Humanos. Editorial Mc Graw Hill . Quinta edición. Año 2000

BIOGRAFIA

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ANÁLISIS DE LOS PAÍSES DEL CARIBE DESDE EL PUNTO DE VISTA DE LOS NEGOCIOS: UNA APROXIMACIÓN A UN PROSPECTO COMERCIAL

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RESUMEN

Este artículo es la síntesis de una investigación sobre las características de los mercados de la región Caribe en lo relacionado con las variables culturales que tienen incidencia en el consumo de los productos, y por lo tanto deberán ser tenidas en cuenta en cualquier estrategia de posicionamiento internacional. Colombia ante su futuro inmediato está afrontando problemas en su perspectiva exportadora, uno de ellos es el de lograr dirigirse hacia mercados que por sus características señalan un potencial de demanda por bienes y servicios Colombianos.

Palabras claves: Pymes exportadoras, planes estratégicos, exportaciones, importaciones, negociaciones, cultura, negocios, consumidores, posicionamiento, competitividad.

INTRODUCCIÓN

Cuando hablamos de la zona del Caribe, es hacer referencia a una región conocida más por su historia; por ejemplo de piratas, fuertes, entre otros o por su atractivo como un destino turístico, sin desconocer su importancia geográfica y política; más que por su riqueza económica y comercial. Dirigir nuestra mirada al Caribe, como un llamativo socio comercial, es encontrarnos con unas muchas posibilidades y oportunidades. El Caribe es una atractiva, diversa e importantísima zona comercial, que en virtud de sus variables propias, con una riquísima pero limitada geografía, se ha especializado en el desarrollo y comercialización de un grupo de productos, importando más del 60% de sus requerimientos.

ANTECEDENTES

Los Gobiernos de diversos países del mundo han diseñado programas especiales de apoyo, con el fin de posicionar a las pequeñas y medianas empresas en el contexto internacional, ya que gracias a su crecimiento en la generación de empleo, se constituyen en motor de desarrollo de la economía. Conforme con este lineamiento de los Gobiernos, el Gobierno Colombiano, a través de la entidad Promotora de Exportaciones – PROEXPORT COLOMBIA – lanzó en Noviembre de 1999 el programa EXPOPYME, un programa integral de ayuda asistido, dirigido a promover la posición exitosa y permanente de las exportaciones colombianas de las Pequeñas y Medianas empresas, y promover su adaptación a las exigencias de la economía mundial (Globalización, competitividad y apertura al exterior).

MARCO TEORICO

Hacer negocios entre fronteras requiere una alta interacción con personas preparadas en distintos entornos culturales. Valores que son importantes para un grupo de personas, puede no serlo para otro. Algunas actitudes y percepciones típicas de los Colombianos pueden ofender o no ser entendidas en otros países. Estas diferencias culturales afectan profundamente el comportamiento del mercado. Cabe anotar, que las empresas necesitan estar tan familiarizadas como sea posible con las costumbres culturales de cualquier país con el cual quieran hacer negocios. La cultura es transmitida de generación en generación, es decir, de padres a hijos, que durante su desarrollo adquieren los elementos que la componen. Es multidimensional, ya que consiste en una serie de elementos comunes interdependientes (García-Sordo, 2000: p. 345).

Perspectivas de la Cultura

Basado en García-Sordo (2000: p.345) afirma que la cultura es un mecanismo de adaptación que comprende la totalidad de herramientas, actos, pensamientos e instituciones. Estas definiciones totalizadoras destacan la organización y función de las culturas; es decir, no se enfocan en las costumbres, ritos, creencias u otras particularidades de las diferentes poblaciones. Arese (1999: p 245) define la cultura como el centro del conocimiento social adquirido, que sirve para interpretar los hechos, la experiencia, los acontecimientos y el obrar de una sociedad. Sin embargo, desde las aproximaciones más sencillas al concepto de cultura (aquella que sostiene que es todo lo que el hombre hace) hasta las definiciones más complejas, no siempre podremos establecer conceptualizaciones comprensivas de lo que la misma importa en el terreno de las relaciones con otros individuos, especialmente cuando esos individuos pertenecen a otro país.

Riesgo País

Al igual que con los costos, los riesgos que se desprenden de una negociación con los países están determinados por una serie de factores políticos, económicos y legales. En relación con el riesgo político, es la probabilidad de que las fuerzas políticas causen cambios sustanciales en el ambiente empresarial de un país que afecten negativamente las ganancias y otros objetivos de una empresa de negocios en particular. Los riesgos económicos se reflejan de una mala administración económica ejercida por el gobierno del país.

METODOLOGÍA

Los estudios exploratorios se efectúan, normalmente, cuando el objetivo es examinar un tema o problema de investigación poco estudiado o que no ha sido abordado antes. Es decir, cuando la revisión de la literatura reveló que únicamente hay guías no investigadas e ideas vagamente relacionadas con el problema de estudio (Hernández, 1999). Adicionalmente el profesor Hernández afirma que los estudios exploratorios son como realizar un viaje a un lugar que no conocemos, del cual no hemos visto ningún documental ni leído algún libro, sino simplemente alguien nos ha hecho un breve comentario sobre el lugar. Dentro de los principales inconvenientes encontrados para obtener la información es que muchos países del Caribe han sido poco estudiados o existe poca literatura que nos ilustre más a fondo del país en cuestión. En repetidas ocasiones se hizo un poco difícil la construcción de las variables a estudiar por país.

RESULTADOS

Se recopiló de información de primera línea, precisa y actualizada, para lo cual se requirió visitar algunas embajadas y consulados durante el proceso de recolección de la información primaria. Toda la información investigada se acopio y se analizó de manera individual para mostrar las bondades y exigencias que este mercado le exige a todos las empresas que deseen ingresar con sus productos o servicios. Como podemos ver en la tabla 1, el 72% de los 21 países analizados, después de hacer un análisis individual a través de diversas fuentes secundarias, tienen una tendencia hacia el individualismo que se refiere a la preferencia por la conducta que promueve el autointerés de cada quien. Las culturas de estos países reflejan una mentalidad de “yo” y tienden a premiar y aceptar la iniciativa individual, además existen sociedades en las que los lazos entre los individuos se han perdido; se espera que cada uno vea primero por sí mismo y por su familia. Entre los países con esta tendencia individualista encontramos a Antigua y Barbuda, Barbados, Belice, Dominica, Granada, Haití, Jamaica, Monserrate, Santa Lucía, San Vicente y las Granadinas, Trinidad y Tobago, Antillas Holandesas, Aruba e Islas Vírgenes Americanas. Tan sólo un 23% de los países del Caribe tienen una tendencia hacia el colectivismo donde pertenece a sociedades en las que se integran los individuos desde su nacimiento a grupos fuertes y unidos, los cuales

continuarán protegiéndolos a lo largo de su vida a cambio de la lealtad incondicional. Entre los países con esta tendencia encontramos a Bahamas, Guyana, Puerto Rico, Cuba y República Dominicana. (Ver tabla 1). El 5% restante tienen una tendencia hacia la masculinidad que refleja al deseo de cada quien por el logro y las tendencias empresariales; los hombres tienen papeles dominantes y agresivos. El país que representa este tipo de comportamientos en menor grado es San Cristóbal y Nevis. En Surinam la población es una de las más étnicamente variadas en el mundo. Cada grupo étnico preserva su propia cultura, además, muchas empresas incluyendo partidos políticos tienden a seguir los lineamientos de cada grupo en particular. Las relaciones informales varían; la clase alta que está compuesta por varios grupos étnicos son agrupados sin ningún tipo de problema.

Todos los grupos étnicos se pueden encontrar en las escuelas y empresas. (ver tabla 1). Por otro lado, el 38% de los países profesan la religión católica, un 9% el hinduismo y el restante 53% profesan religiones como el protestantismo, anglicanismo, luteranos, cristianismo, judaísmo, entre otros. Estas religiones determinan la escala de valores, explicaciones sobre la razón de ser de los habitantes de las islas; siendo, por ende, parte de la raíz de las conformaciones culturales actuales. Además, las Pymes deben tener en cuenta que las cuestiones religiosas influyen en el posicionamiento de los productos o los servicios. (Ver tabla 1). El promedio de la Tasa de Alfabetismo del Caribe es del 89.5% indicando un alto nivel de cobertura de los servicios educativos nacionales, preocupando el caso de Haití que está por debajo del promedio con un 45%, por lo tanto los exportadores deben tener en cuenta esta cifra para el envío de los productos. Es imposible comprender la base cultural de una sociedad sin revisar las formas y los contenidos de la educación. Ésta suele revelar las direcciones de especialización que una cultura va adquiriendo. Un 20.63% de la población de los países analizados hablan Inglés, debido a la influencia Británica y Estadounidense hacia las islas a través de la historia, un 26.92% Francés (Haití), 2.45% Holandés y el 50% hablan Español (Puerto Rico, Cuba y República Dominicana). (Ver tabla 1) Cabe anotar que el idioma se describe como el espejo de la cultura, y es multidimensionalmente por naturaleza. Es de suma importancia que los exportadores a los países de habla Inglesa, Holandesa y Francesa dominen el idioma, antes que una persona sea introducida en una de las islas del Caribe.

A continuación se relaciona un esquema individual de cada país del Caribe en cuanto a la población, idioma, religión, negociaciones y la orientación cultural: (fuente: Proexport y el autor)

Tabla 1: Esquema individual de los países del Caribe

PAIS	POBLACIÓN (HAB)	IDIOMA (OFICIAL)	RELIGIÓN (OFICIAL)	NEGOCIACIONES	ORIENTACIÓN CULTURAL
Antigua y Barbuda	70.100	Inglés	Anglicana	Interesados en el corto plazo. Todo acuerdo debe ser por escrito. Amigables y amables. De buen humor.	Individualistas La cultura de Antigua y Barbuda es una mezcla de la cultura del este, europea y africana media. La cultura africana está determinada en los alimentos y en los cuentos de los pueblos. La navegación es un deporte muy popular en Antigua y Barbuda. Además el golf y el tenis también son gozados por los residentes de Antigua y Barbuda.
Bahamas	320.000	Inglés	Luterana Legitimista	Amigables y amables. Todo acuerdo debe ser por escrito. Ser conservador en su vestimenta es muy importante.	Colectivismo La mayoría de los habitantes de las Bahamas tienen descendencia africana en un 85 por ciento. La población blanca restante descende directamente de aventureros, legitimistas, de Luteranos Ingleses y de marineros. En la Isla de las Bahamas existen muchas culturas que han provenido de muchos países, pero los habitantes de la isla tienen sus tradiciones y valores muy marcados debido a su origen Africano. Los habitantes de las Bahamas tienen su lado artístico que

PAIS	POBLACIÓN (HAB)	IDIOMA (OFICIAL)	RELIGIÓN (OFICIAL)	NEGOCIACIONES	ORIENTACIÓN CULTURAL
					se traduce en su forma de ser, lo que los hace alegres y muy amigables.
Barbados	268.000	Inglés	Anglicana Judaismo Catolica y Adventista	Cambio de tarjetas es importante. Todo acuerdo debe ser por escrito. Son más interesados en el corto plazo.	Individualistas El 94% de la población descende de africanos, el 5% de europeos y el 1% restante de hindúes orientales.
Belice	230.000	Inglés	Catolicos Romanos	La puntualidad es bien vista para los negocios. Se usa comunmente la guayabera. Todo acuerdo es por escrito.	Individualistas El 44% de la población son mestizos, 30% son cróeles, los mayas constituyen el 11%, garifunas un 7% y otros un 8%. Los habitantes de Belice son personas amigables y muy alegres, son personas que desean que el país se desarrolle, por tal razón los extranjeros son bien recibidos y bien tratados.
Dominica	73.000	Inglés	Catolica	No es bien visto hablar de los antepasados. Son amigables.	Individualistas El 89% de la población son de raza negra, 7.2% son mestizos, 2.4% amerindios, los de raza blanca constituyen un 0.4% y otros 0.2%.
Granada (Grenada)	98.000	Inglés	Catolicos Romanos	Todo acuerdo es por escrito. Son amigables. Ser conservador en su vestimenta es importante.	Individualistas El 84% de su población es de origen africano, el 12% es la religión del africano y el blanco europeo, el 3% de origen Hindú y el 1% blanco.
Guyana	856.000	Inglés	Hinduismo	Se debe ser puntual. Nunca rechace una invitación. Se debe ser conservador. La puntualidad es muy apreciada.	Moderamente Colectivistas El 51% de su población es de origen hindú, el 40% de origen africano, el 5% criollo y el 4% restante lo dividen europeos y chinos. En Guyana existen muchas culturas que han provenido de muchos países, pero los habitantes de la Isla tienen sus tradiciones y valores muy marcados, especialmente los de origen Africano. Los de origen Hindú los sentimientos personales son la base de la verdad, pero su gran fe en su religión siempre está presente.
Haiti	8.490.200	Francés	Catolicos	Amigables	Individualistas El 95% de la población es de origen africano, el 4.9% es mulato y el 0.1% es blanco. Generalmente el Haitiano es alegre y muy conversador en las reuniones de trabajo. Por su fuerte de descendencia africana predomina la música proveniente de este continente.
Jamaica	2.772.900	Inglés	Cristianos	Aman el Reggae. Son religiosos y amigables. Todo debe ser por escrito.	Individualistas El 76% de la población es de origen africano, el 15% mulato (afro-Europeo), el 3.5% blanco y el 5.5% restante lo conforman hindúes, mestizos y otros.
Monserate	10.200	Inglés	-	Amigables, alegres y amables. Se debe ser puntual. Cambio de tarjetas es importantes.	Individualistas El 94% de la población descende de africanos, el 5% de europeos y el 1% restantes otros. Son una gente dinámica, independiente y cómoda, aman la música.

PAIS	POBLACIÓN (HAB)	IDIOMA (OFICIAL)	RELIGIÓN (OFICIAL)	NEGOCIACIONES	ORIENTACIÓN CULTURAL
San Cristobal y Nevis (St. Kitts y Nevis)	42.000	Inglés	-	Interesados en el corto plazo. Todo acuerdo debe ser por escrito.	Individualistas y Masculinidad La raza predominante en las islas es de raza negra de origen africano.
Santa Lucia	158.400	Inglés	Cristianos	Interesados en el corto plazo. Ser conservador en su vestimenta es importante	Individualistas Predomina la raza negra proveniente del África. El legado francés sigue presente en el dialecto local.
San Vicente y las Granadinas	121.100	Inglés	-	Se debe ser puntual. Es indispensable en el corto plazo	Individualistas Predomina la raza negra de origen africano, con aproximadamente el 66% de la población; adicionalmente hay un 19% de mulatos, un 5% de hindúes, un 4% de europeos (portugueses en su mayoría) y un 6% de mestizos (criollos). Relaciones Informales (población altamente étnica) Su población está constituida por cróeles (34%), hindúes (34%), indonesios (15%), negros de la selva (10%), indoamericanos (3%), europeos (2%), chinos (2%). La población es una de las mas étnicamente variadas en el mundo. Cada grupo étnico preserva su propia cultura, además, muchas empresas incluyendo partidos políticos tienden a seguir los lineamientos de cada grupo en particular. Las relaciones informales varían; la clase alta que esta compuesta por varios grupos étnicos son agrupados sin ningún tipo de problema. Todos los grupo étnicos se pueden encontrar en las escuelas y empresas.
Surinam (Suriname)	431.000	Holandés	Hinduismo, Católicos Musulmanes Y Judaismo	Cambio de tarjetas es indispensable. Todo acuerdo es por escrito.	Individualistas El 40.8% de la población es descendiente de africanos, el 40.7% es descendiente de indostanos, el 16% es producto del cruce de los anteriores y el 2.5% restante corresponde a las minorías blancas, chinas y árabes.
Trinidad y Tobago	1.362.000	Inglés	-	Se recomienda el intercambio de tarjetas. Interesados en el corto plazo. Un apretón de manos se usa cuando se visita un cliente.	Individualistas A lo largo de la geografía de las Antillas Holandesas, predomina una raza producto de la mezcla del negro africano, el amerindio y el europeo, donde sobresale el nativo de rasgo africano.
Antillas Holandesas	262.600	Holandés	Protestantismo Hinduismo, Católicos y Musulmanes	La escala jerárquica es importante. Se respeta la honestidad. La puntualidad es vital.	Individualistas La población en su mayoría es producto del cruce de africanos, europeos y caribeños de origen (Arawaks y Caribes). En la actualidad se encuentran residentes de mas de 40 nacionalidades diferentes. Aruba está formada por una mezcla de gente de Suramérica y Europa, también del lejano oriente y de otras islas del Caribe. Los diferentes pobladores han agregado un sabor único a las vidas de los habitantes de esta isla.
Aruba	81.500	Holandés	Protestantismo Hinduismo, Musulmanes y Católicos	Se admira mucho la modestia y no gusta las exageraciones. La puntualidad es importante.	Individualistas El 80% de la población es de origen europeo (blanco) y el 20% restante de origen africano. Existen tradiciones en la Isla como las serenatas de los novios, el luto cuando un pariente fallece, la bendición de las madres a los hijos, el pedir la mano de las novias, entre otros.
Puerto Rico	3.949.200	Español e Inglés	Católica	Se respeta la honestidad. Todo debe ser por escrito. Se recomienda el cambio de tarjetas.	Colectivismo El puertorriqueño es amigable y atiende a los extranjeros de muy buena manera, la personalidad es alegre, conversan mucho con las personas y realizan toda clase de preguntas. Sus tradiciones son cumplidas

PAIS	POBLACIÓN (HAB)	IDIOMA (OFICIAL)	RELIGIÓN (OFICIAL)	NEGOCIACIONES	ORIENTACIÓN CULTURAL
					en todo el territorio de la isla.
Islas Virgenes Americanas	119.000	Inglés	Protestantis mo Catolica y Judaismo	Interesados en el corto plazo.	Individualistas Su población está compuesta por isleños, descendientes de africanos (74%), americanos (13%), puertorriqueños (5%) y otros de origen europeo y latinoamericano (8%).

CONCLUSIONES

La realización de ésta investigación proporciona información detallada y profunda de las características de los mercados de la región Caribe en lo relacionado con las variables culturales que tienen incidencia en el consumo de los productos, y por lo tanto deberán ser tenidas en cuenta en cualquier estrategia de posicionamiento internacional. Esta investigación será de interés para las Pymes exportadoras de Barranquilla porque tendrán un acercamiento con el Caribe para que no les cause traumatismos que a la postre conduzcan a llevar una negociación al éxito. Adicionalmente, esta investigación le proporcionará a los empresarios la información adecuada para la construcción de planes comerciales y de marketing internacional hacia el Caribe, por ejemplo los estrategias contarán con mayores elementos de juicio que les permitirán preparar planes de mercadeo internacional con un conocimiento profundo de las culturas de esta región, determinantes en la definición de las estrategias de la mezcla de mercadeo. Como pudo demostrarse, con cada isla del Caribe, en relación con el comercio internacional no se pueden manejar economías de escala para el buen aprovechamiento del transporte, la oferta de transporte no es del todo abundante, a excepción del marítimo, por ejemplo para Puerto España en Trinidad y Tobago y Kingston en Jamaica donde se han concentrado centros de trasbordo y cargas.

Adicionalmente para los anteriores destinos, República Dominicana y Puerto Rico se puede mantener una oferta regular y económica. La Costa liderada por Barranquilla debe exigir a todos los niveles la calidad de sus productos, bienes o servicios, implementando para ello las normas ISO 9000 que garanticen la excelente calidad de sus exportaciones, tanto del producto, como el buen manejo que se haga de ellos. Para ello debe coordinar, con las entidades nacionales tales como el ICONTEC y el CIDET (Comité Independiente de Desarrollo Tecnológico), un amplio programa de culturización en todos los niveles de producción. Es bien sabido que la aplicación consciente de las normas ISO 9000 trae como consecuencia un mejoramiento técnico, financiero, y operativo que da como resultado la excelencia en toda la cadena de producción y que es prenda de garantía para los compradores de bienes y servicios. Estimular, financiar y capacitar al máximo las Pymes, pues estas han demostrado su eficiencia, especialmente en las exportaciones no tradicionales, desde su creación en el año de 1.999. En el caso de las exportaciones de servicios, además de las entidades altamente especializadas, el SENA (Servicio Nacional de Aprendizaje), debe jugar un papel importantísimo capacitando técnicos con tecnología de punta. Para esto la industria debe colaborar con el SENA haciendo aportes que vayan un poco más allá de los obligatorios que exige la ley.

