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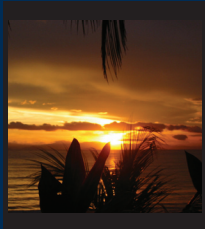
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Global

IBFR

Welcome to Hawaii

Welcome

Bienvenidos

On behalf of the Staff and the IBFR, I welcome you to Hawaii and the 2010 Global Conference on Business and Finance. We hope you have a productive conference and enjoy your time in Hawaii. If we can be of any assistance to you during your time in Hawaii 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 2010 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 nineth conference will be held in San Jose, Costa Rica, May 25-28, 2010. Our tenth conference will be held in Las Vegas, Nevada, January 2-5, 2011 at the newly renovated Flamingo Hotel. 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 The Big Island and the surrounding countryside. Hawaii 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

Bienvenidos a Hawaii

Welcome

Bienvenidos

El Instituto y su personal les da la bienvenidos a Kailua-Kona, Hawaii y al 2010 Global Conference on Business and Finance. Esperamos que su participación sea productiva y que disfruten Hawaii.

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 2010 GCBF representa un compromiso a larga 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 participar, la cual hace realidad nuestro objetivos; el realizar un Congreso realmente Global con participación de educadores y profesionales de todos partes del mundo.

Con gran alegría anunciamos nuestros próximos Congresos en San Jose, Costa Rica, 25-28 de Mayo de 2010. Nuestra congreso de Estados Unidos se realizara en Las Vegas, Nevada del 2 al 5 de enero de 2011 en el Hotel Flamingo Las Vegas. Será un placer el contar con su participación nuevamente.

Deseamos que disfruten su estancia en el Hotel y que tengan la oportunidad de explorar Hawaii. 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

CONVERTIBLE BOND DESIGN AND LONG-RUN OPERATING PERFORMANCE

Devrim Yaman, Western Michigan University

ABSTRACT

In this paper, we examine the influence of bond design on the long-run operating performance of convertible bond issuers and the determinants of this performance. We classify bonds as equity-like and debt-like according to their probability of conversion at the time of the issue. Our measure of long-run operating performance is the pre-tax cash flows of the firm. We find that in the three years before the offering equity-like convertibles have better performance than debt-like convertibles while the performance in the three years after the offering is similar for the two groups of firms. We also find that the factors that determine the long-run operating performance of equity-like and debt-like offerings are different. For example, the rating of the bond issued has a more positive influence on the performance of equity-like issues compared to debt-like issues. The level of information asymmetry, on the other hand, has a more negative influence on the performance of equity-like issues. Our study contributes to the literature by incorporating convertible bond design into the study of the long-run operating performance of these bonds.

INTRODUCTION

Several studies examine the long-run operating performance of convertible bond issues. Typically, these studies find the average performance of all the convertible bonds in their sample. The underlying assumption of this approach is that the performance of convertible bonds does not change according to how firms design the bonds. However, Lewis, Rogalski, and Seward (1999) show that firms can design convertible bonds to be more equity-like or debt-like. In fact, Lewis et al. (2003) and Abhyankar and Ho (2006) find that the stock performance of convertible bonds is significantly different for equity-like and debt-like convertibles. In this study, we analyze whether convertible bond design affects the operating performance of the issuers as well. We specifically test whether the long-run operating performance is different for equity-like and debt-like convertibles. We also test whether the factors that affect the long-run operating performance of convertible bonds have different influences for equity-like and debt-like convertibles.

As in Lewis et al. (1999), we measure the design of the bonds with the risk-neutralized probability that the bond will be converted into equity. We define equity-like convertibles as those issues with the probability conversion higher than the sample median while issues with this probability below the sample median are classified as debt-like convertibles. We measure long-run operating performance with the pre-tax cash flows standardized by the total assets of the firm. As an additional proxy, we use the industry-adjusted version of this measure where we deduct the industry median from the cash flows of the firm.

Our sample consists of 186 convertible bond offerings made by industrial firms. We find that the operating performance of equity-like convertibles is better than the performance of debt-like convertibles in the three-years before the offering. This finding is consistent with the argument of Myers and Majluf (1984) that riskier securities are more likely to be overvalued at the offering than less-risky securities. The performance is similar for equity-like and debt-like convertible issuers in the three years following the issue. We also find that the factors that determine the long-run operating performance are different for these two groups. For example, the riskiness of the bond has a more positive influence on the performance of equity-like convertible bond issuers compared to the issuers of debt-like convertibles.