Las Pymes de Barranquilla deben establecer ya sea por sectores unos embajadores itinerantes que deben ser pagados por estas empresas para que continuamente estén viajando por el Caribe y sean unos retroalimentadores de los gustos y preferencias de los consumidores de esta región. Además, establezcan contactos de negocios y organicen ferias de las Pymes Barranquilleras. Por otro lado, el Caribe ofrece a las Pymes de Barranquilla un mercado altamente competitivo para los diferentes productos

manufacturados en la ciudad, por ejemplo, el 98% de las islas importan productos como ropa íntima, materiales de construcción, bebidas, vestuarios, carne enlatada, harina, trigo, aceites, fertilizantes, equipo agrícola, bienes de capital, herramientas, algodón, aceites vegetales, empaques, envases, medicamentos, entre otros, este mercado significa un pilar importante para el desarrollo de estas pequeñas empresas pero que deben conocer más a fondo ciertas variables socio-económicas para no incurrir en errores fatales que repercutirían en pérdida de mercado y negociaciones importantes.

BIBLIOGRAFÍA

Acevedo, Camilo (2000). *Visión Económica y Comercial del Caribe*. Proexport

Arteta, María Eulalia y Ramón Atencio (1990). *Perfil Socio-Económico de Barranquilla*. CERES, Universidad del Norte. Barranquilla.

Arese, Héctor Felix (1999). *Comercio y Marketing Internacional*. Pagina 245. Primera Edición. Grupo Editorial Norma, Colombia.
Cámara de Comercio de Barranquilla.

Cateora, Philip (2001). *Marketing Internacional*. Pagina 104. Décima Edición. Mc Graw Hill. México

Czinkota, Michael y Ronkainen, Ilkka (1996). *Marketing Internacional*. Pagina 302 Cuarta Edición. Mc Graw Hill. México

Hernández, Roberto, Fernández Carlos y Baptista Pilar (1999). *Metodología de la Investigación*. McGraw Hill. Segunda Edición. México.

Engel, James., Blackwell, Roger y Miniard, Paul (1986). “Consumer Behavior”.Pagina 152. Hinsdale, 111, Driden Press. Quinta Edición.

El Herald, Pymes Exportadoras. Barranquilla, Marzo 1 de 2002.

García-Sordo, Juan B. (2000). *Marketing Internacional*. Pagina 345. Primera Edición. Mc Graw Hill. México

Parada Corrales Jairo (1998). “Ciudad y Apertura Económica: El caso de Barranquilla” en *Investigación y Desarrollo*. Universidad del Norte.

Rugman, Alan (2000). *Negocios Internacionales*. Mc Graw Hill. Pag 408. México

Principales Websites

www.proexport.com.co

www.bancoldex.com

www.exitoexportador.com/caribe.htm

ANÁLISIS A LA IMPLEMENTACIÓN DEL IMPUESTO SOBRE LA RENTA (ISR) A LA COMPRA VENTA DE ACCIONES EN MÉXICO

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RESUMEN

La fase de evolución económica en la que estamos inmersos incluye un factor importante que durante las épocas pasadas no era tan trascendente: el Sistema Financiero. La capitalización de las empresas a través de las Bolsas de Valores es parte de ese sistema. La capitalización de las empresas a través de la colocación de acciones en Bolsa Mexicana de Valores (BMV) es punto central del presente trabajo, el cual plantea la resolución, con la perspectiva de las autoras, a las siguientes preguntas, ¿vender, enajenar, endosar acciones es en un mercado de capitales genera ingresos independientemente de que la fuente de riqueza sea generada por la oferta y la demanda del mercado? ¿La desregularización de los mercados de capitales creadas desde años anteriores tiene consecuencias devastadoras en las economías que agravan las crisis económicas? ¿Las grandes salidas y entradas de capitales desestabilizan financieramente a un país y dañan la producción? ¿A qué se refiere James Tobin cuando hace un redescubrimiento de su impuesto sobre la especulación? ¿Cómo funciona el impuesto a la especulación implementado en 2008 en México (impuesto sobre la renta)? ¿La regulación del mercado de valores puede frenar o disminuir los efectos de una crisis económica?

Palabras clave: Crisis Económicas, Bolsa Mexicana de Valores, Impuesto a la Especulación, Regulación a la Venta de Acciones.

INTRODUCCIÓN

Posteriormente a crisis mexicana que inició en 1995, el Banco de México (Banco Central de México), la Secretaría de Hacienda y Crédito Público (SHCP), la Comisión Nacional Bancaria y de Valores (CNBV), dependiente de la SHCP, y las instituciones involucradas en el Sistema Financiero Mexicano, realizaron ciertas acciones a efecto de “blindar” a México contra posibles depresiones económicas.

Derivado de esas acciones, surgen las siguientes: Se implementa la Política Monetaria del Plan Nacional de Desarrollo (PND) 1995-2000, por lo que desde 1998, el Banco de México ha implementado medidas que permiten controlar el tipo de cambio frente al dólar. Durante este periodo ocurrió un hecho importante para México, el Grupo Financiero Banamex fue adquirido por City Group a través de la Bolsa Mexicana de Valores (BMV), sin pagar un solo peso de impuestos por ésta operación millonaria. El caso provocó sospechas de especulación, y de exención al pago de impuestos al obtener ganancias en este tipo de transacciones. Este trabajo realiza un análisis a los efectos, legislativos, financieros y empresariales que el impuesto sobre la renta (ISR) por la venta de acciones se ha presentado en México. Se estudian las propuestas que Tobin realiza en torno al impuesto a la especulación. Posteriormente se estudia el caso de una empresa mexicana que refleja los impactos del ISR en la venta de acciones. Finalmente se presentan propuestas a los legisladores en materia de ISR, que permitan, además de gravar la venta de acciones, proteger las inversiones en BMV a través de un gravamen a la especulación.

REVISIÓN LITERARIA

La idea de implementar un impuesto en las operaciones de compra venta de acciones, originalmente fue hecha por James Tobin, un economista estadounidense que en el trabajo «*throwing sand in the wheels*» propuso el cobro de impuestos a los movimientos de capitales a corto plazo. (Alonso: 2001). Si bien las propuestas ha sido variable, el impuesto formulado por James Tobin sigue siendo la opción recomendable a la prevención de quiebras derivadas de movimientos financieros (Hernández; 2000). Cuando James Tobin plantea imponer un impuesto en las operaciones con acciones, se refiere básicamente a frenar la especulación, así “El impuesto sobre las transacciones de divisas estaba pensado para amortiguar las fluctuaciones de los tipos de cambio. La idea es muy simple: en cada cambio de una moneda a otra se impondría una pequeña tasa, digamos del 0.5% del volumen de la transacción. Así se disuade a los especuladores. Porque muchos inversores invierten su dinero en divisas a muy corto plazo. Si este dinero se retira de repente, los países tienen que elevar drásticamente los intereses para que la moneda siga siendo atractiva. Pero los intereses altos son a menudo desastrosos para la economía nacional, como han puesto de manifiesto las crisis de los años noventa de México, el Sudeste asiático y Rusia. Mi tasa devolvería un margen de maniobra a los bancos emisores de los países pequeños y opondría algo al dictado de los mercados financieros. (Spiegel, 2001) La definición de algunos términos relacionados con el presente trabajo será la de Keynes (2001). Expuso que el término especulación es la actividad de prever la psicología del mercado. Por movimiento cíclico dice que al progresar el sistema, por ejemplo, en dirección ascendente, las fuerzas que lo empujan hacia arriba al principio toman impulso y producen efectos acumulativos unas sobre otras, pero pierden gradualmente su potencia hasta que, en cierto momento, tienden a ser reemplazadas por las operaciones en sentido opuesto; las cuales, a su vez, toman impulso por cierto tiempo y se fortalecen mutuamente hasta que ellas también, habiendo alcanzado su desarrollo máximo, decaen y dejan sitio a sus contrarias.

Como dice Keynes, una crisis no es exactamente el alza de una tasa de interés sino más bien un colapso repentino de la eficiencia marginal del capital (EMC). El espíritu empresarial o empresa es para Keynes la tarea de prever los rendimientos probables de los bienes por todo el tiempo que duren, de ninguna manera la empresa deberá ser predominada por la especulación. Las acciones que se venden a precios de Mercado a través de la Bolsa Mexicana de Valores se gravan según el Precio de Venta de estas, es decir, no tienen nada que ver con el Valor Nominal que se pagó al momento de exhibirlas. Y como dice el reglamento de la Ley del Impuesto sobre la Renta (RISR) “a la ganancia acumulable derivada de operaciones con títulos opcionales (warrants) referidos a acciones que cumplan con requisitos que establece dicha fracción, siempre que se realicen en Bolsa de Valores en los términos de la Ley del Mercado de Valores y que se liquiden en efectivo” (RLISR, 2008). El Impuesto Sobre la Renta en México es el impuesto a las ganancias (utilidades), grava las utilidades de las empresas. (LISR: 2008). Los warrants son un instrumento financiero representado en valores que otorgan unos derechos a comprar o vender un determinado activo llamado "activo subyacente" a un precio predeterminado conocido como "precio de ejercicio"... Entre los subyacentes posibles de un warrant se encuentran; acciones, portafolios de acciones, obligaciones, divisas, materias primas, índices de bolsa, tipos de interés, tipos de cambio, en unas condiciones determinadas. (Gestiopolis, 2008).

De El Universal (Avilés, 2008):“La Suprema Corte de Justicia de la Nación validó el impuesto del 5% que se aplica a las personas o grupos que vendan más del 10% del capital social de una empresa, en una o varias operaciones, en el transcurso de dos años. Niega la Suprema Corte de Justicia de la Nación (SCJN) amparo al empresario Alejandro Joaquín Martí García, quien buscaba que la Corte ordenara que Hacienda le devolviera el dinero que le retuvo por concepto de la venta del 27.05% del total de las acciones de Grupo Martí, la cual ascendió a alrededor de 2 mil millones de pesos.

El impuesto en cuestión, contemplado en el artículo 109 de la Ley del Impuesto sobre la Renta, se implementó a partir del 2007, después de las críticas que generó el hecho de que se conociera que

Citigroup adquirió a Grupo Financiero Banamex, a través de movimientos en la Bolsa Mexicana de Valores (BMV), sin pagar un solo peso de impuestos por esa operación multimillonaria.” Posteriormente analizaremos el artículo 109 de la Ley del Impuesto Sobre la Renta en México (fracción XXVI, misma que fue dispuesta en 2008). Se consultan algunos reportes de ventas de acciones que se han efectuado a través de la Bolsa Mexicana de Valores y por los que se han cobrado ISR. Utilizamos un ejemplo real de venta de acciones en BMV del Grupo Mexichem, para mostrar la consecuencia de la aplicación del ISR, así como el comparativo con las propuestas que existían para las operaciones en BMV.

Finalmente se presentan propuestas a los legisladores en materia de ISR, que permitan, además de gravar la venta de acciones, proteger las inversiones en BMV a través de un gravamen a la especulación. Los supuestos son para las empresas que cotizan en la Bolsa Mexicana de Valores el objetivo es tratar de impedir la especulación, no de desalentar la inversión, ya que como dice Tobin todos nos beneficiamos de ella. Los controles a través de la BMV pueden ser SENTRA (sistema electrónico controlado por la BMV), en donde los registros y los datos de los capitales son inspeccionados, la retención de un impuesto a la especulación se hará a través de la retención del 0.3% de los capitales que se dispongan, es decir que verdaderamente se hacen efectivos en divisas. Dichos ingresos no se acumulan a Ingresos Acumulados para Impuesto Sobre la Renta, sino que son pagos definitivos al sistema impositivo mexicano.

La tasa especulativa trata de prevenir la salida masiva de capitales que operan en la BMV y que frenan el espíritu de empresa la que Keynes se refiere en su obra cumbre. Por otro lado no se trata de frenar a las grandes compañías, ni de considerar que los ingresos derivados de la especulación sean para obras de beneficencia, ese es un subproducto que en el presente trabajo no se discutiré, toda vez que con la nueva ley del Mercado de Valores, las empresas medianas y pequeñas pueden fondearse a través de la BMV, ellas también estarían consideradas para estas restricciones.

RESULTADOS

Para analizar las consecuencias que la implementación del ISR a la compra venta de acciones en México, hemos considerado pertinente tomar como caso a la empresa Mexiquem, quien es un grupo líder en la industria química y petroquímica de Latinoamérica. (Mexichem, 2009). Si bien el grupo Mexichem es una controladora que opera desde hace años en la Bolsa Mexicana de Valores, es un ejemplo relevante toda vez que le ha tocado perder en octubre pasado una de las más considerables reducciones a los precios de mercado de sus acciones. Además es un grupo cuyas empresas son reales, es decir, tienen plantas productoras de materiales químicos en la república mexicana y se dedica a la transformación, es decir, es un grupo industrial, no de servicios, ni de extracción, y por ello sus empresas son generadoras de valor agregado. Y que si bien existieron otros factores como la caída del precio del petróleo que afectó sus acciones, es una compañía seria y fuerte. Por lo tanto la estamos considerando en este ejemplo, mismo que tiene fines académicos y educativos. Para éste caso tomaremos las acciones de Mexichem, el valor en libros emitido como valor es de 4.6792 (El Financiero, 2009). Si el precio de venta fue de 12.07 y las acciones se hubieran comprado un día anterior a 11.70, la ganancia sería de 37 centavos de peso por cada acción, si se operaron 3,321,200 acciones (El Financiero, 2009), la ganancia será de 1,228,844 pesos, las ganancias para las personas que vendieron (suponiendo que especularon al comprar un día antes para esperar una ganancia); si la LISR adicionó al apartado XXVI del Artículo 109 la obligación de pagar ISR a las personas que tengan directa o indirectamente el 10% de las acciones representativas de la sociedad emisora, y que sea en un periodo de 24 meses como máximo; por lo anterior, y suponiendo que las operaciones del día hubieran cubierto las condiciones del apartado XXVI, se acumularían a los ingresos de los vendedores, toda vez que hubo una ganancia, según la fracción V del artículo 20 de la Ley del Impuesto Sobre la Renta, México (LISR: 2008). Sin embargo la realidad del Impuesto Tobin es otra, no se trata de saber si es el 10% y ni si es propiedad de una sola empresa o si vende en menos de 24 meses las acciones; en realidad el Impuesto debe hacerse al momento de solicitar divisas que pueden sacarse del país, concretamente, dólares. Ya que es un impuesto a la conversión, más que a la venta condicionada de

acciones. Más bien lo que tendría que hacerse sería que el volumen operado de 3,321,200 acciones a 12.07 pesos por cada acción representan \$40,086,884 pesos, a la hora de convertir a dólares este importe, se tendrían 13.45 pesos por 1 Dólar Americano (USD), lo que llevaría a “sacar” del país 2,980,437.47 USD, sobre ellos se impondría un 0.5% , es decir, 14902.18 USD de impuesto a la especulación (independientemente de que se llame Impuesto sobre la Renta o Impuesto Empresarial de Tasa Única, ambos gravan ganancias en México). El fin es frenar la especulación, no tanto obtener ganancias de operaciones poco probables (Notimex, 2008).

CONCLUSIONES

Como puede observarse con el análisis y resultados realizados, los impactos de la implementación de un ISR son diversos: Ya que se trata de impuesto a la ganancia, más que a la conversión, la incorporación de la fracción XXVI no representa un gravamen a la especulación como lo propusieron Tobin y Keynes. Las crisis económicas como dice Keynes son fuerzas del propio sistema capitalista “crisis no es exactamente el alza de una tasa de interés sino más bien un colapso repentino de la eficiencia marginal del capital”. Por lo tanto el hecho de implementar a una venta de acciones no es relevante para poder frenar la crisis, porque un impuesto no hace más eficiente al capital y recordemos que la Eficiencia Marginal del Capital no es otra cosa que la relación entre el rendimiento probable de un bien de capital y su precio de oferta, es decir, la que hay entre el rendimiento probable de una unidad más de esa clase de capital y el costo de producirla.”El impuesto debería aplicarse al menos por todos los países de moneda clave o con centros financieros importantes (Alonso:2001) Quizá la fracción XXVI del artículo 109 de la LISR no grava la especulación, pero si ese fuera su objetivo, necesitaría estar en concordancia con otros países cuyos centros financieros pudieran fortalecer el cerco de protección anti especulación. Aunque el impuesto sería recaudado por cada gobierno sobre todas las conversiones monetarias spot efectuadas dentro de su jurisdicción (Alonso, 2001) los problemas de la especulación debería ser vigilada por Organismos internacionales, ya que el fenómeno financiero traspasa fronteras, quizá el Fondo Monetario Internacional, el Banco Mundial y la Organización Mundial de Comercio, ya que como dice Tobin “Los problemas de la globalización no se resuelven deteniéndola. Todos los países y sus habitantes se benefician del libre intercambio de mercancías y de capital (Spiegel, 2001)”.

El espíritu de empresa debe superar a la especulación. Y la política monetaria y fiscal debieran ser aplicadas por el Banco de México y la SHCP, organismos internos de México, toda vez que ésta última es la encargada de los impuestos en este país. Para México, se trata de gravar operaciones de ganancias especulativas, originadas por los poseedores de acciones (capitales), pero sin condiciones, sino en general; a todos. Es necesario pagar por todas las ganancias, ya que muchas de estas operaciones tienen más ganancias que muchas empresas juntas. Si el impuesto sobre la renta se cobra por ganancias en la venta de acciones, en realidad las empresas pueden tener pérdidas en lugar de ganancias, entonces es mas relevante cobrar al momento de operar cualquier tipo de warrants en la Bolsa Mexicana de Valores, más que a las ganancias o las pérdidas. Cuando las acciones se venden por primera vez, no deben llevar un impuesto toda vez que la función es captar y colocar recursos, es decir, en el mercado primario, la colocación de las acciones por parte de las compañías se hace con el fin de fondear o capitalizar a la sociedad emisora, en ese sentido la función de captar (la empresa) y colocar (el inversionista) no debe tener ningún tipo de impuesto, ya que desmotivaría el espíritu de empresa del que habla Keynes.

REFERENCIAS

Alonso, M. (2001). El impuesto Tobin como una solución a los Mercados Financieros Internacionales. Boletín Económico ICE 2484, 2001.
http://74.125.95.132/search?q=cache:EGCJW7FCXAJ:www.revistasice.com/cmsrevistasICE/pdfs/BICE_2684_1724__FC260BD738DECBA5EC9F6A77ECDE5113.pdf+felix%2Blos+capitales+extranjeros+y+el+impuesto+Tobin&cd=4&hl=es&ct=clnk&gl=mx Consultada el 10 de Marzo 2009.

Avilés, C. (2008). El Universal. Valida Corte impuesto a venta de acciones en BMV. Publicado el 05 de noviembre de 2008. <http://www.el-universal.com.mx/notas/553073.html> Consultada el 05 abril 2009.

Banco Popular de España. (2007). Fiscalidad. http://www.bancopopulare.com/esp/ecom/pc/pweb/htm/vvrble_fisc.htm?carp=1&fald=6&lugar=0&color=Azul&foto=foto.vacio Consultada 05 abril 2009.

Banxico. (2008). Medidas Instrumentadas por el gobierno Federal y el Banco de México para Preservar la Estabilidad Financiera. <http://www.banxico.org.mx/medidasesp.pdf> Consultada el 13 de marzo 2009.

Bolsa Mexicana de Valores consultada en <http://bmv.com.mx> el 17 de abril del 2009.

Calderón, F. (2007). Diario Oficial de la Federación. DECRETO por el que se reforman, adicionan y derogan diversas disposiciones de la Ley del Impuesto sobre la Renta, del Código Fiscal de la federación, de la Ley del Impuesto Especial sobre Producción y Servicios y de la Ley del Impuesto al Valor Agregado, y se establece el Subsidio para el Empleo. Publicado 01 de octubre de 2007. http://www.diputados.gob.mx/LeyesBiblio/ref/lisr/LISR_ref13_01oct07.pdf Consultada el 05 abril 2009.

Cámara de Diputados. (2007). Gaceta Parlamentaria, número 2359-II . Acuerdo de la Junta de Coordinación Política. Publicada 14 de octubre de 2007. <http://gaceta.diputados.gob.mx/Gaceta/60/2007/oct/20071010-II.html> Consultada el 05 abril 2009.

Cobo, J. (2007) Expansión.com. IRPF 2007 La Nueva Ley: Final “a medias” para las plusvalías con antigüedad. Publicada 15 noviembre 2007. <http://www.expansion.com/especiales/irpf2007/lafiscalidad3.html> Consultada el 05 abril 2009.

El Diccionario de la Economía, Términos Financieros, (2009) consultada en <http://www.terminosfinancieros.com.ar/definicion-accion-4> el 30 de Marzo del 2009.