Similarly, the level of information asymmetry about the firm's future prospects has more negative influence on the performance of equity-like convertible bond issuers.

HYPOTHESES

In this section we develop the hypotheses we test in our paper. First, we present the hypotheses on the long-run operating performance of equity-like and debt-like convertible issuers. Next, we present our hypotheses related to the influence of convertible bond design on the relationship between issue- and firm-specific factors and the long-run operating performance of convertible bond issuers.

Long-run Operating Performance of Equity-like and Debt-like Convertible Bonds

Myers and Majluf (1984) argue that riskier securities are more likely to be overvalued at the offering than less-risky securities. Hence, since equity is a more risky security than debt, the pre-issue operating performance of equity issuers should be better than the operating performance of debt issuers. Similarly, since equity-like convertibles have more equity characteristics we would expect these bonds to have better operating performance than debt-like convertibles during the period before the offering.

The argument of Myers and Majluf (1984) also suggest that following the offering the superior performance of equity issuers should be reversed and the performance of equity issuers should be worse than the performance of debt issuers. Consistent with this argument Bae et al. (2002) show that equity issuers have negative long-run returns while straight bondholders have insignificant returns. Contrary to this finding, Hansen and Crutchley (1990) and McLaughlin et al. (1998b) show that both straight bonds issuers and equity issuers have negative long-run operating performance. This finding suggests that the performance of equity-like and debt-like convertible bond issuers could have similar performances in the long run.

Determinants of Long-term Operating Performance of Equity-like and Debt-like Convertible Bonds

Prior literature shows that several firm and issue-related factors affect the long-run operating performance of convertible bond issuers. However, studies suggest that the design of convertibles could affect the extent of the influences of these variables since the design of the bonds determine whether the bonds behave more like equity or debt. Therefore, in our analysis of issue- and firm-specific factors, we include interactions with the convertible bond design.

Issue size: Miller and Rock (1985) suggest unexpected financing signals a decrease in future cash flows. Hence, the amount of capital raised should have a negative effect on the long-run operating performance since higher amounts of financing indicates that the firm will lower future cash flows. In Myers and Majluf (1984) overvaluation is higher for riskier securities. Hence, when firms issue equity-like convertibles (a riskier security) as opposed to debt-like convertibles, higher amounts of financing should result in even lower future performance.

Leverage and bond risk: Stein (1992) argues that convertible bondholders have lower credit quality and higher amounts of debt indicating that firms that are of better quality than what their rating and leverage imply have to issue convertible bonds rather than straight bonds. Hence, to the extent that convertible bond issues with low bond rating and high leverage are good quality, operating performance should be negatively related to bond rating and positively related to leverage. We would expect this relation to be more pronounced for debt-like convertibles since it is likely that firms that cannot issue straight bonds design the convertibles to be more like straight bonds. In a similar vein, for equity-like convertibles operating performance should be less negatively (i.e. more positively) related to rating and less positively (i.e. more negatively) related to leverage.

Growth opportunities: McLaughlin et al. (1998b) indicate that firms with better growth opportunities may choose to issue convertible bonds instead of straight bonds when they have higher expected costs of financial distress and information asymmetry. These firms can obtain financing with lower yields since the option to convert these securities into equity makes convertibles attractive to investors. Hence, convertible bond issues with high growth opportunities at the time of issue will have better operating performance in the long-run. Convertible bond issuers that wished to issue straight debt if they did not have the financial distress and information asymmetry problems will design the issue to be debt-like. Therefore, the relation between operating performance and growth opportunities will be more positive for debt-like convertibles and less positive for equity-like convertibles.

Information asymmetry: McLaughlin et al. (1998b) find that debt and equity issuers with higher information asymmetry have higher declines in operating performance following the security issue and the decline for equity-issuers is higher. Hence, information asymmetry should have negative influence on operating performance and the influence should be more negative for equity-like convertibles.

Investments: McLaughlin et al. (1998a) argue that firms that make investments that increase firm value should have better operating performance. Since these investments are important for both equity-like and debt-like convertibles, we expect both groups of firms to have a positive relation between investments and operating performance and do not expect a significant difference in the relation of this variable with operating performance of the two groups.