El Financiero (2009). Sección Mercados, 21 DE Abril del 2009. ESTAS SON LA MISMA REFERENCIA???

El Universal. (2008). Valida Corte impuesto a Venta de Acciones en BMV. Publicado 05 noviembre del 2008.

Félix, A. (1996). Los capitales extranjeros y el impuesto Tobin. CEPAL. México.

Gestiopolis. (2008). WARRANTS: INSTRUMENTOS FINANCIEROS DE INVERSIÓN. <http://www.gestiopolis.com/canales/financiera/articulos/35/warrants.htm> Consultada el 19 de abril 2009.

Hernández, R. “El Ingreso de Capitales a México y la Crisis de 1994”, BUAP, 2000. consultada en: <http://en.scientificcommons.org/6567948>

Infobaeprofesional.com (2006). Gravabilidad de la venta de acciones y títulos valores para personas físicas. Publicada 13 marzo 2006.

Keynes, J.M. (2001). Teoría General de la Ocupación, el Interés y el Dinero, Tercera Edición, FCE.

Ley del Impuesto Sobre la Renta (2008) , Prontuario Tributario, Tax Editores.

Mexichem. (2009). Pagina oficial.

http://www.mexichem.com/web_mexichem/empresa.php?page=somos.php Consultada el 20 de abril 2009.

Mexichem. (2009). http://www.mexichem.com/web_mexichem/bursatil.php del 21 de abril 2009.

Notimex. (2008). Tendrá mínimo impacto aplicación de ISR en operaciones de la BMV. Publicado 12-Febrero-2008. http://www.vanguardia.com.mx/diario/noticia/economia/finanzas/tendra_minimo_im_pacto_aplicacion_de_isr_en_operaciones_de_la_bmv/119267. Consultada el 05 abril 2009.

Reglamento de la Ley del Impuesto Sobre la Renta 2008, Artículo 134.
http://www.caad.gob.mx/Reg_24.pdf Consultada el 19 de Abril del 2009.

SAT. (2008). Reforma Fiscal 2008: Enajenación de acciones en bolsa de valores
http://www.sat.gob.mx/sitio_internet/informacion_fiscal/reforma2008/137_10333.html Consultada el 05 abril 2009.

Soto, O. y Román, R. (2004). El Universal.com.mx. Revisarán SAT y CNBV la venta de Bancomer. Sección Finanzas del 04 de marzo 2004.

http://www2.eluniversal.com.mx/pls/impreso/noticia.html?id_nota=38717&tabla=finanzas
Consultada el 05 abril 2009.

Spiegel, D. (2001). El movimiento antiglobalización abusa de mi nombre.
<http://www.eumed.net/cursecon/textos/tobin-antiglob.htm> Consultada el 13 de Marzo 2009.

Valderrama, C. (2007). Economía y Negocios on Line
Impuesto por la venta de acciones. Publicada el 16 de agosto 2007.
http://www.economiaynegocios.cl/mis_finanzas/detalles/detalle_fin.asp?id=852
Consultada el 05 abril 2009.

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FUNDAMENTOS ESTRATÉGICOS DEL SECTOR OLEÍCOLA Y SUS COOPERATIVAS DE TOLEDO EN MOMENTOS DE INCERTIDUMBRE

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RESUMEN

El sector oleícola de la provincia de Toledo como a nivel nacional tomó una decisión que ha resultado ser fundamental en el desarrollo posterior para la sostenibilidad del negocio y sobre todo la perdurabilidad de un modelo productivo arraigado en el territorio. Una toma de decisión es fundamental en el ámbito empresarial, y en el sector cooperativo no es diferente. La situación se presentaba con ciertos visos de dificultad, lo que provocó que las cooperativas oleícolas tomaran como determinación que la unión hace la fuerza, y en este caso, en el ámbito del sector del aceite de oliva se creó la solución con una institución de segundo grado: Oleotoledo. El resultado se pone a prueba en estos momentos en los que hasta ahora el funcionamiento de la cooperativa de segundo grado ha dado unos resultados diferentes que de forma individualizada.

Palabras clave: desarrollo, sostenibilidad, decisión, aceite de oliva, duradera.

REFERENCIAS BIBLIOGRÁFICAS

Arcas, N.; Munuera, J. L. Y Hernández, M. (2002): “Beneficios De Las Cooperativas Agrarias De Segundo Grado: Contribución A Los Objetivos De Sus Socios”. Revista De Estudios Cooperativos, Nº 76, Pp. 7-25.

Caballer, V.; Juliá, J. F. Y Segura, B. (1987): Las Cooperativas Agrarias: Un Análisis Empresarial. Iii Premio Pascual Carrión. Ed. Aedos.

Porter, P. K. Y Scully, G. W. (1987): «Economic Efficiency In Cooperatives». The Journal Of Law & Economics, Vol. Xxx (2): Pp. 489-512.

Segura, B. Y Oltra, M. J. (1995): «Eficiencia En La Gestión De Las Cooperativas Agrarias De Comercialización». Investigación Agraria. Economía, Vol. 10 (2): Pp. 217-232.

VINCULACIÓN ESCUELAS DE NEGOCIOS-EMPRESAS: MEJORES PRÁCTICAS PARA LA INNOVACIÓN

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RESUMEN

La colaboración universidad-empresa constituye un excelente promotor de la innovación, debido a que las nuevas ideas se transfieren de las aulas a productos y servicios. Especialmente, esto ocurre cuando la empresa busca conocer nuevas tecnologías o resolver problemas técnicos. Sin embargo, ¿esto ocurre en el caso de las escuelas de negocio? La presente investigación presenta el marco de referencia para el estudio de la vinculación de las escuelas de negocio y empresas internacionales.

INTRODUCCIÓN

En la economía global actual, la innovación basada en la investigación es un elemento de competitividad. Por ello el tema de la colaboración entre la universidad y la empresa ha sido analizado por varios académicos, consultores de empresa y gente encargada de diseñar políticas públicas. Desafortunadamente la vasta literatura de las ciencias económico-administrativas en este tema se enfoca en la transferencia de tecnología entre el mundo académico y las corporaciones. Por ejemplo, se analiza la contribución de los laboratorios y universidades públicas al proceso de innovación de las corporaciones vía proyectos del área de investigación y desarrollo (I&D). Sin embargo, esta colaboración no debe limitarse sólo a esta área. Debe expandirse a la transferencia de conocimiento por medio de la capacitación y educación continua así como a la generación de conocimiento a través de la investigación.

Esta investigación tiene como objetivo conocer: ¿Cuáles son los factores de éxito para crear actividades de colaboración eficaces?

A. COLABORACIÓN UNIVERSIDAD-EMPRESA. MARCO TEÓRICO

Transferencia de Tecnología

Como se mencionó la mayoría de la vasta literatura trata sobre la colaboración en el área de investigación y desarrollo (I&D) e innovación entre universidad y empresa. Como lo indican Chakrabarti & Santoro (2004). La literatura se concentra en la perspectiva de los beneficios basada en los recursos que sólo cuenta una parte de la historia. La transferencia de tecnología: su contenido, su mecanismo, su organización, experiencia, fundamento. [9]

-Formas y tipos de colaboración: centros de investigación cooperativa [1], incubadoras.

-Beneficios de colaboración: impacto, barreras y factores de éxito, capacidad de innovar [14], clusters y ventajas de la aglomeración geográfica [6] [17]

A nivel teórico, la literatura tiene debilidades. Las principales contribuciones vienen de:

- La Economía del cambio tecnológico y la innovación, en particular del enfoque “geográfico” que estudian la comunión de prácticas, clusters, aglomeración. Las políticas científicas orientadas a los sistemas de innovación.

-Organización Industrial y Economía Gerencial. Se analiza las relaciones entre las distintas formas de organización económica. Especialmente, las investigaciones en redes, aprendizaje y confianza.

Mientras que el objetivo de la investigación ha sido entender la naturaleza del ambiente de negocios y su impacto en la innovación dentro de la empresa. Algunos investigadores se han concentrado en los procesos para construir las relaciones universidad-empresa y otras organizaciones intensivas en conocimiento. Dodgson publicó un importante artículo sobre la confianza en la investigación grupal en 1993 [11]. Dodgson afirma que una colaboración exitosa requiere de un alto nivel de confianza interpersonal entre científicos, ingenieros y directores. En particular, resalta el papel clave de las comunidades de interés, apertura a ideas externas y las relaciones inter-personales.

Chakrabarti & Santoro [7] resaltan el papel del capital social basado en la confianza, socialización y la interacción entre los miembros dentro de las relaciones universidad-empresa. Estos factores hacen posible y más eficiente el intercambio y transferencia de conocimiento así como la capacidad de aprendizaje. Laursen and Salter [15] afirman que la apertura es un factor de éxito clave para el desarrollo de la innovación. Las empresas involucradas en redes de colaboración tienden a asumir un mejor desempeño en la innovación.

Cohen, Nelson & Walsh [10] hicieron una importante aporte al analizar la relación e impacto de la investigación pública en las áreas de I&D industrial. Los autores analizaron varios canales de transferencia de conocimiento. Encontraron que las publicaciones y reportes son el canal dominante de transferencia, seguido por el intercambio informal de información, las conferencias y las consultorías. De acuerdo a su encuesta, la obtención de una licencia y el intercambio personal son los menos importantes. Es muy significativo que la “ciencia abierta” no relacionada con el mercado parece más eficiente que los intercambios privados que implican dinero. El resto de la literatura estudia las fuerzas y debilidades de la colaboración científica y tecnológica entre universidad y empresa. Pero, no considera los retos organizacionales y directivos así como el potencial de la cooperación con escuelas de negocios y dirección.

Colaboración con las Escuelas de Negocio

La literatura que trata sobre la relación de la industria con las escuelas de negocio es muy limitada. En un artículo clave por Watling, Prince y Beaver [27] se enfoca en la dinámica cambiante de la educación en negocios más que en las facetas potenciales de cooperación. Los autores se basan mucho en un reporte de la Fundación Europea para el Desarrollo de la Dirección [15] sobre el reto universidad corporación. Las principales tendencias que apoyan un incremento en la colaboración son:

- Una creciente conciencia de las corporaciones acerca de la importancia de los empleados y su desarrollo.
- Búsqueda de enfoques más flexibles e individualizados para desarrollar directivos.
- Desarrollar capacitación e intervenciones de desarrollo menos estructuradas y más concentradas al contexto de la empresa.
- Establecer uniones más fuertes para ambientes competitivos.
- Cambiar de programas abiertos a programas acreditados externamente dentro de la compañía.

Estas tendencias están influyendo los programas de las universidades. Se ha incrementado el uso de nueva tecnología, la contratación mediante outsourcing de empresas dedicadas a recursos humanos. Se ha cambiado la relación entre comprador-proveedor por sociedades más diversificadas e intensas entre negocios y escuelas de negocio.

El Contenido de la Cooperación

A) La transferencia de conocimiento a través de la educación y la capacitación. Es obvio que la industria necesita de la competencia de las universidades para acceder a personas educadas adecuadamente por medio de programas para la obtención de grados o capacitación profesional.

Muchos autores escriben sobre la cooperación en la educación superior. Por ejemplo, en programas de licenciatura generales y específicos [18], MBA's generales [12] y MBA's dedicados [5]. De acuerdo a la Reunión de Educación Ejecutiva EFMD llevada a cabo en la Universidad de Stellenbosch en Octubre 12-15 de 2003. [13,24]. Las mejores sociedades en educación ejecutiva son aquellas que se hacen para satisfacer una necesidad específica y que son financiadas y co-organizadas con una institución designada. Las asociaciones basadas en la necesidad son las más eficientes. Como lo resalta Betts and Santoro [4], cuatro variables determinan el éxito del aprendizaje y los resultados tecnológicos de las cooperación industria-academia tanto en el nivel inicial como final. Estas variables son: confianza, políticas de derechos de propiedad intelectual, comunicación y grado de superioridad. Respecto a la capacitación vocacional por medio de la colaboración, hay varios estudios de caso reportados en la literatura académica.

Otro camino para la colaboración es dentro de las universidades corporativas [2], [22]. Leenamaija [16] considera las asociaciones industria-universidad como la única forma para desarrollar aprendizaje de por vida. Debido a que por un lado los empleadores no tienen experiencia ni es su función dar educación continua y por el otro lado las instituciones académicas necesitan saber cuales son las necesidades de los empleadores en el futuro. Desde esta perspectiva, implementar aprendizaje de por vida requiere de nuevas estrategias por parte de las universidades y las empresas mediante las asociaciones que establezcan.

El Acceso al Conocimiento Tráves de la Consultoría

Hay un gran debate sobre el acceso al conocimiento más reciente a través de las instituciones académicas. Ankers & Brennan [3] consideran que la relevancia que tiene la investigación académica sobre las decisiones de la dirección empresarial es un tema que está adquiriendo mucho interés. Los autores resaltan la división inherente entre teoría y práctica. Rynes, Bartunek & Daft [23] también llaman a este desajuste como la gran división. Algunos académicos resaltan la irrelevancia del conocimiento producido por los profesores e investigadores de las escuelas de negocio debido a que muchos se realizan en el criterio científico para sus carreras [26] y su ingreso [20]. Oviatt y Miller [20] encontraron muchas razones que tienen los profesores de negocios para resistir la presión de los ejecutivos con mentes prácticas para que hagan sus investigaciones y enseñanza más aplicables a los problemas de negocios actuales y futuros.

Rynes, Bartunek & Daft [23] observaron que los investigadores de la dirección empresarial muy pocas veces preguntan a los directivos para que les sugieran sus temas y preguntas de investigación. Una debilidad complementaria de las instituciones académicas y sus profesores es que poseen habilidades de comunicación pobres [26]. Por otro lado, los ejecutivos de negocios también sufren por su renuencia a reflejar sus propias prácticas a partir de los resultados teóricos [26] y su distancia de los modelos teóricos [8]. Rynes, Bartunek & Daft [23] resaltan que los ejecutivos muy pocas veces no revisan los hallazgos académicos cuando desarrollan sus estrategias de dirección y su estilo de dirección. Christensen & Raynor [8] argumentan convincentemente la necesidad absoluta de los ejecutivos para recurrir a la teoría sobre la dirección empresarial.

Starkey & Madan [25] sugiere el alineamiento de los investigadores y directivos futuros para cerrar la brecha de la relevancia a través de cambios en los paradigmas académicos así como la integración de las empresas en los proyectos de investigación. Especialmente por medio de la colaboración apropiada en la creación y difusión del conocimiento. Pharr [21] enfatiza la necesidad de hacer investigaciones cooperativas entre las escuelas de negocios y los sectores público y privado. Por ejemplo, Nambisan & Wilemon [19] sugieren que la industria debería ayudar a definir la agenda de las política gubernamental de manejo de tecnología y educación.

REFERENCIAS

- [1] Adams, J.D., Chiang, E.P., Starkey, K., (2001), 'Industry-University Cooperative Research Centers', *Journal of Technology Transfer*, 26, 1- 2, pp. 73-86.
- [2] Allen, M, Renaud-Coulon, A., (2002), *The Corporate University Handbook*, Pepperdine University, Amacom Press, May.
- [3] Ankers, P., Brennan, R., (2002), 'Managerial relevance in academic research: an exploratory study', *Marketing Intelligence & Planning*, 20, 1, pp. 15-21.
- [4] Betts, S.C, Santoro, M.D., (2003), 'Industry and academe working together: Factors that give life to initial and continuing success', Kocaoglu, D.F. & Anderson, T.R. (eds.), *Technology Management for Reshaping the World*, IEEE Publications, Piscataway, NJ, pp. 165-171
- [5] Birchall, D.W., Chanaron, J.J., (2004), *Industry & Academic Institutions Partnerships*, Final Report of the Working Group #4, Leonardo Da Vinci-ELAN 2, The European Learning Automotive Network 2001-2005.
- [6] Caniëls, M., Romijn, H., (2001), 'Small-industry clusters, accumulation of technological capabilities and development: A conceptual framework', *Eindhoven centre for Innovation Studies*, Working Paper 01.05, June.
- [7] Chakrabarti, A.K., Santoro, M.D., (2004), 'Building social capital and learning environment in university – industry relationships', *International Journal of Learning and Intellectual Capital*, 1, 1, pp. 19-36.
- [8] Christensen, C.M. , Raynor, E.M., (2003), 'Why Hard-Nosed Executives Should Care about Management Theory', *Harvard Business Review*, September, pp. 66-74.
- [9] Claridge, P.F., (2004), *A Review of Technology Transfer From New Zealand Universities*, MBA Dissertation, Henley Management College.
- [10] Cohen, W.M., Nelson R.R., Walsh, J.P., (2002), 'Links and Impacts: The Influence of Public Research on Industrial R&D', *Management Science*, 48, 1, pp. 1-23.
- [11] Dodgson, M., (1993), 'Learning, trust and technological collaboration', *Human Relations*; 46, 1, pp. 77-96.
- [12] Edwards, V., Loveys, R. Wareing, T., (1993), 'How to make partnership work', *Journal of European Industrial Training*, 17, 3, pp. 3-7.
- [13] EFMD, (2002), *The Corporate University Challenge: Corporate competitiveness, learning and knowledge*, Report of the efmd CU Learning Group (1999-2001).
- [14] Fontana, R., Geuna, A., Matt, M., (2004), 'Firm size and Openness: The Driving Forces of University-Industry Collaboration', *EARIE conference*, Berlin, 2-5 September.
- [15] Laursen, K., Salter, A., (2004), 'Open for innovation, the role of openness in explaining innovation performance among UK manufacturing firms', *DRUID Summer Conference*, 29 March.
- [16] Leenamajja, O., (1994), 'Industrye-university partnership: Implementing lifelong learning', *Journal*

of *European Industria Training*, 18, 8, pp. 13-18.

[17] Martin, R., Sunley, P., (2001), 'Deconstructing Clusters: Chaotic Concept or Policy Panacea', *Regional Studies Association Conference on Regionalising the Knowledge Economy*, London, 21st November.

[18] Muskett, D., (1996), 'Making university-industry co-operation work for education and training', *Industrial and Commercial Training*, 28, 2, pp. 22-28.

[19] Nambisan, S., Wilemon, D., (2004), 'Industry should help define the agenda for technology management education', *Research Technology Management*, November-December, pp. 9-13.

[20] Oviatt, B., Miller, W.D., (1989), 'Irrelevance, Intransigence and Business Professors', *The Academy of Management Executive*, 3, 4, pp. 304-312.

[21] Pharr, S.W., (2001), 'Cooperative Research Efforts Between Business Schools And The Private and Public Sectors: Frequency Of Occurrence And Outcomes', *The Journal of Applied Business Research*, 17, 2, pp.1-16.

[22] Renaud-Coulon, A., (2002), *Universités d'entreprise, Vers une mondialisation de l'intelligence*, Editions Village Mondial, Paris.

[23] Rynes, S.L., Bartunek, J.M., Daft, R.I., (2001), 'Across the great divide, Knowledge creation and transfer between practitioners and academics', *Academy of Management Journal*, 44, 2, pp. 340-355.

[24] Slater, V., (2003), The Challenge of partnerships for Sustainable Executive Education, EFMD Executive Education Meeting, University of Stellenbosch Business School, South Africa, October 12-15, Conference report, Henley Management College.

[25] Starkey K.; Madan P., (2001), 'Bridging the Relevance Gap: Aligning Stakeholders in the Future of Management Research', *British Journal of Management*, December, 12, Supplement 1, pp. S3-S26(24).

[26] Tapp, A., (2003), 'Linking business schools and practice in direct marketing: Are we missing an opportunity', *Journal of Database Marketing & Customer Strategy Management*, 11, 2, pp. 107-113.

[27] Watling, D., Prince, C., Beaver, G., (2003), 'University business schools 2 business: the changing dynamics of the corporate education market', *Strategic Change*, 12, 4, pp. 223-234.

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LAS PYMES Y LAS TECNOLOGÍAS DE LA INFORMACIÓN Y LA COMUNICACIÓN

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RESUMEN

Debido a la globalización la forma de hacer negocios a cambiado significativamente, no así las Tecnologías de la Información y Comunicación han contribuido abrir espacios que antes no existían en cuestión de la actividad económica entre otras. No obstante se presenta la problemática de que las Pequeñas y Medianas Empresas se van quedando rezagadas debido la entrada de grandes empresas trasnacionales. De acuerdo a la Secretaria de Economía en México las PYMES constituyen la columna vertebral de la economía nacional, ya que representan 99.8% y generan 72% del empleo, eso sin contar con que representan 52% del PIB en el país (SEC, 2008), por ello es importante indagar los factores que determinan la adopción de las Tecnologías de la Información con el propósito en apoyo a la actividad económica de las Pequeñas y Medianas Empresas. Este trabajo tiene como objetivo presentar los principales factores internos inciden para que las PYMES en Mexicali Baja California adopten las TIC's de forma tal que les permitan no solo mantenerse en el mercado, sino ser competitivas ante la inminente globalización y apoyen su actividad económica tan importante para el país.