Announcement Returns: Bae et al. (2002) argue that the market can predict the long-run operating performance of security issuers when the security issue is announced, before the actual bond issuance. This argument suggests that announcement returns should be positively related to operating performance. We do not expect this variable to have a significantly different relation with the operating performance of equity-like and debt-like convertible bond issuers.

EMPIRICAL ANALYSIS

Measures of Convertible Bond Design and Operating Performance

In order to compare the long-run operating performance of equity-like and debt-like convertible issuers, we divide our sample into equity-like and debt-like convertibles using the probability of conversion measure in Lewis et al. (1999). In Lewis et al. probability of conversion is defined as the risk-neutralized probability that the bond will be converted into equity. Hull (1999) indicates that $N(d_2)$ in the option pricing equation is the cumulative probability under the standard normal distribution and represents the probability that the option will be exercised in a risk-neutral world. We estimate d_2 using the equation

$$d_2 = \frac{\ln(S/X) + (r - div - \sigma^2/2)T}{\sigma\sqrt{T}} \tag{1}$$

In this equation *S* is the issue date stock price, *X* is the conversion price, *r* is the risk-free rate calculated as the continuously compounded annual yield on 10-year T-bonds in the issue month, *div* is the continuously compounded dividend yield during the fiscal year preceding the issue date, σ is the standard deviation of the continuously compounded equity return estimated over the period 240 to 40 trading days prior to the issue date, and *T* is the number of years until maturity. We define issues with probability of conversion higher than the sample median as equity-like convertibles and issues with probability of conversion lower than the sample median as debt-like convertibles.

As in McLaughlin et al. (1998a), Alderson and Berker (2000), Lewis et al. (2001), and Hertzel, Lemmon, and Rees (2002) we measure of operating performance as the pre-tax operating cash flows defined as the operating income before depreciation and amortization (Compustat item 13) adjusted by the book value of total assets (Compustat item 6). Pre-tax operating cash flow is a better measure of operating performance than earnings for two reasons. First, items such as income taxes, interest expense, and special items are included in earnings and these items obscure operating performance (McLaughlin et al. (1998a)). Second, this measure is a pre-tax measure and therefore is not affected by the changes in the firms' capital structure and tax status. Hence, pre-tax operating cash flow shows the economic benefits generated by the firm (Barber and Lyon (1996)). In order to be able to compare the cash flows through time and across firms, we scale this measure with total assets.

We also use the abnormal operating performance of the firm measured by the industry adjusted performance since Barber and Lyon (1996) state that measuring operating performance as the firm's performance relative to the industry leads to well specified and powerful models. We define industry adjusted cash flow as the firm's pre-tax operating cash flow divided by total assets minus the median of this ratio for all firms in Compustat with the same two-digit SIC code. We examine the operating performance over a seven year period around the offer year (years -3 to +3). In a separate analysis, we study the pre-and post-issue changes in operating performance relative to year -1.

Data and Results

Our sample consists of completed convertible bond issues made between 1992 and 2004 in US markets by industrial firms. D'Mello, Tawatnuntachai, and Yaman (2003) classifies firms with two-digit SIC codes of 49 as utilities, those with one-digit SIC code of 6 as financial institutions, and all other firms with valid SIC codes as industrial firms. We follow this classification to define industrial firms. We obtain our initial sample of convertible bond issues from the Securities Data Corporation (SDC) database of Thomson Financial. All of our sample firms have balance sheet and income statement data in Compustat and common stock and price data in CRSP.

Table 1: Pre-issue Operating Performance

Variables		All Convertibles	Equity-like Convertibles	Debt-like Convertibles	Difference Equity-like- Debt-like
Raw Operating Performance (-3)		0.0910 [a] (0.1111 [a])	0.1279 [a] (0.1285 [a])	0.0549 [b] (0.1044 [a])	0.0033 [a] (0.0329 [b])
Raw Operating Performance (-2)		0.0960 [a] (0.1120 [a])	0.1372 [a] (0.1327 [a])	0.0548 [c] (0.0907 [a])	0.0075 [a] (0.0052 [a])
Raw Operating Performance (-1)		0.1029 [a] (0.1113 [a])	0.1322 [a] (0.1323 [a])	0.0735 [a] (0.0956 [a])	0.0008 [a] (0.0025 [a])
Industry-adjusted Performance (-3)	Operating	-0.0677 [c] (-0.0091)	-0.0205 (0.0023)	-0.0884 [c] (-0.0091)	0.2495 (0.9740)
Industry-adjusted Performance (-2)	Operating	-0.0392 (0.0038)	-0.0159 (-0.0064)	-0.0496 (0.0082)	0.6566 (0.6990)
Industry-adjusted Performance (-1)	Operating	-0.0070 (0.0172 [b])	0.01855 (0.03445 [b])	-0.0205 (0.0154)	0.2289 (0.4666)

This table presents the long-run operating performance of the sample firms. Raw operating performance is defined as the operating income before depreciation and amortization divided by the book value of total assets for years -3 to -1 relative to the issue year. Industry-adjusted operating performance is the raw operating performance of the firm minus the median raw operating performance in the issuing firm's industry for years -3 to -1. The numbers in "Difference Equity-like – Debt-like" column represent p-values of t-tests (Wilcoxon tests) for the differences in means (medians) for the equity-like convertibles sample from those of the debt-like convertibles sample. [a], [b], and [c] denote significance at 1, 5 and 10 percent levels respectively.

Table 1 presents the operating performance of the firms in our sample before issuing convertible bonds. The results show that the operating cash flows of the firms increased over the three years before the convertible bond issuance. For the whole sample average operating cash flows were 9.1% of total assets three years before the issuance, 9.6% two years before the issuance and 10.3 % a year before the issuance. The mean and median operating performances of equity-like convertibles are significantly higher than the performance of debt-like convertibles in all of the three years prior to the issue. For example, in the year before the offering the average operating cash flows is 13.2% of the assets of equity-like convertible issuers and only 7.4% of the assets of debt-like convertible issuers. This finding is consistent with Myers and Majluf's (1984) argument that riskier securities are more overvalued at issuance. When we use the industry adjusted cash flows to proxy for the operating performance, operating cash flows continue to increase in the three years prior to the offering for the firms in the sample. With this proxy, the operating performance of equity-like convertible issuers is still higher than the performance of debt-like convertibles. However, the difference in the mean and median performance of the two sub-samples is insignificant.