INTRODUCCIÓN

Gracias a la apertura de comercial de los países la forma de hacer negocios en nuestros días ha cambiado significativamente. Según la biblioteca electrónica Wikipedia se entiende como globalización: *Al proceso fundamentalmente económico que consiste en la creciente integración de las distintas economías nacionales en una única economía de mercado mundial* (Wikipedia, 2008).

En México los primeros indicios de la apertura comercial se dan en 1977, con la eliminación gradual de los permisos previos de importación. Con esta iniciativa ya se vislumbraba una política de apertura comercial, aunque no se hablaba abiertamente de ello. En 1986 México ingresa oficialmente al Acuerdo General de Aranceles y Comercio y para el 12 de agosto de 1992 concluyeron las negociaciones del TLCAN, 17 de diciembre de 1992 se firma y entra en vigor el 1 de Enero de 1994. El Tratado de Libre Comercio de América del Norte (TLCAN) se da en el marco de la globalización de los mercados y busca desaparecer las barreras arancelarias y no arancelarias del comercio internacional (Rodríguez, 2000). En la actualidad nuestro país tiene en vigor mil doscientos setenta tratados, de los cuales 653 son bilaterales y 617 multilaterales y de ellos 11 son tratados comerciales.(Reyes, 2008). Esto se traduce que México ha entrado en el vertiginoso proceso económico de integración con otras economías una de las cuales es nuestro vecino país con el que actualmente tiene el mayor intercambio económico.

Ante esta apertura comercial es necesario buscar las alternativas para que las PYMES, no solo no desaparezcan sino que sean competitivas, Asertivamente el autor de La Pequeña Empresa:¿Condenada a desaparecer con la Globalización?, dice que: *“Es importante recalcar que la globalización no solo afecta a las empresas medianas y grandes sino también a las pequeñas, basta con observar cómo se han ido acabando las tiendas familiares de abarrotes reemplazadas por grandes cadenas internacionales de supermercados, los “negocitos” de máquinas tragamonedas por los grandes establecimientos de apuestas, las pequeñas firmas de contadores por los grandes consorcios globales multiservicios, entre otros varios ejemplos. Y enfatiza que Los grandes retos para el empresario, independiente de su tamaño,*

es entender el entorno mundial de su industria y tomar ya sea la decisión de globalizarse, encontrar un socio estratégico, invertir en tecnología de la información, profesionalizar la administración de su empresa, empezar a exportar, en el momento adecuado”.(Angulo, 2006).

Una de las herramientas más importantes para logra la comercialización de los productos y servicios a nivel nacional e internacional es las Tecnologías de la comunicación. Algunos autores recalcan su importancia: Cote & Venina, afirman que *las TICs representan un área de oportunidad para las PYMES. El desafío consiste en que necesariamente estas empresas tendrán que adoptar e incorporar de manera estratégica esta tecnología a su organización* (Coté & Vecina, 2005; Joyce & Winch, 2005; Owens, 2006).

Por su parte Koonts asevera que *para tener éxito en el siglo XXI, las empresas tienen que aprovechar la tecnología de la información, especialmente la Internet* (Koontz & Weihrich, 2003, p. 12). Con Internet y World Wide Web (www), surge una herramienta para forjar una relación más cercana con el cliente (Jim, 1995).

Sin embargo es necesario no solo la adopción de las TIC's sino una estrategia y planeación adecuada para que realmente sean aprovechadas estas tecnologías en beneficio de las PYMES. De acuerdo a la Secretaria de Economía en México las PYMES constituyen la columna vertebral de la economía nacional, ya que representan 99.8% y generan 72% del empleo, eso sin contar con que representan 52% del PIB en el país (SEC, 2008). Por ello es importante indagar sobre los factores que afectan a las PYMES en su desarrollo ya que están son de suma importancia para la actividad económica del país.

Ante este panorama el presente trabajo pretende identificar los principales factores internos que impiden que las PYMES adopten las TIC's para hacerlas más competitivas. La ciudad fronteriza de Mexicali, B. C., es una ciudad industrial cuya ubicación geográfica permite el intercambio comercial con Estados Unidos. Sin embargo se observa que la mayoría de las Pequeñas y Medianas Empresas, aún no han incursionado en el mercado global y pocas de ellas han adoptado las TIC's en su actividad económica, el gobierno municipal y federal promueve acciones para su actualización tecnología y además ofrece algunos servicios en internet, no obstante aun no se ha indagado cuales son las causas que impiden que las PYMES en la ciudad de Mexicali adopten las TIC's aun teniendo un todos los medios para hacerlo.

REVISIÓN LITERARIA

Se sabe que existen factores tanto internos como externos propician o no la adopción de las TIC's, en las Pequeñas y Medianas Empresas, sin embargo para esta investigación solo se consideraran los factores internos, puesto que son los factores internos que los menos se logran identificar además son aquello en los la empresas si puede intervenir, es decir esta dentro de sus posibilidades tomar la decisión de adoptar las TIC's o no hacerlo.

Analizaremos los modelos los para medir el grado de adopción de las TIC's en las PYMES de los autores Elisabeth Lefebvre y Louis A. Lefebvre y modelo del Foro Económico Mundial (World Economic Forum) conocido en inglés como Networked Readiness Index (NRI), el cual es un índice para medir la integración de un país en las Tecnologías de Información y Comunicación (TIC).

En el primer modelo de los doctores Lefebvre dicen que existen tanto factores externos como internos que determinan el nivel de adopción de las TICs por parte de una PYME, en donde, dentro de los factores externos se encuentran las políticas nacionales en los campos social, económico, comercial y tecnológico, además del entorno macroeconómico y del sector productivo al cual pertenece la firma. Dentro de los factores internos, destacan la parte administrativa y el personal de la empresa. Es decir, aquellos factores que afectan la productividad, la rentabilidad y la competitividad de la empresa.(Lefebvre y Lefebvre, 1996).

La siguiente Tabla 1 muestra los principales factores internos que afectan la decisión de una empresa, a la hora de decidir si adopta o no tecnologías basadas en la computación y la Internet. En su modelo

existen varios indicadores iniciando con el número de empleados que usan una computadora o tiene computadora, el tamaño de la empresa, si la empresa tiene consideradas partidas para la compra y mantenimiento del equipo de computo, tecnificación del personal o la formación profesional del personal en las áreas de las informática, orientación tecnológica relacionado a los programas o equipo relacionadas con la actividad de la empresa que pueda favorecer tanto su producción como o servicios de internet que apoyen a su administración, política tecnológica, identificar si cuenta con planes a corto o mediana mejorar tanto el equipo como el software, Esfuerzo Innovador, el grado en que la empresa desee innovar tanto en su producción como en su comercialización, y por ultimo conciencia del valor de las TIC's como herramienta competitiva.(Tabla 1)

Tabla 1 Factores Internos Que Afectan El Grado De Adopción De Las Tics

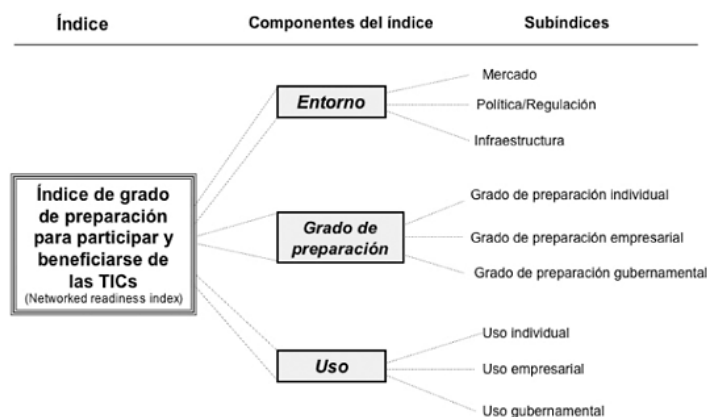
Variables para medir los Factores que afectan la adopción	Indicadores
Factores internos	
Experiencia de la firma con TICs	
Empleados que usan TICs	Porcentaje de empleados que usan computadoras y/o Internet
Características de la firma	
Tamaño	Promedio de ventas de los últimos tres años
Gastos en TICs	Existencia de partidas de gasto para compra y mantenimiento de computadoras y servicios de Internet
Tecnificación del personal	Porcentaje del personal, en puestos, técnicos, programadores, ingenieros y científicos
Estrategia de la firma sobre TICs	
Orientación científica	Conocimiento sobre programas de cómputo y servicios de Internet modernos para la actividad de la empresa
Política tecnológica	Existencia de planes para introducir nuevos programas o equipo de cómputo en el corto plazo (2 o 3 años)
Esfuerzo Innovador	Grado de innovación de la empresa, según Índice de Innovación (II)
Deseo de incursionar en e-commerce	Interés en incursionar en negocios por la Internet, gozando de apoyo técnico
Conciencia sobre importancia TICs	Valoración sobre la importancia de usar computadoras e Internet en la actividad productividad de la empresa para ser competitivo

El segundo modelo es el de Foro Económico Mundial está constituido por una base de datos de 102 países y está compuesto por 48 variables. Este índice busca captar el grado de preparación de un país para participar y beneficiarse de los desarrollos de las tecnologías de la información y la comunicación (TICs), y está basado en la premisa de que hay tres diferentes tomadores de decisión en este campo: las personas o individuos, las empresas y el gobierno.

El NRI Figura 1 está formado por tres componentes: el entorno apropiado para el desarrollo y uso de las TICs en un país, el grado de preparación de los tomadores de decisión (agentes individuales, empresarios y gobierno) para hacer uso de las TICs y finalmente, el uso de las TICs por parte de los diferentes tomadores de decisión. Los componentes del NRI sirven para evaluar las áreas claves donde un país debe trabajar, si éste desea participar y beneficiarse de los desarrollos de las TICs, al compararse con otros países de similar nivel de desarrollo, con los líderes de la economía basada en el conocimiento o con sus principales competidores. (Monge, Alfaro, Alfaro 2006).

Los factores internos de este modelo son: Del *grado de grado de preparación*; la preparación individual, es decir la formación profesional de cada empleado y la preparación empresarial, relacionada con las políticas y estrategias de la empresa respecto las TIC's, y del *uso* igualmente el uso que cada empleado le da a las tecnologías en su trabajo cotidiano tanto en la administración como en la producción y el uso empresarial relacionado con la comercialización, administración y producción de la empresa y las herramientas tecnológicas que utilizan para cada propósito.

Figura 1:



Por último del trabajo de Juan Alonso Valenzuela Rodríguez, de las *Las Tecnologías De Información En Las Pequeñas Y Medianas Empresas (Pyme's)* propone que existen 4 barreras principales que han impedido que las PYME's logren su propio cambio, innovación y modernización, y todas ellas son principalmente factores internos:

- (a) Resistencia al cambio
- (b) Definición de requerimientos
- (c) Hardware y software
- (d) Dependencia de los proveedores de tecnología

La resistencia al cambio es la barrera más influyente y la causante de que muchas pequeñas y medianas empresas estén rezagadas en lo referente a tecnología. Esta resistencia al cambio incluye diferentes aspectos, tales como:

- 1) El temor al uso de alguna tecnología por parte de los trabajadores
- 2) Los errores en el uso de la nueva tecnología
- 3) El cambio de cultura y comportamiento (dejar viejas prácticas para incorporar nuevas)
- 4) Y la escasa participación de los usuarios finales en el levantamiento de los requerimientos, diseño y desarrollo de las aplicaciones.

La segunda barrera es la mala definición de los requerimientos de la aplicación que se quiere implementar, ya sea específica o estándar. Esta barrera incluye:

- 1) La falta de compromiso de los involucrados (gerencia),
- 2) La escasa coordinación entre los niveles jerárquicos de la empresa
- 3) Y La falta de experiencia en el desarrollo e implementación de proyectos de esta índole

Por otro lado está el obstáculo del hardware y el software donde muchas de las veces las empresas no cuentan con un soporte técnico eficiente, el equipo computacional existente en las compañías es insuficiente para el desempeño de las actividades básicas. (Valenzuela, 2003) Al analizar esta la propuesta Valenzuela se puede discernir qué: El temor al uso de alguna tecnología por parte de los trabajadores, los errores en el uso de la nueva tecnología, el cambio de cultura y comportamiento (dejar viejas prácticas para incorporar nuevas), y la escasa participación de los usuarios finales en el levantamiento de los requerimientos, diseño y desarrollo de las aplicaciones. Básicamente se refieren a la formación profesional de los empleados, es decir se tiene miedo al cambio o al uso por la falta de formación o

tecnificación adecuada de los empleados, generalmente el miedo al cambio o al uso de las TIC's está bien identificado por el desconocimiento de los mismo es decir, tememos casi siempre a lo que no conocemos y eso nos impide hacer un buen uso. La segunda barrera está relacionada con las estrategias y políticas de la empresa, el principal problema de las TIC's es la falta de una planeación estratégica les permita crecer ordenada y orientadamente haciendo uso de las herramientas disponibles. Los empresarios poco le apuestan a la capacitación y asesorías que ofrecen los gobiernos, no así incursionan en mercado aun a sabiendas de su desconocimiento de los mismos. El modelo propuesto para esta investigación es tomado de los 3 modelos anteriores (Tabla 2)

Tabla 2: Factores Internos Que Afectan la Adopción de las TIC's en las PYMES

	Variable	Dimensión	Indicador
Factores Internos	Características de la empresa	Número de empleados	Número de empleados de la empresa
		Tamaño	Promedio de ventas de los últimos tres años
		Edad de los empleados	Edad promedio de los empleados
		Gastos en TICs	Existencia de partidas de gasto para compra y mantenimiento de computadoras y servicios de Internet
		Tecnificación del personal	Porcentaje del personal, en puestos, técnicos, programadores, ingenieros y científicos
		Número de Computadoras	Porcentaje de computadoras en base al número de empleados
		Red de Área Local	Porcentaje de computadoras conectadas en una red
		Acceso a Internet	Porcentaje de computadoras con acceso a internet
		Banda Ancha	Porcentaje de computadoras con Banda Ancha
		Equipo periférico	Porcentaje de impresoras, scanner y fax de acuerdo al número de empleados
		Telefonía	Número de teléfonos fijos y móviles
		Pagina Web	Cuenta con un sitio Web.
		Directorio Web	La pagina de la empresa está suscrito a un directorio comercial
		Correo electrónico	La empresa cuenta con correo electrónico o los empleados utilizan el correo electrónico para realizar su trabajo.
		Software para el control de operaciones y eficientizar la producción	Cuenta con software especializado que le permita llevar el control de sus operaciones administrativas y/o hacer más eficiente su producción.
Factores Internos	Estrategias de las TIC's	Empleados que usan TICs	Porcentaje de empleados que usan computadoras y porcentaje de empleados que usan Internet
		Banca Electrónica	Utiliza la banca electrónica para llevar a cabo su operaciones bancarias
		Tramites electrónicos	Realizan algún tipo de tramite a través de los medios electrónicos
		Orientación científica	Conocimiento sobre programas de cómputo y servicios de Internet modernos para la actividad de la empresa
		Política tecnológica	Existencia de planes para introducir nuevos programas o equipo de cómputo en el corto plazo (2 o 3 años)
		Esfuerzo Innovador	Grado de innovación de la empresa
		Deseo de incursionar en e-comercio electrónico	Interés en incursionar en negocios por la Internet, gozando de apoyo técnico
		Percepción de los directivos referente las las TIC's	Conocimiento
			Uso
			Valoración
			Formación profesional
			Relación con las TIC's

El modelo propuesto está basado en el de Élisabeth Lefebvre y Louis A. Lefebvre, pero se le agrego la variable de la percepción de los directivos donde se pretende medir, el conocimiento, el uso, la valoración, la formación profesional y la relación con las TIC's que tiene tanto el empresario como sus principales dirigentes, esta propuesta está basada en el Juan Alonso Valenzuela, donde una de las barreas es el miedo al cambio por el mismo desconocimiento. Los tomadores de decisiones en las PYMES, generalmente son los dueños y mucho lo hacen de la experiencia de sus padres y abuelos, sin embargo en

antaoño ni siquiera se conocía el termino de Tecnologías de la Información, entonces conocer su percepción es un indicador que nos permitirá conocer, si esta percepción favorece o no a las TIC's en las PYMES.

METODOLOGÍA

Muestra: Se selecciono 5 PYMES del sector de servicios y comercio. Instrumento: Se le aplicará un cuestionario y se realizó una entrevista con los dueños de las mismas. La entrevista es de carácter cualitativo y el cuestionario de carácter cuantitativo. Con los resultados de este trabajo se analizaran las variables y se replantearan algunas para mejorar el instrumento.

RESULTADOS

De los resultados obtenidos en esta investigación se determina que existe poca infraestructura tecnología, es decir cuentan 1 o 4 como máximo equipos de cómputo y las actividades o el uso que se les da a los equipos de computo, generalmente es del área de la administración. Cuentan con 1 o ningún software para la su actividad administrativa, contabilidad, inventarios y nominas. Solo 1 de las 5 empresas tiene programada capacitación de sus los empleados en las áreas de la informática, también se observo que los empleados de menor edad y con un nivel medio superior utilizan más las herramientas tecnológicas como correo y búsqueda de información en internet. Solo 2 de las 5 empresas cuentan con partidas para el mantenimiento del equipo de cómputo.

Respecto de los directivos, solo 2 de los 5 tienen conocimientos relacionados con las área de la informática, 3 de los 5 les gusta y usan con frecuencia el internet, 2 de los cuales no utilizan para nada la computadora, Solo 3 de los 5 tienen formación profesional, sin embargo todos tienen interés en la incursión de las TIC's dentro de su empresa. 4 de 5 manifestaron tener miedo de extorción o de una mala inversión, y todos coincidieron que las herramientas tecnológicas les permitirán mejorar sus procesos, sin embargo el costo y la falta capacitación adecuada lo limita en adoptar nuevos procesos.

CONCLUSIONES

Se puede determinar sin duda alguna que uno de los factores internos que inhiben la adopción de las Tecnologías de la Información es la percepción de los dueños o empresarios, en primera instancia el desconocimiento en el área, en segunda instancia el costo de las Tecnologías, su implantación y capacitación, la percepción de la nula o poca recuperación propicia el desinterés en las misma.

Sin embargo es importante recalcar que si hay una conciencia general de que estamos en la era de las comunicaciones y que las Tecnologías de la Información facilitan y mejoran todos los procesos, desde la administración hasta la comercialización de los productos y servicios. Las Tecnologías de la Información representan un área de oportunidad pero no son la solución mágica a los problemas de las PyMES, son herramientas que sabiéndolas aprovechar favorecerán tanto la permanencia como la competitividad de la empresa que las utilice.

“La globalización de los negocios no es buena ni mala por sí misma, es un fenómeno mundial aparentemente irreversible y que no se trata de controlar sino de enfrentar y capitalizar. No existen recetas milagrosas ni para las grandes ni para las medianas ni para las pequeñas empresas, pero lo peor que puede hacer es no hacer nada, dese una oportunidad de mantener y hacer crecer su negocio aun en medio de la vorágine globalizadora. Hay oportunidades, pero hay que salir a buscarlas, abrazarlas y dar la gran batalla, sus probabilidades de éxito pueden ser mayores de lo que piensa.” (Angulo, 2006).

BIBLIOGRAFÍA

Rodríguez A Agustina. MÉXICO Y LA CUENCA DEL PACÍFICO Vol. 3 núm. 10 / Mayo — agosto de 2000, <http://www.publicaciones.cucsh.udg.mx/ppperiod/pacifico/Revista10/09Agustina.pdf>

Lic. Reyes C, Alma Arámbula., Investigadora Parlamentaria, Tratados Comerciales de México, Marzo 2008, <http://www.diputados.gob.mx/cedia/sia/spe/SPE-ISS-05-08.pdf>

Angulo Pichón, Pedro E. La Pequeña Empresa: ¿Condenada a desaparecer con la Globalización?, 2006.

Ricardo Monge-González, Cindy Alfaro-Azofeifa, y José I. Alfaro-Chamberlain, http://www.revistafuturos.info/autores/aut_2006/r_monge_glez.htm, 2006

Juan Alonso Valenzuela Rodríguez LAS TECNOLOGÍAS DE INFORMACIÓN EN LAS PEQUEÑAS Y MEDIANAS EMPRESAS (PYME'S), 2003.

Lefebvre, Elizabeth y Louis Lefebvre (1996). Information and telecommunication Technologies. The impact of their adoption on small and medium-sized enterprises. International Development Research Centre. Canadá.

Coté, L. & Vecina, M. (2005): The strategic management process in e-business. Ivey Business Journal Online, Núm. 1, p. 10.

Koontz, H. & Weihrich, H. (2003): Administración una perspectiva global, México, D.F.: McGraw-Hill.
Jim, C. (1995): Internet expected to be backbone of global business. Computing Canada, vol. 21, pp. 20-27.

IDENTIFICACIÓN DE LAS VARIABLES QUE IMPACTAN LA DINÁMICA DE LA CURVA DE APRENDIZAJE DE LAS INSTITUCIONES DE EDUCACIÓN SUPERIOR EN CARTAGENA: CASO TECNOLÓGICO COMFENALCO CARTAGENA

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RESUMEN

En este trabajo se analizan los resultados obtenidos a través de la matriz de inteligencia organizacional en la Fundación Universitaria Tecnológico Comfenalco como caso de estudio entre las Instituciones de Educación superior de la Ciudad de Cartagena primeramente para valorar el nivel de aprendizaje que poseen estas, para posteriormente analizar si el carácter institucional tiene una relación significativa con el aprendizaje organizacional. Para ello, se estudiarán las prácticas que permiten la consecución del aprendizaje en las Instituciones de Educación Superior, distinguiendo entre los factores internos y externos así como los instrumentos que las facilitan, planteando un índice que permita determinar empíricamente el nivel de aprendizaje. Lo anterior con el objetivo de proporcionarle a la comunidad académica herramientas para elevar las tasas de transferencia de conocimiento a la sociedad. Trabajos como los de Kaplan y Norton (1992, 1996), Edvinsson (1997), Saint-Hongre (1996), el del profesor Camisón (1999), el del Instituto Universitario Euroforum (2000), han definido escalas y constructos para medir el nivel de intangibles en las organizaciones, pero no se centran específicamente en el aprendizaje organizacional.

Palabras Claves: Índice aprendizaje organizacional, Carácter institucional, tasa de transferencia, instituciones educativas, ciudad, región, territorio.

METODOLOGÍA PARA LA EVALUACIÓN DEL POTENCIAL COMPETITIVO EN PEQUEÑAS Y MEDIANAS EMPRESAS BASADO EN EL ESQUEMA DE CAPACIDADES INTERNAS

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RESUMEN

En este trabajo se presenta el desarrollo de una metodología para la evaluación del potencial competitivo en pequeñas y medianas empresas basado en el esquema de las capacidades internas. El objetivo principal de este trabajo es lograr un enfoque de análisis que permitiera establecer el potencial competitivo sin ejercer el criterio de comparación interinstitucional, ante lo cual, se elimina la medición de rankings y se desarrollan una serie de indicadores cuantificables a partir de la realidad particular de la organización. Para el desarrollo de este trabajo se identificaron los principales referentes teóricos a partir de la revisión de artículos publicados en bases de datos y revistas indexadas con los cuales se realizó un estudio de concurrencia mediante la aplicación de un algoritmo de inteligencia artificial que permitió identificar los elementos principales más relevantes de dichos estudios. En la segunda parte, se muestra el desarrollo teórico del modelo, la construcción de los indicadores y el esquema de medición del mismo, presentando algunos resultados obtenidos en su validación como aproximación a las características propias de la pyme empresa de la ciudad de Cartagena para posteriormente iniciar la exploración de un modelo más complejo que permita su replicabilidad en diferentes entorno productivos.

LA ECONOMÍA INFORMAL Y LAS MIPYMES EN BAJA CALIFORNIA: EL CASO DE LA CIUDAD DE MEXICALI

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RESUMEN

En la actualidad pocos actores niegan la importancia de las micro y pequeñas empresas en el desempeño económico de un país. En ese sentido, estas representan poco más del 95% del total de empresas en México y aportan alrededor del 70% del total de empleo generado en el país; cabe destacar por otro lado, que una buena parte de estos agentes económicos operan en la economía informal y compiten en forma desleal con las empresas legalmente establecidas, por lo que recientemente, en la ciudad de Mexicali han aparecido programas que buscan incentivar la regularización de las primeras. Para el caso de la capital de Baja California, se encuentra que la mayoría de las Mipymes se encuentran en el sector de comercio y servicios, cuentan con pocos empleados que en su mayoría no son remunerados debido a que forman parte del núcleo familiar; asimismo, se documenta la falta de procesos formales de administración y contabilidad en estas a pesar de que el propietario cuenta con estudios universitarios. Habría que agregar, la nula participación de estos agentes en los mercados financieros debido entre otras cosas, al desconocimiento por parte de la empresa de los distintos programas públicos y privados para tal fin, a los costos elevados de acceso a los créditos y finalmente, a que la banca no los reconoce como sujetos de crédito debido a la nula posesión de activos físicos. Finalmente, se percibe que a pesar de los esfuerzos del gobierno mexicano, este no ha logrado ser capaz de generar una política pública acorde a las particularidades de las distintas regiones y a los sectores en los cuales se asientan estas empresas, por lo que estas siguen operando en la informalidad.

Palabras Clave. Mipymes, Economía Informal, Baja California, crédito, empleo.

THE INFORMAL ECONOMY AND SME IN BAJA CALIFORNIA: THE MEXICALI CASE.

ABSTRACT

At present few people deny the importance of micro and small enterprises in the economic performance of a country. In that sense, these represent just over 95% of all businesses in Mexico and contribute about 70% of the total employment generated in the country; it should be noted, that many of these institutions operate in the informal economy and compete unfairly with the legally established companies, so recently, the local government has started a program that seek to encourage the regularization of those SME's. In the case of the capital of Baja California, most of the SME are located in the commercial and services sectors, with few employees who mostly are not paid because they are part of the family. At the same time we find the lack of formal processes of administration and accounting in these, even though the owner has a bachelor degree. It should be added, the absence of participation of these actors in financial markets, that could be the result of the lack of knowledge of the various public and private programs that seek to incentive this agents, the high costs of access to credit, and finally, the banking system does not recognize them as subjects of credit due to the lack of ownership of physical assets. Finally, it is perceived that despite the efforts of the Mexican government, it has not managed to be able to generate a sound public policy according to the particularities of the different regions and sectors where these companies are based, so the still operate in informal sectors

Keywords. SME's, informal economy, Baja California, credit, employment.

BIOGRAFIA

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CARACTERIZACIÓN DE LA MICROEMPRESA INFORMAL: EL CASO DE MEXICALI

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RESUMEN

En el presente documento se analizan los principales resultados de una investigación diagnóstica de 139 microempresas que operan en la economía informal en el municipio de Mexicali, Baja California en el periodo de 2006-2008. El objetivo de este trabajo es determinar las características de este tipo de unidades productivas, las cuales en su mayoría son operadas a nivel familiar; estas pequeñas unidades de producción, han sido destacadas desde diversas dimensiones como un mecanismo de resistencia de la población frente a la agudización de la crisis económica global actual. En México, a pesar de los problemas estructurales de la economía, las microempresas han demostrado su capacidad como un medio efectivo para propiciar el desarrollo social y económico de sus miembros, así como también se convierten en un elemento importante para disminuir los índices de pobreza; habría que agregar, que el autoempleo es sin duda, una forma eficaz a través de la cual, las familias de bajos ingresos pueden incrementarlos a través de actividades productivas que utilizan la mano de obra familiar de forma intensiva. En ese sentido, este tipo de agentes económicos se han convertido en una solución parcial al elevado nivel de desempleo que permea en el país. Los resultados de este trabajo, forman parte de un modelo de servicio social profesional de estudiantes de la Facultad de Ciencias Administrativas de la Universidad Autónoma de Baja California.

Palabras Clave: Microempresas, Economía Informal, Autoempleo, Baja California.

CHARACTERIZATION OF THE INFORMAL MICRO- ENTERPRISE: THE CASE OF MEXICALI

ABSTRACT

The present paper discusses the main results of a diagnostic investigation of 139 microenterprises operating in the informal economy in the municipality of Mexicali, Baja California in the period 2006-2008. The aim of this study is to determine the characteristics of this type of production units, which are mostly operated at the family level, these small production units, have been highlighted from various dimensions as a mechanism of resistance within the population to the worsening of the current global economic crisis. In Mexico, despite the structural problems of the economy, microenterprises have demonstrated their ability as an effective means to promote social and economic development of its members, as well as become an important element in reducing poverty rates; we should add, that this type of business is certainly an effective way through which low-income families can increase production through the intensive use of family labor. In that sense, this kind of economic agents have become a partial solution to the high unemployment that permeates the country. The results of this study are part of a professional social service in the Faculty of Administrative Sciences at the Autonomous University of Baja California.

Keywords: Microenterprises, informal economy, selfemployment, Baja California.

BIOGRAFIA

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EL PERFIL ADMINISTRATIVO Y FINANCIERO DE LAS MIPYMES EN MEXICALI: UN ANÁLISIS PRELIMINAR

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RESUMEN

El presente trabajo muestra los principales hallazgos obtenidos de la aplicación de la encuesta denominada Perfil Administrativo y Financiero a las Micro, Pequeñas y Medianas empresas en la ciudad de Mexicali, Baja California durante el 2007. Se encuentra que en general, al igual que en el ámbito nacional las empresas locales son pioneras en la generación de empleo y en su aportación al Producto Interno Bruto Estatal, lo mismo que en la cantidad de negocios; asimismo, carecen de una estructura administrativa formal, poseen bajos niveles de acceso a crédito, son mayoritariamente empresas de tipo familiar y presentan una escasa o nula integración a los mercados externos a pesar de que se vive en una región fronteriza bastante dinámica. Un hallazgo importante, esta dado por el interesante proceso de innovación al interior de las empresas que contrasta con la creencia general de que las únicas que innovan son las empresas grandes; asimismo, se documenta la poca participación de este tipo de establecimientos en el sistema bancario, lo que pudiera deberse al desconocimiento de los programas que estos ofrecen o a la falta de confianza del sector en las Mipymes.

Palabras Clave: perfil administrativo, perfil financiero, Mipymes, Mexicali, empleo, innovación.

ABSTRACT

This paper shows the main findings of the implementation of a survey called the Administrative and Financial Profile of Micro, Small and Medium enterprises in the city of Mexicali, Baja California in 2007. It is found that in general, as at the national level, local companies are pioneers in the generation of employment and in its contribution to the State Gross Domestic Product, as in the number of businesses; also, they lack a formal administrative structure, have low levels of access to credit, are mostly family enterprises and have little or no integration to external markets even though they live in a border region quite dynamic. An important finding is given by the process of innovation within companies, which contrasts with the general belief that the only ones who innovate are major enterprises; also it document the low participation of such establishments in the banking system, which it could be due to ignorance of the programs they offer or a lack of confidence from the banking system to the Mipymes sector.

Keywords: Administrative profile, financial profile, Mipymes, Mexicali, employment, innovation.

BIOGRAFIA

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ALTERNATIVAS TURÍSTICAS PARA UN DESARROLLO MUNICIPAL DE TALA JALISCO, MÉXICO: ESTUDIO DE CASO

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RESUMEN

Si queremos un desarrollo de los seres humanos y de sus familias es importante observar y analizar en que situación nos encontramos y con que recursos contamos para iniciar esa alternativas de desarrollo municipal y uno de los elementos indispensables es el turismo es uno de los sectores económicos más importantes y dinámicos en el mundo actual, tanto por su nivel de inversión, participación en el empleo, aportación de divisas, como por la contribución al desarrollo regional. Aporta alrededor del 11% de la producción mundial y genera uno de cada once empleos. Se estima que en los próximos 20 años viajarán por el mundo 1.6 millones de turistas que dejarán una derrama económica de dos millones de millones de dólares. Es por eso que el Centro Universitario de los valles, de la Universidad de Guadalajara, ofrece alternativas en donde los alumnos e investigadores buscamos resolver problemas en las comunidades, en donde los afectados o beneficiarios son alumnos de las licenciatura en este caso son Licenciados en Turismo, que observan, analizan y realizan trabajos de campo en donde el proceso enseñanza-aprendizaje se de manera proactiva, aprovechando todas las potencialidades y recursos con los que contamos de una manera sostenible.

INTRODUCCION

Por lo respecta al estado de Jalisco, contamos con un gran potencial, en cada uno de los municipios que forma este estado, por eso el municipio de Tala Jalisco, Mexico, en la materia de panificcaión turistica que desarrolla el Centro Universitario de los Valles de la Universidad de Guadalajara, realizaremos esta investigación, tenemos la oportunidad de incidir ya que como Centro Universitario esta dentro de nuestra área de acción para la planificación, el desarrollo de las comunidades con investigadores de nuestro Centro y alumnos que reciden ahí, así mismo como una problemática por resolver. Causas suficiente para realizar una propuesta de plan de desarrollo turístico del municipio de Tala, Jalisco, México.

De acuerdo diversas circunstancias, el municipio de tala, se observo en las primeras visitas al municipio, que es limitado como destino turístico, en primera instancia se consideró que seguramente el municipio contaba con escasos atractivos en materia turística y sin embargo, se pensó en la elaboración del plan para que esos poco atractivos que se consideraba existían fueran aprovechados de manera sostenible y por ende que naciera el turismo como una actividad económica importante que brindara fuentes de trabajo a la población. La grata sorpresa fue que se detectó toda una lista importante de atractivos turísticos, de los cuales algunos ya son aprovechados aunque de manera poco favorables, pensando en la conservación y aprovechamiento de los recursos en forma sostenible. En Algunos otros recursos no son considerados, a pesar su gran riqueza Natural y cultural . Así mismo Tala tiene de manera muy escasa establecimientos de hospedaje, lo que se convierte en este momento en una debilidad para el desarrollo del turismo, sin embargo, es importante mencionar que aunque no presentan ninguna categoría ya es una ventaja que exista donde alojar al visitante, se brinda el servicio de restaurantes, también existen agencias de viajes, herramientas de entretenimiento como los balnearios y otros servicios básicos como bancos, transporte, entre otros, sin embargo, es necesario enfatizar en que su planta turística no está bien desarrollada, por lo que será necesario prestarle especial atención. El municipio de Tala es potencialmente turístico, y sólo

para dar una idea muy general es preciso mencionar que en Tala existen cascos de haciendas, ríos, presas, bosques y zonas arqueológicas no rehabilitadas que en un futuro no muy lejano serán un detonante en la cuestión turística.

Todo lo anterior motivó para que la presente investigación continuara, fue así como se elaboró un inventario de atractivos turísticos, el cual resultó ser suficientemente extenso para que el grupo de futuros profesionales del Turismo que está a cargo de esta investigación justificara el gran interés en concluir de manera exitosa el presente plan, poniendo en práctica todos los conocimientos teóricos obtenidos durante el desarrollo de la carrera, así se llegó a una serie de propuestas con la intención de que estas permitan lograr los objetivos ya planteados, entre ellos destaca el convertir al municipio de Tala en un destino turístico importante e icono representativo del Estado de Jalisco en materia turística. Con base en las características geológicas del municipio, se detectaron una serie de actividades turísticas que pueden realizarse en diferentes lugares que son parte del territorio del municipio, cabe destacar que la importancia radica en el potencial latente en materia turística que tiene el municipio de Tala. A continuación se mencionan de manera general algunas de dichas actividades:

Safari Fotográfico.

Observación de fenómenos y atractivos naturales:

Educación Ambiental.

Observación Sideral.

Montañismo

Escalada

Caminata

Cañonismo

Rappel

Ciclismo de montaña

Cabalgata

Pesca recreativa

Y muchas otras actividades que gracias al potencial natural y cultural del municipio de Tala sería posible realizar, sin embargo, es necesario cuidar una serie de aspectos que encaminarán al éxito ya que el municipio como un impulso o destino turístico, esto es entre otras cosas la programación adecuada de las actividades propuestas, es decir un cronograma el cual ya fue elaborado, así como una serie de indicadores que permitirán la evaluación y seguimiento de todas y cada una de las actividades que se realizarán en cada sitio, por mencionar uno de los más importantes, será necesario controlar desde el primer momento la capacidad de carga de cada lugar en el que se pretenda llevar turistas. Son algunas de las muchas actividades que se pueden iniciar en el municipio.

Por lo tanto nos planteamos como objetivos generales en esta investigación los siguientes: Impulsar el turismo sustentable en el municipio de Tala. Crear actividades y servicios para el turista que visita Tala vinculadas en su mayoría con el turismo alternativo ó turismo de naturaleza como el ecoturismo, turismo de aventura y el turismo rural. Promover, gestionar y proponer estrategias para el desarrollo sostenible y sustentable de la actividad turística en Tala donde se expresen ideas fundamentadas sobre el aprovechamiento correcto de los atractivos existentes y de los atractivos potenciales del municipio de Tala.

Los Objetivos Específicos

Brindar la herramienta adecuada para la creación de un Consejo de Turismo en el H. Ayuntamiento del Municipio de Tala.

Estructurar actividades de ecoturismo y turismo rural de acuerdo a las características del municipio.

Estructurar de tal forma las actividades y servicios que sean impulsoras de la conservación, preservación y rescate del medio ambiente.

Implementar programas que concienticen tanto a la comunidad como a los visitantes del valor de los recursos naturales.

En Tala el aprovechamiento en materia turística no se ha dado, pero si encontramos ciudadanos que se interesan por el desarrollo del municipio, ya que cuenta tanto con recursos naturales como culturales, y personal con capacidad para poder desarrollar cualesquier de los proyectos que sugeriremos en el transcurso de esta investigación como son:

El Templo de San Francisco de Asís.

Plaza Principal

Presidencia Municipal

Casa de la Cultura Museo de Arqueología Auditorio.

Panteón Municipal

Casco de Hacienda del Refugio

Hacienda San Juan de los Arcos

Ex Hacienda San Isidro Mazatepec

Bosque de la Primavera

Río Escondido en San Isidro Mazatepec

Balneario Los Chorros de Tala Balneario de agua Termal San Antonio Mazatepec.

Las Cuevas de Ahuisculco

Barranco “El Chorro”

Los recursos anteriormente mencionados pueden ser de gran utilidad para el desarrollo del turismo en el municipio de Tala, sin olvidar, que el turismo debe ser estrictamente sustentable para pronosticar el éxito a largo plazo, con lo anterior se hace referencia al equilibrio entre los factores importantes de desarrollo.

Bajo este nuevo panorama se acepta que el desarrollo -el crecimiento económico incluido-, puede satisfacerse sin la degradación ambiental, teniendo como estrategia un proceso fundamentado en la racionalización de los modelos de utilización de los recursos. El Desarrollo Sostenible se presenta como una alternativa para buscar el progreso, con base en el aprovechamiento racional de los recursos naturales y humanos. Basado en tres principios de equidad: el económico, el social y el ambiental. Por lo tanto al hacer énfasis en el desarrollo sostenible en Tala se pone principal atención a un concepto definido por la SECTUR, el cual se refiere a “Satisfacer las necesidades de la población actual sin comprometer la capacidad de las generaciones venideras para satisfacer sus propias necesidades” (Sectur, 2004).

En las últimas décadas, el turismo ha tenido un nuevo enfoque en el que afortunadamente el medio ambiente se ha convertido en uno de los aspectos más importantes. Mucho se ha escuchado ya acerca de lo que es el desarrollo sustentable, el cual se basa en tres principios de equidad en tres dimensiones: la económica, la social y la ambiental; y se refiere específicamente a la posibilidad de satisfacer las necesidades de la población actual sin comprometer la capacidad de las generaciones venideras para satisfacer sus propias necesidades. En el análisis del desarrollo turístico sustentable y lo que entendemos con ello, se une al turismo no convencional ó lo que se conoce como turismo alternativo, que básicamente engloba tres tipos de turismo: turismo de aventura, turismo rural y el Ecoturismo. Para clarificar lo que es el turismo alternativo, es conveniente dar a conocer la definición que expone la Secretaría de Turismo; esta define al turismo alternativo como:

Los viajes que tienen como fin realizar actividades recreativas en contacto directo con la naturaleza y las expresiones culturales que le envuelven con una actitud y compromiso de conocer, respetar, disfrutar y participar en la conservación de los recursos naturales y culturales. El presente documento sugiere una propuesta de plan de desarrollo en materia turística para el municipio de Tala donde se presenta una serie de acciones de manera definida y un respectivo plan de implementación de cada una de las actividades que se proponen, donde se toma como aspecto primordial el desarrollo sostenible y sustentable en cada una de las propuestas, acciones, planes y objetivos. En el estado de Jalisco presenta un gran mosaico de posibilidades, pero también está los problemas por resolver, así mismo el municipio de Tala es por eso que nos enfocamos a los problemas locales y detectados en las observaciones y en el trabajo de campo, por lo tanto hacemos referencia a los siguientes y a los prioritarios para realizar esta investigación, que detectamos más de 100 problemas que si no se consideran o se pone atención especial para tratar de resolverlos de manera sostenible pueden ocasionar otros más fáciles de controlar aquí en este resumen tratamos de mencionar algunos (Tabla 1):

Tabla 1: Análisis De Problemas

No.	Problema
1	Bancos de material sin control, Erosión de suelos
2	Desconocimiento de nuestra historia
3	Falta de espacios para estacionamientos en la zona centro, Circulación de camiones muy lentos por exceso de carga
4	Concentración de Gobierno y comercio en la zona centro
5	Cárcel ubicada en la zona centro, Crecimiento urbano sin control
6	Falta de infraestructura, para incentivar el turismo en el municipio
7	Quema de la caña de azúcar, Aplicación excesiva de insecticidas, herbicidas en cultivos, Incendios forestales, Basureros al aire libre
8	Falta de escuelas a nivel licenciatura
9	Saqueo en las zonas arqueológicas
10	Mala calidad de vida de los habitantes del municipio.
11	Planta tratadora de aguas residuales sin funcionar

Por lo que respecta a los antecedentes de la actividad turística en Tala, encontramos monumentos históricos, arquitectónicos, arqueológicos, así mismo como fiestas, danzas y tradiciones con sus fiestas populares que no solo se han transmitido de generación en generación que hacen posible que sea un municipio de trayectoria en los Modelos teóricos de desarrollo. En el marco metodológico, se analizarán conceptos, teorías y políticas relativas al desarrollo local-endógeno, veremos cómo han sido impactadas los municipios, regiones y estado, en cuanto a la funcionalidad de las políticas públicas, y el acceso a la participación y a la toma de decisiones, el tipo de participación en diversas actividades en donde se involucre la población, también abordaremos el tema ambiental desde una perspectiva del desarrollo local-endógeno, bajo lo cual se analizará el crecimiento económico y el desarrollo como dos políticas (La Base Exportadora. Estrategia Regional para el Desarrollo Nacional (el caso de Sinaloa) Dr. Sergio Rosales Inzunza).

Desarrollo regional, local y municipal, se le han asignados múltiples objetivos, su origen se puso el interés a los problemas de desempleo, posteriormente se le agregó el distributivo de Boix (1974:7-43) planteó el esquema de planificación regional. Después, dice de Mattos (1997:205) y Gibert (1997:187), se le incorporó el objetivo de la convergencia y el de aminorar la polaridad, los cuales se correlacionan con el objetivo de combatir la pobreza, mejorar la distribución del ingreso y las tasas de desarrollo y desempleo entre las regiones, revertir la concentración demográfica y una mejor distribución de la industria, han sido propósitos esenciales de la política regional en muchas partes del mundo. Barkin y King (1986:7), señalaron que todos los objetivos económicos nacionales- crecimiento del ingreso

nacional, estabilidad de precios, diversificación de la economía, fortalecimiento de la balanza de pagos etc. Tienen la misma posibilidad de estar entre los fines de políticas regionales que los objetivos específicamente regionales. Armstrong y Taylor (1978:5-8) identifican los siguientes seis grandes objetivos: Preservar y fortalecer las culturas e identidades regionales y, Alcanzar una mejor distribución entre población y medio ambiente

Según Sergio Boiseir, los núcleos de desarrollo endógeno son "iniciativas productivas que emergen del interior de un territorio, sector económico o empresa, para aprovechar las capacidades, potencialidades y habilidades propias, con el fin de desarrollar proyectos económicos, sociales, ambientales, territoriales y tecnológicos, que permitan edificar una economía más humana, para una nueva vida económica del país". En otras palabras, el desarrollo de un territorio debe ser el resultado de esfuerzos endógenos. Para Vásquez Barquero, "el desarrollo endógeno puede entenderse como un proceso de crecimiento económico y cambio estructural por la comunidad local, utilizando el potencial de desarrollo que conduce a la mejora del nivel de vida de la población". El desarrollo endógeno es, entonces, un proceso en donde lo social se integra con lo económico, dentro del cual se pueden identificar, al menos, tres dimensiones: Económica: caracterizada por un sistema específico de producción que permite a los empresarios locales usar eficientemente los factores productivos y alcanzar los niveles de productividad que les permiten ser competitivos en los mercados.

En el aspecto sociocultural: donde los actores económicos y sociales se integran con las instituciones locales formando un sistema denso de relaciones que incorporan los valores de la sociedad en el proceso de desarrollo. Política: que se instrumenta mediante las iniciativas locales y permite crear un entorno local que estimula la producción y favorece el desarrollo sostenible. El desarrollo endógeno, no solo propone la teoría territorial del desarrollo, es, además, una interpretación orientada a la acción, que permite a las comunidades locales y regionales enfrentar los retos que presenta el aumento de la competitividad y abordar los problemas que presente la reestructuración productiva, utilizando el potencial de desarrollo existente en el territorio. La política de desarrollo endógeno tiene una gestión descentralizada que se hace operativa, a través de las organizaciones intermediarias que prestan servicios reales y financieros a las empresas y organizaciones. No se trata de facilitar fondos a las empresas, sino de dotar a los sistemas productivos de los servicios que las empresas demandan, para mejorar su competitividad en los mercados, y a la sociedad con los medios que favorezcan una mejor calidad de vida. Respecto a un elemento fundamental que es lo político, que se caracteriza por una creciente capacidad para tomar decisiones relevantes a las opciones de desarrollo territorial, que es uno de los ejes motores, sin olvidar el aspecto económico, que hace referencia a la apropiación y reinversión de parte del excedente a fin de diversificar la economía del territorio, en donde el científico-tecnológico, es decir, la capacidad interna del sistema para generar sus propios cambios e impulsos tecnológicos, sin olvidar el aspecto cultural, como una elemento matriz generadora de la identidad socio- territorial, pues es imposible concebir los nuevos espacios de desarrollo territorial si no existe una identidad de la sociedad con su región.

También hay que analizar las teorías dominantes sobre crecimiento regional en Europa, ejemplo claro y preciso de lo que se quería desarrollar. Por otro lado unos de los complementos que menciona Roura, particularmente en cuanto a la Teoría del Desarrollo Endógeno y Desarrollo desde abajo (INVIHAMI,2008) - que, entre sus principales estrategias, esa teoría plantea aprovechar y explotar el propio potencial de crecimiento y la descentralización de las políticas regionales (políticas locales), mediante las siguientes acciones:

- a) Apoyo a las iniciativas empresariales locales (PYMES)
- b) Incentivos (fiscales, monetarios y, sobre todo, administrativos-políticos)
- c) Incentivos reales (terrenos, servicios a la empresa, infraestructuras locales) a la creación de empleos.
- d) Formación de profesionales: aumento del gasto en educación
- e) Difusión de nuevas tecnologías.

A través de los núcleos, el desarrollo se realizará desde adentro y por dentro y el ser humano estará en equilibrio con los otros seres vivos; adicionalmente, contribuirán a mejorar las condiciones de vida.

En esta investigación quiero retomar de manera como una parte fundamental, de lo que es diagnóstico estratégico, que tiene el propósito de proporcionar información que nos permitirá detectar las fortalezas, las oportunidades, así mismo como las amenazas y debilidades, variables metodológicas que nos permitirán detectar problemas reales de análisis cuantitativo y cualitativo, para mejorar la eficiencia y eficacia, en las propuestas de planeación estratégica, para la toma de decisiones, en la administración pública municipal, la vinculación entre las instituciones, universidad y empresas del municipio.

En este análisis, es importante incorporar el modelo CRETA, junto con desarrollo endógeno y local de los procesos de desarrollo municipal, que es la gestión del conocimiento empresarial competitivo, basado en la captación, retención, creación, transferencia y aplicación del conocimiento. Este modelo parte de la creación del conocimiento organizacional (CCO), Según Nonaka & Takeuchi (1991,.P.p), por lo tanto el proceso es innovar continuamente, en cantidades mayores en menor tiempo y en espiral, es parte de la dimensión epistemológica/ Ontológica, en lo que las cuatro formas de conversión del conocimiento, crea condiciones facilitadora en el conocimiento organizacional, con el esquema centro-arriba-abajo y la vigilancia tecnológica. Sin descuidar la dimensión epistemológica, es decir los tipos de conocimiento que es el implícito no codificado (que se aprende mediante la observación e imitación) el conocimiento explícito que es conocimiento codificado y sistematizado. La dimensión Ontológica es el trayecto que recorre el conocimiento, del individuo, al grupo a la organización, al ámbito inter-organizacional. Otro de los puntos centrales sería la inversión para ese tan anhelado desarrollo que buscamos, por lo tanto tenemos que considerar: Los instrumentos de la política de desarrollo. Uno de los peligros mas graves en los países en vías de desarrollo es la trasposición de los instrumentos ya utilizados en los países evolucionados sin consideración de las profundas diferencias de estructura que existen entre dos categorías de países, en los instrumentos de política económica es el de su relativismo en relación con las estructuras y los niveles de desarrollo.

La política de inversión, tiene, pues numerosas dimensiones en un país en vías de desarrollo: debe tender, al mismo tiempo, a la formación del capital social fijo, del capital técnico y de los hombres. La selección de las inversiones a realizar depende de los objetivos políticos y sociales adoptados por el gobierno; puede ser orientada recurriendo a criterios que permitan apreciar la productividad social de los diversos proyectos de inversión. La distribución de los recursos a invertir debe elevar al máximo la relación de la producción corriente con la inversión

Los proyectos de inversión debe elevar al máximo la relación del trabajo con la inversión. Los proyectos de inversión deben elevar al máximo la relación de los bienes exportables con la inversión, con el fin de mejorar la situación de la balanza de pagos. H. B. Chenery, propuso una formula precisa, que permite clasificar los proyectos de inversión según sus productividad social marginal La política de inversiones se une un último problema: el de la selección de las técnicas de producción; la inversión será altamente capitalista (capital intensivo) o recurrirá antes que nada al trabajo (labour intensive). En nombre de la teoría clásica de la dotación de factores, algunos autores sostienen que la inversión debe admitir una gran proporción de trabajo en relación con el capital, puesto que el trabajo es, en una economía subdesarrollada, el factor más abundante. Por su parte dos economistas hindúes, Valkil y Brahmanand, consideran preferible: 1) Las técnicas que se aprenden relativamente pronto; 2) Las técnicas que reducen el periodo de gestación de la inversión, 3) las técnicas que ahorran materias primas y recursos escasos; 4) las técnicas que permiten a los países pobres aumentar sus acervos de factores, tales como los minerales la tierra, la electricidad. El estado puede, para mejorar la balanza de pagos mediante un aumento de las exportaciones orientar las inversiones hacia determinados sectores, donde la utilización del capital debe ser intensiva, así como la exportación de los recursos del subsuelo.

Todos los países en vías de desarrollo, amenazados por cierto complejo de industrialización, se ven obligados en seguida a medir la importancia de una política agrícola coherente y energética, la reforma agraria pone fin a las desigualdades y a los abusos que engendra el régimen de tenencia de la tierra, la posesión de la tierra, cuando sucede a un régimen de inseguridad en la explotación, puede estimular el rendimiento e incitar a la inversión de capitales, una reforma agraria que mantuviera o aumentara la no rentabilidad de las explotaciones agrícolas estaría desprovista de eficacia. Puede decirse que una política de desarrollo agrícola incluye; 1) la extensión de las tierras cultivables y su preparación para su cultivo; 2) de una asistencia técnica a los agricultores, con métodos racionales de producción; 3) de asistencia financiera, mediante una organización de crédito agrícola; 4) el mejoramiento de los métodos de distribución, almacenamiento y de cooperativas de venta, el aumento de información sobre los mercados y precios y facilidades de trasporte.

Política monetaria suscita en las economías subdesarrolladas problemas particulares debidos por una parte, a la naturaleza y la estructura de las instituciones monetarias, los objetivos de esta política, es la extensión de los bancos de depósito o de negocios, la creación de organismos de créditos agrícolas, el establecimiento de una red de instituciones de ahorro son indispensables para la promoción y la orientación de la inversión. Maurice Dobb estima que una dosis moderada de inflación es deseable para favorecer los movimientos de trabajadores en gran escala y para aumentar el suministro de productos alimenticios y materias primas por las aldeas a las ciudades. a) La inflación debe ser utilizada de manera intermitente: b) debe ser practicada en pequeñas dosis; debe de favorecer las inversiones que puedan realizarse rápidamente y que sean muy productivas, d) no deben arrastrar desequilibrios graves de la balanza de pagos, lo que supone reservas de divisas, o una política de control de cambios. La escasa elasticidad de la oferta de productos agrícolas y de producción de consumo dificulta una compensación de afluencia monetaria por el incremento de la producción real. La inflación corre el riesgo de provocar una mala orientación de las inversiones, la estructura desarticulada de los países subdesarrollada y su coyuntura irregular de los países productores y exportadores de productos primarios permite practicar una inflación al mismo tiempo intermitente y moderada (MMVIII, 2008).

Es importante tener cuidado con lo que se quiera desarrolla y no es solo mismo desarrollo que crecimiento ya en puede ser una de utopía que se persiguen con el tan anhelado desarrollo de los municipios, si lo vemos como una secuencia de fases en donde los sistemas económicos son definidos a partir de una clasificación y en el sentido abstracto con base en su pequeño número de fenómenos que puedan expresarse cuantitativamente y en parámetros derivados del nivel de la técnica y del marco institucional. Adam Smith, señalo que la economía humana experimento una secuencia de fases: la casa, la crianza, la agricultura, el comercio y la industria.

METODOLOGÍA

En esta investigación se planifico en tres etapas; la primera la realización del plan y acciones, recorridos de campo, identificando los problemas principales, visitas a las instituciones para saber con que información contabamos ya existe información referencial no actualizada, así mismo como las diferentes fuentes del gobierno del estado, gobierno municipal y dependencias que se encuentran en la localidad.

En la Segunda etapa fue definir los limitantes del trabajo de campo, y las fechas para realizarlo, contando con los elementos necesarios para organizar los datos obtenido. Tercera etapa como se contaba con el protocolo de la investigación se inició con el análisis y ordenación de la información. Se utilizo métodos no paramétricos, ya que de acuerdo al estudio de caso se realizo un inventario de los recursos con los que contaba, para resolver la problemática y realizar una propuesta alternativa para poder desarrollar el municipio de tala, Jalisco México.

INTERPRETACIÓN DE RESULTADOS

De Acuerdo a toda la información que se, recabo, se analizo y se organizo de decidio realizar y proponer un plan de implementación que consiste en definir un objetivo, el como mediante el diseño de estrategias, actividades por realizar así mismo como las metas que se desean alcanzar , con los recursos necesarios para lograrlas y un presupuesto para considerar dentro de los costos en cada una de las acciones, sin olvidar de donde y como obtener ese recurso mediante alianzas estrategicas o financiamiento con creditos que puedan obtener las autoridades o los responsables de estos proyectos. Que a continuación se describen con un cronograma de actividades (como Anexo 1) que dan soporte acada uno de los proyectos antes mencionado .

CONCLUSIONES

podemos decir que fue satisfactorio los objetivos del curso la experiencia y la capacidad de poder observar, analizar, ordenar y desarrollar habilidades para poder implementar un programas de proyectos que pueden detonadores de ese desarrollo que buscamos en las comunidades que les asegure un mejor nivel de vida y empleo para la población y su familias. Recomendaciones que integren en su equipo profesionales del Centro Universitario de los Valles.

APENDICE

CRONOGRAMA DE EJECUCIÓN DEL PROYECTO (ACTIVIDAD)																								
Actividades	Enero			Febrero			Marzo			Abril			Mayo			Junio								
Safari Fotográfico.																								
Observación de fenómenos y atractivos especiales de la Naturaleza (actividad permanente fines de semana).																								
Talleres de Educación Ambiental.																								
Observación Sideral (actividad permanente).																								
Senderismo Interpretativo (actividad permanente, para adecuar infraestructura tres dos meses y medio).																								
Caminatas																								
Ciclismo de Montaña																								
Cabalgata																								
Escalada en Roca y Rappel:																								
Espeleísmo																								
Agroturismo																								
Talleres Gastronómicos																								
Talleres Artesanales																								
Espeleísmo																								
Fotografía rural (todo el año)																								
Kayakismo																								
Tirolesa																								
Vivencias místicas																								
Aprendizaje de dialectos																								
Preparación y uso de medicina tradicional																								
Eco-arqueología																								

Actividades	Julio	Agosto	Septiembre	Octubre	Noviembre	Diciembre
La observación de ecosistemas						
Safari Fotográfico						
Observación de fenómenos y atractivos especiales de la Naturaleza						
Talleres de Educación Ambiental						
Observación Sideral (para adecuar infraestructura dos meses)						
Senderismo Interpretativo						
Pesca recreativa						
Agroturismo						
Talleres Gastronómicos						
Talleres Artesanales						
Espeleísmo						
Fotografía rural (todo el año)						
Kayakismo						
Tirollesa						
Vivencias místicas						

BIBLIOGRAFÍA

ADELMAN.I. Teoría del desarrollo económico. F.C. E México

ARROLLO. G. Modelos de acumulación, clases sociales y agricultura en América latina. C.I.I UNAM. México

ADIZES, I (1979): "Organizational Passages: Diagnosing and treating lifecycle problems of organizations". Organizational dynamics Vol. 8 Iss 1 pp 3-24.

ANDERSON, C R AND ZEITHAML (1984): "Stage of the product life cycle, business strategy and business performance" Academy of Management Journal 27 mar. pp. 5-24.

ANSOFF, H. I. (1976): La estrategia de la empresa. Ed. Universidad de Navarra, Pamplona.

Amparo Sancho Pérez. Apuntes de Metodología de la investigación en Turismo, Organización Mundial del Turismo. Madrid: Themis, 2001

BARKIN.J. Los beneficios del desarrollo regional. ILPES DDSNV

BADIE, B. 1994. Le développement politique. París, Economica, 5ª edición.

BONIE ALEJANDRA Y Gabriel Ferrero. Introducción a la cooperación para el desarrollo. Universidad politécnica de valencia 1997.

COUSSY, J 1991. "Economie et politiques du développement" en Coulon C. y Martin D.C. Les Afriques politiques. París. La Découverte Diagnóstico de la actividad turística en el municipio de Tala, Jalisco.

SECTUJAL. Tala, Jalisco, México, 2008.

Enciclopedia de los municipios de México, Estado de Jalisco, Tala.

GÓMEZ OLIVER, L. Crisis agrícola de campesinos, Revista comercio exterior .vol. 28, No. 6 P:p: 714=727 de junio de 1998.

GOBIERNO DEL ESTADO DE JALISCO, INFORMACIÓN MUNICIPAL.

PREBISCH RAÚL y la agenda del desarrollo en los albores del siglo XXI. Discurso pronunciado por el Secretario ejecutivo de la CEPAL, en el seminario “ La del desarrollo en los albores del siglo XXI”, en homenaje a don Raúl Prebisch.Santiago de Chile. 28 de agosto de 2001.

Turismo Alternativo una nueva forma de hacer turismo. SECTUR Fascículo 1 Serie Turismo Alternativo. México, D.F. 2004.

Panorama del sector turístico. El turismo en México, en http://www.cptm.com.mx/wb/CPTM/CPTM_Panorama_del_Sector_Turistico. Sitio visitado la fecha 10 de Diciembre del 2008.

Plan de Desarrollo Municipal 2007 – 2009 Tala, Jalisco. H. Ayuntamiento del Municipio de Tala, Jalisco.

Porter, Michael E. 2000. "Location, Competition, and Economic Development: Local Clusters in a Global Economy", Economic Development Quarterly, Vol. 14, No. 1, 2000.

PORTER, M.E. (1990): The Competitive Advantage of Nations. New York: The Free Press. (Traducido al castellano bajo el título La ventaja competitiva de las naciones. Barcelona:Plaza & Janes, 1991.

Rey, Sergio J. y Mattheis, Daniel J. 2000. Identifying Regional Industrial Clusters in California, Report prepared for the California Employment Development Department. January, p. 4.

KOJIMA, K. (1976): Direct Foreign Investment: A Japanese Model of Multinational Business Operations. London: Crom Helm.

Martínez, S. T. 1986. El Desarrollo Rural en las ciencias Sociales en conceptualización y teorías del desarrollo Rural. Cuadernos del centro de estudios del Desarrollo Rural, México.

S.A.R.H. 1982-94 Informes área de Estadística e Informática. Subjefatura de Programación. Distrito De Desarrollo Rural 067 de Ameca, Jalisco.

Sunkel. O. 1970 El Subdesarrollo Latinoamericano y teorías del desarrollo. Edit. Siglo XXI.

Selltiz 1974. Métodos de investigación en relaciones sociales. Edit Rialp. S.A. Madrid, España.

Zapata. M. 1986 Sociología y Desarrollo Rural. En Conceptualización y teorías del Desarrollo. Seminario. CEDERU Y CRECIDATH, cuadernos del CEDERU-CP. C

BIOGRAFIA

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PROGRAMA DE ASESORÍA INTEGRAL AL SISTEMA DE EDUCACIÓN BÁSICA) (PAISEB) VINCULACIÓN Y APLICACIÓN DE CONOCIMIENTOS EN BENEFICIO DEL SECTOR EDUCATIVO ESTATAL (SEE) DEL ESTADO DE BAJA CALIFORNIA, MÉXICO

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Ricardo Ching Wesman, Universidad Autónoma de Baja California

ABSTRACT

Para que realmente sea significativo el aprendizaje, éste debe de reunir varias condiciones: la nueva información debe de relacionarse de modo no arbitrario y sustancial con lo que el alumno ya sabe, dependiendo también de la disposición (motivación y actitud) de éste por aprender, así como de la naturaleza de los materiales o contenidos del aprendizaje. (Frida Díaz-Barriga Arceo y Gerardo Hernández Rojas, 2002)

INTRODUCCIÓN

Estrategia Educativa De Aprendizaje Significativo

“Dime y lo olvido, enséñame y lo recuerdo, involúcrame y lo aprendo.”

Benjamín Franklin

Basado en lo anterior y aunado a la condición actual de nuestro país donde la educación a nivel básico como soporte al desarrollo de un país reviste una gran importancia, y tanto las autoridades a nivel federal y estatal hacen esfuerzos por impulsar una educación pública de calidad para la niñez mexicana.

Dichos esfuerzos a menudo se ven afectados por la falta de capacitación y atención a las Escuelas en cuanto a su operación y funcionamiento. El Programa escuelas de Calidad (PEC) es una iniciativa del Gobierno Federal cuyo propósito general es mejorar la calidad de la educación que se imparte en la educación que se imparte en las escuelas públicas de educación básica con base en el fortalecimiento, articulación y alineación de los programas federales, estatales y municipales enfocados hacia ese nivel educativo.

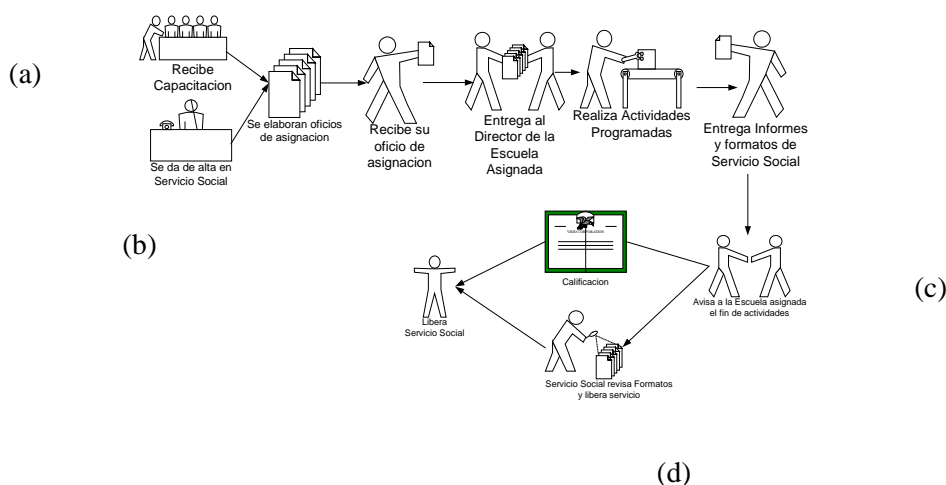
El Programa de Escuelas de Calidad (PEC) pretende que la institución escolar construya, con la participación de todos sus integrantes, un plan estratégico de transformación escolar propio en el marco de los propósitos educativos nacionales. Derivado de lo anterior es que: en pláticas con el Sistema Educativo Estatal se detectaron necesidades que dificultan de manera directa o indirecta el buen funcionamiento de dicho programa. El SEE cuenta con aproximadamente 3000 escuelas que atienden a una población de 600,000 alumnos en el estado. La misión prioritaria del PEC es atender aquellas escuelas con mayor matrícula, que atiendan a población urbano-marginada por lo cual es de vital importancia buscar optimizar el uso de los recursos y la infraestructura que el PEC proporciona a estas escuelas y además buscar la incorporación de un mayor número de escuelas a este programa, de manera que puedan acceder a los beneficios del mismo. Y es en este aspecto en el que la Universidad Autónoma de Baja California a través de los alumnos de la Facultad de Ciencias Administrativas Campus Mexicali ha brindado apoyo técnico y asesoría Informática y Contable desde el ciclo 2005-2, dentro de sus áreas disciplinarias respectivas.

Objetivos (propósitos del programa de acuerdo con su razón de existir)

- Proporcionar a los estudiantes los espacios en ambientes reales donde puedan aplicar y reafirmar los conocimientos teórico-prácticos adquiridos en las aulas.
- Fomentar en el estudiante el espíritu de servicio y apoyo en beneficio de los sectores más desprotegidos de la población.
- Propiciar en el alumno habilidades de liderazgo, responsabilidad, trabajo y compromiso.
- Fomentar el uso de las herramientas computacionales en el proceso Enseñanza-Aprendizaje, aplicadas desde edades tempranas. Herramientas como Enciclomedia, Red Edusat, Proyectos Colaborativos, Manejo básico de Software.
- Contribuir a fortalecer los vínculos de colaboración establecidos mediante PAISEB entre la UABC y el Sistema Educativo Estatal.
- Contribuir a la difusión en la sociedad del espíritu de servicio y apoyo a la comunidad que es una característica distintiva de nuestra Universidad.
- Apoyar a los directivos y consejos escolares de participación, las herramientas necesarias para la administración eficiente y transparente de los recursos federales recibidos del Programa de Escuelas de Calidad.
- Lograr la implementación a nivel estatal contando actualmente con los municipios de Mexicali, San Felipe y Tijuana, ya que tanto el SEE como la Facultad de Ciencias Administrativas tienen áreas homologas en todo el estado de Baja California.

METODOLOGÍA

Programa de Asesoría Integral al Sistema Educativo Básico Flujograma de Actividades a realizar por alumnos PAISEB



RESULTADOS

Los resultados obtenidos en los años de operación se presentan en la tabla 1. Donde vemos la población beneficiada tanto de UABC y del Sistema Educativo Estatal.

Tabla 1: Descripción de los Grupos Beneficiados

BENEFICIARIOS	BENEFICIOS
Alrededor de 8,400 alumnos de las diferentes escuelas de educación básica, de los niveles 5to. Y 6to.	Al brindarles servicios básicos de mantenimiento a sus equipos asegurando con ello su operabilidad para el desarrollo del proceso de enseñanza-aprendizaje.
Directivos, administradores, alumnos, maestros y supervisores de zona de las escuelas del Sistema Educativo Estatal (SEE).	<ol style="list-style-type: none"> 1.) En las escuelas incorporadas al programa de Escuelas de Calidad, el beneficio se verá reflejado en el uso eficiente de los recursos financieros federales que se les asignan, ya que alumnos de la carreras de Contabilidad les capacitarán en dicho aspecto. 2.) Fomentar que cada escuela sea autosuficiente en la administración y gestión de sus recursos y disminuir la dependencia del SEE.
Alumnos de la Carrera de Licenciado en Informática	<ol style="list-style-type: none"> 1.) Adquirir competencias en el desempeño de su profesión que le permitan efficientizar los procesos operacionales de la organización. 2.) Realizar actividades de consultoría y asesoría en el área de informática, acorde al código de ética profesional.
Alumnos de la Carrera de Licenciado en Contaduría y aproximadamente 7000 alumnos de las Zonas Escolares cuyos administrativos, consejos escolares o supervisores de zona, reciben la asesoría de alumnos de Contabilidad para el registro contable-administrativo del apoyo federal del PEC.	<ol style="list-style-type: none"> 1.) Formulación de estados y reportes financieros para la toma de decisiones que favorezcan el desarrollo del ente económico. 2.) Implementar controles contables de acuerdo a las necesidades de la entidad, valorar transacciones financieras y otros eventos que afectan a la entidad, procesar en forma sistemática y estructurada información financiera.

CONCLUSIONES

El Programa de Asesoría Integral al Sistema Educativo Básico o PAISEB ha venido operando ininterrumpidamente desde el semestre 2005-2 en colaboración con el Sistema Educativo Estatal (SEE), trabajando de manera directa con escuelas primarias y secundarias públicas a las cuales brindan asesoría y apoyo en diferentes áreas, con el fin de coadyuvar directa o indirectamente con el proceso de enseñanza-aprendizaje particularmente de la niñez y juventud bajacaliforniana.

Uno de los reclamos más fuertes de entre los muchos que se ha hecho a la evaluación tradicional es que se ha preocupado por evaluar saberes *descontextualizados* por medio de situaciones artificiales. A partir de la línea de “aprendizaje situado” (Brown, Collins y Duguid, 1989), hemos llegado a aprender la importante relación que existe entre los saberes y los contextos donde éstos aparecen (Frida Díaz-Barriga Arceo y Gerardo Hernández Rojas, 2002). Es con este espíritu que se sitúa al estudiante en escenarios reales de trabajo, con un objetivo específico en apoyo de esfuerzos gubernamentales (federal, estatal, municipal y local). Permitiendo además que sea el propio medio quien los evalúe en su desempeño académico y profesional, enriqueciendo su aprender integral.

Dado el espíritu de ser de los programas de servicio social dentro de la Universidad Autónoma de Baja California el esfuerzo hecho dentro de Facultad fortalece los lazos de colaboración entre los niveles educativos previos. En la medida que todos encaminemos nuestros esfuerzos en la generación de beneficio a sectores más desprotegidos el país se verá transformado en los ámbitos no solo educativos sino también económicos y sociales.

BIBLIOGRAFÍA

Estrategias Docentes Para Un Aprendizaje Significativo: Una Interpretación Constructivista.
Frida Díaz-Barriga Arceo y Gerardo Hernández Rojas, 2002. Página 25 a 30.

LA EVALUACIÓN COLEGIADA, ESTRATEGIA EN BUSCA DE LA CALIDAD DE LA EDUCACIÓN SUPERIOR, UN TRABAJO DE EQUIPO: CASO FACULTAD DE CIENCIAS ADMINISTRATIVAS, UABC

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RESUMEN

Como dice Santos Guerra (1993; 35) *"la evaluación colegiada es un tipo de evaluación que asume un equipo y no un solo individuo. No porque la que se realiza bajo la responsabilidad única de una persona sea deficiente, sino por que la que realiza un grupo de personas goza del aval del contraste, de la pluralidad de los enfoques, de una mayor garantía de rigor y de una diversidad estratégica de acceso y actuación"*.

INTRODUCCION

El modelo educativo de la UABC es la base sobre la cual se diseñan e instrumentan los programas educativos, así como los planes y programas de estudios. Aspectos como la forma de estructurar contenidos, las políticas de vinculación con los sectores social y productivo, una creciente movilidad académica y la incorporación de tecnologías de la información y comunicación, fortalecen la labor de los docentes como facilitadores del aprendizaje, y permiten a los alumnos asumir un rol más protagónico en su formación y hacer de la flexibilidad curricular un importante recurso para el diseño de su proyecto académico de formación en la universidad.

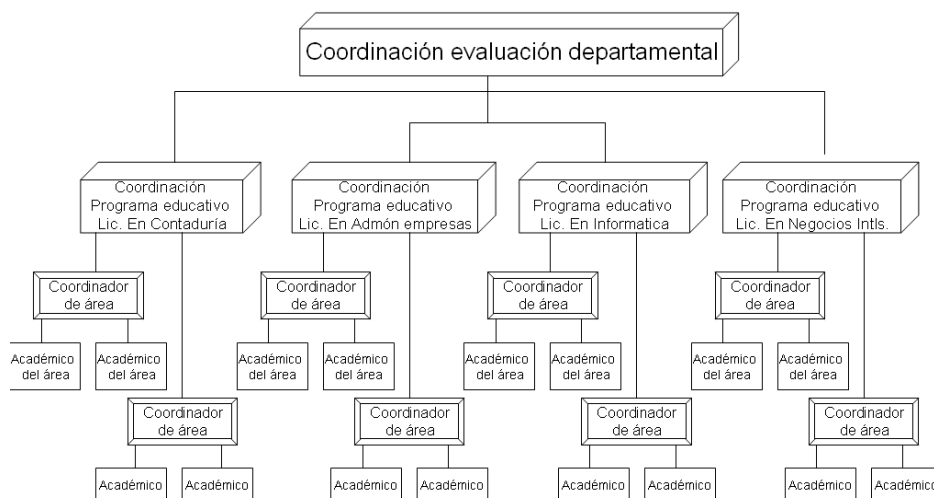
El desarrollo de la nueva forma de evaluar en el proceso de enseñanza-aprendizaje requiere de una estructura colegiada, operativa, normada, permanente y formal para el cumplimiento de sus funciones. Las principales acciones colegiadas están dirigidas a la definición de los objetivos, a cumplir en el proceso de enseñanza-aprendizaje y de criterios académicos para el proceso de evaluación y seguimiento del desempeño del alumno así como la toma de decisiones orientadas a eliminar las deficiencias del trabajo docente y a modificar la dinámica de la relación alumno profesor. (Depto. de formación básica, Vicerrectoría Mexicali, Universidad Autónoma de Baja California)

METODOLOGIA

Aunado a lo antes descrito y con base en las iniciativas integradas en el Plan de Desarrollo Institucional 2003-2006, con respecto al Desarrollo del Personal Académico y del Fortalecimiento de los Procesos y Mecanismos Institucionales de Seguimiento y Evaluación, se implementa en la Facultad de Ciencias Administrativas de la Universidad Autónoma de Baja California la aplicación de exámenes departamentales para las carreras de Licenciado en Contaduría, Licenciado en Administración de Empresas, Licenciado en Informática y Licenciado en Negocios Internacionales. Seleccionando de entre las unidades de aprendizaje aquellas donde; en análisis previos se detecto un índice de reprobación preocupante o aquella asignatura considerada relevante para la formación disciplinaria de los estudiantes, de los distintos programas educativos.

Integrando el equipo de trabajo docentes de cada una de las disciplinas involucradas, de acuerdo al esquema abajo planteado. Figura 1.

Figura1. Organigrama de Trabajo Planteado para la Ejecución del Comité de Evaluación Colegiada



Los académicos integrantes de esta estructura para la evaluación colegiada del aprendizaje – a través de los exámenes departamentales- tienen funciones diferenciadas y delimitadas de acuerdo a su formación, donde uno de sus integrantes cumple con la función de coordinador, de esta manera, se espera garantizar la efectividad del proceso de enseñanza aprendizaje.

El examen permite a docentes y directivos conocer el nivel escolar de los alumnos para seleccionar estrategias adecuadas que busquen resolver las deficiencias las unidades de aprendizaje: asesorías especiales, cursos propedéuticos.

Este examen se fundamenta en la Teoría de Respuesta al Ítem con el modelo de dos parámetros (parámetro de discriminación y el de dificultad¹) y es de tipo adaptativo. Esta última característica implica que el alumno sólo responde a las preguntas que corresponden a su nivel de aprendizaje, evitando presentarle preguntas muy fáciles o muy difíciles.

Para administrar el examen departamental se diseñó la interfaz computarizada llamada “QuizSys”, capaz de presentar los reactivos tanto en forma normal, como en forma adaptativa y de calificar preguntas de respuesta abierta de diferentes tipos: numéricas y de opción múltiples.

Obteniendo grandes beneficios no solo de la implementación de la evaluación que permitió determinar: implementar curso a los maestros para la elaboración de reactivos, incentivar al académico a apegarse a los contenidos establecidos en la carta descriptiva de cada unidad de aprendizaje. Sino además optimización del recurso humano y de infraestructura aplicando evaluaciones a cerca de 800 estudiantes y obteniendo sus resultados de manera automática.

CONCLUSIONES

La acreditación institucional busca evaluar el cumplimiento de su proyecto institucional, verificar la existencia de mecanismos eficaces de autorregulación y de aseguramiento de la calidad y propender al fortalecimiento de su capacidad de autorregulación y al mejoramiento continuo de su calidad. El objeto de

la evaluación consiste en examinar si las acciones programadas y los medios utilizados son eficaces y pertinentes para alcanzar los objetivos y metas que cada institución determina con autonomía. Este enfoque es funcional al concepto de calidad como relación entre recursos usados y logros alcanzados. Así, instituciones con recursos limitados pueden tener gestión de calidad superior a la de otras que tienen más recursos.

En sí mismo el proceso debe tener mecanismos de mejora, de detección de quejas, errores o carencias y toma de decisiones correctivas. Rueda de Deming (Deming, Juran). Los Resultados son una medida de eficacia de la gestión de una organización. Los Procesos garantizan que los Resultados no son fruto del azar y se pueden mantener y superar.

Lo que se gestiona y se mejora son procesos.

El mejoramiento de la gestión puede lograrse por tres vías

1. Mejorando procesos existentes.
2. Suprimiendo procesos innecesarios.
3. Estableciendo nuevos procesos necesarios.

El mejoramiento de procesos debe ser algo permanente.

LIDERAZGO FEMENINO EN LA INDUSTRIA MAQUILADORA DE CIUDAD JUÁREZ, CHIH., MÉXICO

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ABSTRACT

El liderazgo femenino en las empresas, es un tema ampliamente tratado en la literatura administrativa y de liderazgo, no solo por su relevancia, sino por la conquista de los espacios públicos y laborales que la mujer ha conseguido en las últimas décadas, cuando en contraparte, por siglos fue la dueña absoluta solo del espacio familiar circundante al hogar. El presente artículo describe la llegada de mujeres directivas a la Presidencia de la Asociación de Maquiladoras A. C. (AMAC) de Ciudad Juárez en 2006, así como las dinámicas y cambios originados por ese liderazgo femenino. A la fecha, es el tercer año consecutivo liderado por ejecutivas en el ramo maquilador. El diseño de la investigación es no experimental de campo, cualitativo con estudio de casos. Los resultados muestran que la presencia de mujeres ejecutivas al frente de la AMAC como organismo representante de la Industria Maquiladora en Juárez, ha generado controversias en términos generales, mayor presencia social y observación constante a su actuación, así como el incremento de metas específicas cumplidas, en los planes de trabajo. Se presentan además las conclusiones, implicaciones, limitaciones y recomendaciones para futuras investigaciones.

INTRODUCCIÓN

La integración de la mujer al trabajo denominado “productivo” y, por consiguiente, a la población económicamente activa (PEA), es el resultado de relevantes transformaciones socioeconómicas y de la consolidación del modo de producción capitalista en América Latina. Desde fines de la década de 1960, la mujer se ha incorporado a un nuevo sector productivo del área de las industrias de exportación no tradicionales: las maquiladoras o plantas de ensamblaje de artefactos eléctricos y electrónicos, plásticos y juguetes. Las empresas transnacionales contratan mayoritariamente mujeres para estas maquiladoras por el tipo de trabajo minucioso que requieren: “Las mujeres contratadas por las maquiladoras fronterizas o por plantas de ensamblado semejantes no compiten contra el proletariado no calificado varonil, simplemente porque las operaciones que aquellas han de realizar son, de alguna manera, diseñadas para un contingente de trabajo con características ‘femeninas.’ (Vitale, 1981).

La incorporación al trabajo maquilador de la mujer, fue básicamente en las áreas de producción desempeñando el puesto de obreras, sin embargo a partir de la década de los 70’s empezó a realizar trabajos administrativos, como secretaria, asistente y muy pocas de ellas, contadas, como jefas de personal y solo una en los 70’s, como gerente de planta. A partir de esa fecha, la mujer empieza a escalar puestos ejecutivos como gerente de área, coordinadora y gerente de planta (Jiménez, 2008b).

ASOCIACIÓN DE MAQUILADORAS A.C. (AMAC) EN JUÁREZ

En 1966 el gobierno Mexicano concreta el Programa de la Industria Maquiladora para la Frontera Norte de México, conocido como el Programa de Industrialización Fronteriza (PIF) para instalar fragmentos de los procesos productivos de empresas industriales estadounidenses que requerían uso intensivo de mano de obra y permitía tanto la importación de insumos y componentes como la exportación de los mismos libres de impuestos, excepto el valor agregado del país. Es pertinente mencionar sin embargo, que las primeras maquiladoras se establecieron en México bajo el sistema de zona libre y franjas fronterizas en

Ciudad Juárez aprovechando el régimen arancelario y fiscal especial, antes de la formalización del PIF, aunque la mayoría de los autores sobre industria maquiladora en México, toman el año de 1966 como el inicio de la Industria Maquiladora por ser el arranque formal de la misma. (Jiménez, 2008).

La Asociación de Maquiladoras A.C. en Ciudad Juárez (AMAC) se constituye oficialmente en febrero de 1974, (aunque inicio operaciones desde 1970) con la intención de unir y fortalecer la presencia de la industria maquiladora en la ciudad, buscando armonizar la operación de las plantas maquiladoras bajo el esquema de eficiencia, productividad y competitividad (Ojeda, 2007a).

A la fecha, la AMAC es presidida por el 25vo presidente en turno, quien al igual que el 24vo, es una mujer. La actual presidente de la AMAC, Ing. María Soledad Máynez Bribiescas, inicio su periodo de gestión en enero de 2009, en medio de una de las peores crisis económicas mundiales que ha repercutido enormemente a la Industria Maquiladora. Durante el 2008 este sector productivo perdió mas de 40 mil plazas laborales en la ciudad, correspondiendo el mayor porcentaje a las ramas de autopartes y electrónica y en el primer trimestre de 2009, suman mas de 15 mil puestos perdidos, también en las mismas ramas (AMAC, 2009). Este panorama sombrío para la maquiladora en Juárez, hace que el desempeño de su presidenta, gire en torno a la recuperación económica de la maquiladora.

MÉTODO

El diseño de la investigación es no experimental de campo, cualitativo con el método de estudio de casos, entrevistas y revisión bibliográfica y hemerográfica. Para el presente artículo, los estudios de caso se centran en las dos mujeres ejecutivas que han liderado la AMAC en Ciudad Juárez en los últimos tres años: Sandra Montijo-Dubrule (2007-2008) y María Soledad Máynez Bribiescas (2009).

RESULTADOS

María Soledad Máynez Bribiescas (2009): Tomo cargo como presidenta de la AMAC Cd. Juárez el 1ero de enero de 2009 y ocupa adicionalmente el puesto de gerente general de la maquiladora Pladino. Cuenta con una trayectoria de casi 30 años en la industria maquiladora con una amplia experiencia en áreas de calidad y proveeduría. En su plan de trabajo destacan seis puntos: (1) promocionar la ciudad y capacidad de los juarenses para atraer nuevas empresas de alta tecnología, (2) retener las plantas ya establecidas y mantener el empleo, (3) impulsar el uso de energías alternas, como la solar, (4) integrar los “botones de pánico” a las plantas maquiladoras ante la ola de inseguridad en la ciudad, (5) fomentar la relación universidad-industria y (6) impulsar la educación bilingüe. (El Diario, 2009)

En el desarrollo de su plan de trabajo y debido a la severa crisis económica que atraviesa la industria maquiladora, los puntos de retener las plantas establecidas, mantener el empleo y la inseguridad, han ocupado los titulares periodísticos y en los escasos cuatro meses de su gestión, Soledad Máynez ha logrado conseguir el apoyo del “Plan Anticrisis” de México a 12 plantas maquiladoras y continua en gestión con 25 plantas mas; incluir una agencia del Ministerio Publico en las instalaciones de la AMAC para atender de manera exclusiva los delitos en contra del sector industrial y continua con las gestiones ante la SEP de incluir en la currículo de manera obligatoria la materia de ingles para fomentar la educación bilingüe desde el nivel básico (Ojeda y Jiménez, 2009).

Sandra Montijo-Dubrule (2007-2008): Fungió como presidenta de la AMAC Cd. Juárez el 1ero de enero de 2007, siendo la primera mujer en ocupar ese puesto en México. Re-elegida en 2008 y actualmente como consejera nacional de la AMAC ante el Consejo Nacional de la Industria Maquiladora y Manufacturera de Exportación A. C. en México. Su plan de trabajo se centro en tres aspectos medulares: resaltar la importancia del factor humano en la industria, ser la voz del sector maquilador impulsando la gestoría de la asociación y crear la fundación AMAC (Ojeda, 2007b).

Los aspectos medulares de su plan de trabajo se vieron cumplidos a cabalidad: en octubre de 2007, inicio operaciones la Fundación AMAC teniendo como objetivo la asistencia social a través del apoyo económico a instituciones, programas o individuos en el rubro de educación y salud principalmente. Como gestora de la asociación, ha llevado a cabo numerosas participaciones antes distintos organismos públicos y privados en México y el extranjero, revelando ante ellos, no solo los males que aquejan al sector maquilador, sino también resaltando la calidad de los productos que se elaboran y la capacidad y competencias técnicas de sus empleados (Ojeda y Jiménez, 2008).

CONCLUSIONES

Al revisar los casos específicos de las dos mujeres ejecutivas al frente de la AMAC, se observa que sus planes de trabajo se enfocan a cuestiones de ayuda y soporte a la industria maquiladora, así como de impulso y promoción de su capacidad y competitividad. Por otro lado, destaca su labor social enfocada a fomentar sus vínculos con la sociedad de una manera mas ordenada y de mayor impacto, como orientar los apoyos que la maquiladora venia otorgando a la sociedad de manera desarticulada y aislada desde hace muchos años, ahora a través de su Fundación AMAC A.C.

A nivel social y en los medios de comunicación, los resultados muestran que la presencia de mujeres ejecutivas al frente de la AMAC ha generado controversias en términos generales, mayor presencia social y observación constante a su actuación, así como el incremento de metas específicas cumplidas en los planes de trabajo. Es importante mencionar sin embargo, que el cumplimiento de las metas establecidas en los planes de trabajo, es la premisa que se espera de los lideres, directores y presidentes de agrupaciones, en el caso de la presente investigación, se destaca por el hecho de ser mujeres quienes lo logran, en un ambiente donde la cuestión de genero, no es la equidad ni la igualdad, ni tampoco el demostrar la capacidad en el trabajo, es sencillamente, la diferencia entre genero: los hombres desde hace muchos siglos han sido quienes en el trabajo, destacan por el logro de sus metas, las mujeres en cambio, no llevan mas de tres décadas en demostrar con su trabajo, el logro de metas.

REFERENCIAS

AMAC. http://amacweb.org/espanol_index.html

El Diario (2009). Recibe año AMAC con nueva presidenta. *El Diario digital*. Nota electrónica recuperada el 11 de enero de 2009.
<http://www.diario.com.mx/nota.php?notaid=92af0c94a4cbff5abf4ea284c121f8d3>

Jiménez T., C. Patricia (2008). *Socialización Organizacional en la Industria Maquiladora Fronteriza del Norte de México: casos de estudio*. Tesis de Doctorado. UNAM.

Jiménez T., C. Patricia (2008b). *Entrevistas varias*. Sin publicar

Ojeda A., Armando (2007a). La industria maquiladora, una visión con futuro?. *Revista Ser Empresario*. Año VI, Edición AMAC.

Ojeda A., Armando (2007b). Entrevista a la Lic. Sandra Montijo, Nueva Presidenta de la AMAC. *Revista Ser Empresario*. Año VI, Edición AMAC.

Ojeda A., Armando y Jiménez T., C. Patricia (2008). *Entrevista a Lic. Sandra Montijo*. Sin publicar.

Ojeda A., Armando y Jiménez T., C. Patricia (2009). *Entrevista a Ing. Soledad Máynez*. Sin publicar.

Vitale, Luis (1981). La Incorporación Masiva de la Mujer al Trabajo “Productivo” y su Condición Jurídica y Cultural en el Siglo XX. Capitulo VI de *Historia y Sociología de la Mujer Latinoamericana*. Barcelona: Fontamara.

BIOGRAFIA

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PUBLICIDAD INFANTIL EN EL DÍA DEL NIÑO EN MÉXICO: A LA BÚSQUEDA DE CONSUMIDORES POTENCIALES

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ABSTRACT

Las campañas publicitarias que incluyen niños en sus anuncios se observan cada vez con más frecuencia, al considerar al niño como un sujeto capaz de realizar compras debido al poder de influencia que ejerce sobre sus padres o tutores y como futuro consumidor con conocimientos y actitudes sobre marcas y productos específicos, que aún no están a su alcance económico (Martínez, 2005). El presente artículo identifica las representaciones sociales que hacen los anunciantes de los niños en la publicidad televisiva e impresa cercana a la celebración del día del niño en México y el impacto que producen en el comportamiento del consumidor. El diseño de la investigación es cualitativo, con método de observación en anuncios de periódico y televisión de Ciudad Juárez, Chih., México. La muestra incluye 76 anuncios: 46 de televisión y 30 en periódicos, publicados entre los días 25 de abril al 1 de mayo de 2008. Los resultados revelan que la imagen que se presenta de los niños en la publicidad, busca atraer por un lado a los potenciales consumidores que son los niños y adolescentes y a su vez, llamar la atención de los adultos presentando imágenes de ternura, afecto y familias unidas, como un medio para satisfacer necesidades y estereotipos sociales. Se presentan además las conclusiones, implicaciones, limitaciones y recomendaciones para futuras investigaciones.

INTRODUCCION

El tema de los niños en la publicidad se considera muy atractivo debido a la ingenuidad y fragilidad emocional que tienen, ya que la persuasión publicitaria infantil, busca conseguir que el niño sea dependiente de un artículo para sentirse mejor (Martínez, 2005). Una forma de influir en el niño es por medio de la utilización de la publicidad audiovisual ya que utilizan: el timbre de voz, la presencia de animales, la voz de otro niño, la sincronía imagen-sonido y al placer, provocando en el menor el deseo de apropiarse, de tenerlo, de consumirlo, logrando con ello la atención del niño según Joel Bree (Montoya, 1996).

Desde el punto de vista de Ferran Casas (1998), la infancia se define como una categoría social distinta de la sociedad adulta caracterizada por su "aun no" competencia, capacidad, responsabilidad, fiabilidad, conocimiento, etc., por lo tanto se representa al niño como inocente, natural, vulnerable, y frágil (Gómez y Blanco, 2005).

Las actividades o el comportamiento del niño ante la publicidad incluyen: (a) Atiende el mensaje, (b) Distingue entre anuncio y programa, (c) Comprende la intención del mensaje, (d) Interpreta el contenido del anuncio -incluyendo cuestiones como el simbolismo del consumo o los estereotipos sexuales- y (e) Realiza otros procesos como la elaboración de defensas cognitivas ante este tipo de contenidos, etc. Posteriormente aparecen los efectos que provoca la publicidad como la (1) Modificación de sus actitudes y valores, a corto o largo plazo, (2) Realización de peticiones a otras personas como los padres o los iguales y (3) Influencia en las elecciones del niño y en su comportamiento de compra (Bringué, 1996).

Las tres formas en las cuales influye la publicidad televisiva en los niños es en sus valores y aspiraciones, debido a que propicia el ascenso al materialismo, otro efecto global, por la rápida vinculación de valores adultos en los niños, ya sea en productos o programas, tendientes a cortar la ingenuidad del niño, y por ultimo la uniformización de los gustos infantiles a escala mundial (Martínez, 2005).

Es frecuente que el niño se refleje en la publicidad como referente de valores positivos. El protagonista infantil del spot "contagia" al producto sus atributos, asociándose los valores positivos del niño a este, a la marca y, lógicamente, a quien lo consume. En otros casos, sin embargo, el uso de niños no persigue en exclusiva este objetivo, sino que estos se muestran como personajes de la trama dramática en la que desempeñan un papel que tiende a coincidir con el que la sociedad le otorga a sujetos frágiles, instintivos o problemáticos. (Gómez y Blanco, 2005).

Los niños son atacados por medio de la utilización de animales y el tono y la intensidad de la voz utilizada en los personajes ya que representan su estado de animo (alegría, tristeza, enojo, etc.), porque no solo se transmite información con las palabras, sino con el tono de voz, movimientos y expresiones que se presenten en el anuncio o comercial. Es importante considerar que para los publicistas el negocio es la creación de futuros consumidores, ya que los niños son grandes consumidores de spot y además sabemos que eso puede influir en las compras de la familia (Montoya, 1996). Este consumo de anuncios repercute según los padres ya que solo comen, beben, visten y juegan según lo que vean en algún medio de publicidad, es por ello que es esencial estar atentos con nuestros niños en que están viendo en TV, para evitar ser manipulados por estos.

CONTEXTO

Este proyecto se realizó en los medios de comunicación masiva impresa (periódicos) y en canales de televisión abierta de Ciudad Juárez, Chihuahua. Los medios de comunicación masiva en Ciudad Juárez incluyen: prensa, televisión abierta, televisión digital terrestre (señal digital), televisión restringida y radio.

En prensa circulan 5 periódicos: El Diario, Norte de Ciudad Juárez, El Mexicano, PM y Semanario. Existen 18 canales de televisión abierta, de los cuales 11 son estadounidenses y 7 mexicanos. En televisión digital terrestre (señal digital) existen 21 canales y en televisión restringida solo 3. En el radio, en Amplitud Modulada existen 24 señales y en Frecuencia Modulada 21 (wikipedia, 2008).

METODO

El Diseño de la investigación es no experimental de campo transaccional, su enfoque es cualitativo y alcance exploratorio. La población de esta investigación será infinita ya que en Ciudad Juárez no existe un consenso oficial sobre la cantidad de publicidad infantil impresa en periódicos y televisión abierta que se publicita diariamente, sin embargo para efectos de investigación se utilizara un listado de publicidad infantil anunciada en 5 periódicos que circulan en la ciudad y publicidad infantil televisada en 5 canales de televisión mexicanos. Los elementos a analizar serán los anuncios publicitarios infantiles en 5 periódicos de Ciudad Juárez los días 26 de abril y 1 de mayo de 2008, y 5 canales de televisión abierta en Ciudad Juárez durante los días sábado 26 y domingo 27 de abril en el horario infantil matutino. El diseño de muestreo es no probabilística de muestras cualitativas de tipo dirigida por teoría o por criterio (Hernández, 2003).

El método incluye la recopilación de datos secundarios a través de libros, revistas y artículos avalados; de datos primarios a través de observación directa para lograr identificar si consiguen captar a su mercado meta a través de la descripción del anuncio y del niño.

Para realizar la observación cualitativa se grabó en DVD la programación de 5 canales de televisión abierta en El Paso, Texas, EUA durante los días sábado 26 y domingo 27 de abril en el horario infantil matutino, según se describe en la siguiente tabla:

Horario	Canal de TV
7:00 – 8:00am	Canal 4
8:00 – 9:00am	Canal 7
9:00 – 10:00am	Canal 9
10:00 – 11:00am	Canal 14
11:00 – 12:00am	Canal 13

Y como parte de la observación, se buscaron anuncios publicitarios infantiles en 5 periódicos que circularon en Ciudad Juárez los días 26 de abril y 1 de mayo de 2008, siendo éstos El Diario, Norte de Ciudad Juárez, P y El Mexicano de Ciudad Juárez y de la Ciudad de México El Universal.

RESULTADOS

Los anuncios publicitarios analizados fueron:

Medios utilizados	Días en los que se efectuó la investigación					Enfoque	
	Totales	25-abr	1-may	26-abr	27-abr	Niños	Adultos
Periódico	30	20	10			5	25
TV	46			28	18	35	11
Totales	76	20	10	28	18	40	36

El total de anuncios con publicidad infantil los días seleccionados como muestra, fueron 76. De ellos, 46 fueron de televisión y 30 en periódicos, clasificándolos según a quien va dirigido el consumo: adultos o niños.

Con respecto a los anuncios publicitarios en televisión, se encontró que en función al estilo de vida americano, el enfoque publicitario cambia y se observó por ejemplo que el sábado 26 de abril durante la programación matutina de los diferentes canales americanos el 93% publicitaba productos de consumo meramente infantil (ver la grafica 1); y la programación del día domingo 27 de abril la publicidad atiende dos divisiones de segmentación demográfica subdividida en edades, ya que del total de los 18 anuncios publicitados ese día el 50% son para adultos y el otro 50% para el publico infantil (ver la grafica 2). Así también se relacionan con la segmentación sociocultural enfocándose a las clases sociales, dirigiéndose la publicidad al poder adquisitivo de la clase media ya que, los padres están orientados hacia sus hijos y tienden a satisfacer y disfrutar las mejores cosas de la vida. De igual manera podemos decir que se dirige a la tercera fase del ciclo de vida familiar en la que la pareja casada tiene al menos un hijo que vive en el hogar (Schiffman y Lazar, 2005).

Los anuncios publicitarios de los periódicos muestreado se observó que van más dirigidos a los adultos y se cree que este enfoque se da, en función de que los adultos tienen la costumbre de comprar el periódico con el fin de informarse debido a su fácil manejo entre sus rutinas y por sus vías de distribución permite su rápida adquisición. De forma general, se encontró en la muestra observada, que el enfoque de la publicidad dirigida a los niños en el periódico es solo del 12% y el de la televisión del 88%. En cuanto a la publicidad dirigida a los adultos (donde salen niños en los anuncios publicitarios), el 69% de ella se encuentra en los periódicos y solo el 31% en la televisión.

CONCLUSIONES

Al realizar esta investigación se mostraron varias actitudes sobre el comportamiento del consumidor respecto a la imagen que se tiene del infante en los diversos medios masivos de publicidad.

El infante puede ser visto en la publicidad ya sea para atraer el mercado infantil, publicando artículos de su interés como lo juguetes, ropa, comida y otros accesorios utilizados por ellos. En algunos comerciales se trata de concienciar a los niños o jóvenes sobre algunos temas de relevancia para su desarrollo tanto físico como emocional.

Los comerciales también pueden recurrir a la imagen de un niño para su publicidad dirigida al mercado adulto para llamar su atención ya que los niños crean una imagen de ternura, afecto, y para las familias es uno de los mayores deseos.

La vida familiar tiende a reflejar armonía entre los integrantes, tanto por las ventajas que los hijos reciben de los padres como por las que estos reciben de aquellos. El niño da sentido a la familia porque el proyecto familiar se culmina a través de su existencia. La familia necesita de los niños tanto como los niños a la familia.

Se considera importante establecer que los niños y adolescentes son los futuros consumidores potenciales por lo que se debe hacer una mayor fijación a los productos que se les ofrece y la forma en que se transmite el mensaje para que desarrollen la capacidad de distinguir entre los diversos productos y servicios que se ofrecen, y desde pequeños vayan creando su criterio para decidir entre cuales productos o marcas se inclinan. El núcleo familiar también es un factor importante a considerar ya que nos crean ciertas preferencias de consumo, que con el paso del tiempo se vuelve una costumbre utilizar.

REFERENCIAS

Bringué, Xavier (1996). Publicidad infantil y estrategia persuasiva: un análisis de contenido. Zer, 10, 1996, p. 53-76 <http://www.ehu.es/zer/zer10/bringue.html>

Garrido, Manuel (2002). 40 años de investigación de los efectos de la violencia en prensa y televisión. Razón y palabra, n° 17, 2002, pp. 1-30.

Gómez Espino, Juan Miguel y Blanco López, Juan (2005). Los niños en la publicidad: una propuesta de la categorización e las representaciones sociales sobre la infancia en los anuncios televisivos. Zer, 19, 2005, p. 53-76 http://www.ehu.es/zer/zer19/zer19_7.pdf

Martínez Rodrigo, Stella (2005). Los niños ante la publicidad televisiva. Revista Comunicación y Hombre, Num. 1, Año 2005. http://www.ufv.es/docs/stella_mart.pdf

Montoya Vilar, Norminada (1996). El papel de la voz en la publicidad audiovisual dirigida a los niños. Universidad Autónoma de Barcelona. Trabajo de investigación. Dt. de Comunicación Audiovisual y Publicidad. <http://www.ehu.es/zer/zer4/normai7.html>

Schiffman, L. G.; Lazar K., L. (2005). Comportamiento del Consumidor. 8va. Edición. México: Pearson Educación de México, S.A. de C.V.

Wikipedia (2008). Ciudad Juárez. Consultada el 25 de septiembre de 2008
http://es.wikipedia.org/wiki/Ciudad_Ju%C3%A1rez

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