Figure 1: Annual Post-issue Operating Performance

Panel A: Operating Performance of All Sample Firms
Figure 1.1: Raw Operating Performance of All Sample Firms
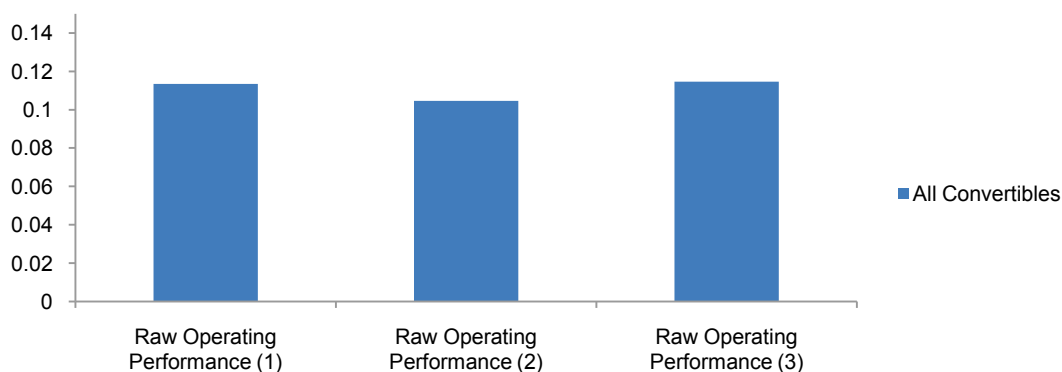
Figure 1.2: Industry-Adjusted Operating Performance of All Sample Firms
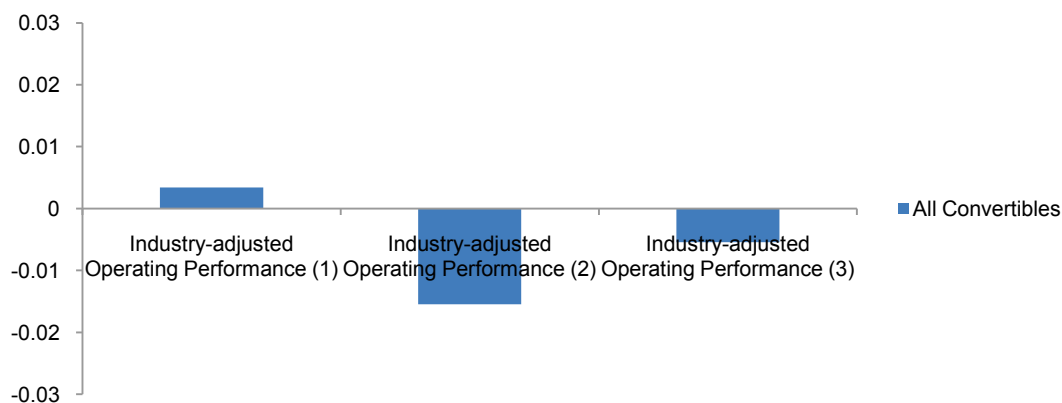
Panel B: Operating Performance of Issuers of Equity-Like and Debt-like Convertibles
Figure 1.3: Raw Operating Performance of Issuers of Equity-like and Debt-like Convertibles
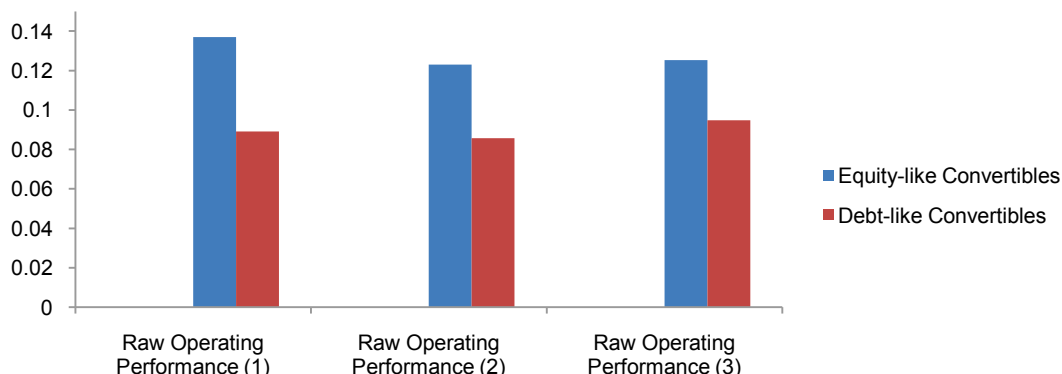
Figure 1.4: Industry-adjusted Operating Performance of Issuers of Equity-like and Debt-like Convertibles
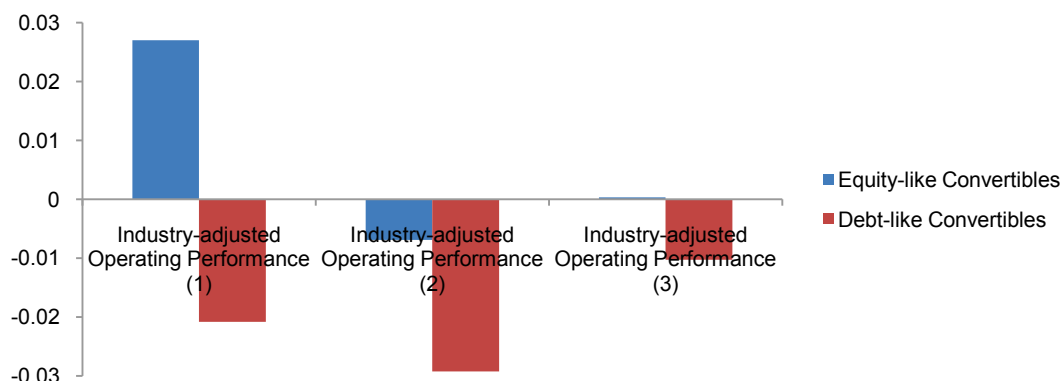
This figure presents the median operating performance of the sample firms in each of the three years following the convertible bond issue. The sample consists of completed convertible bond issues made between 1992 and 2004 by industrial companies trading in US markets. Equity-like Convertibles are issues with probability of conversion above sample median and Debt-like Convertibles are issues with this probability below the sample median. Panel A shows the median operating performance of all sample firms and Panel B shows the median operating performance of issuers of equity-like and debt-like convertibles separately. Raw operating performance is defined as the operating income before depreciation and amortization divided by the book value of total assets for years 1 to 3 relative to the issue year. Industry-adjusted operating performance is the raw operating performance of the firm minus the median raw operating performance in the issuing firm's industry for years 1 to 3.

Figure 1 presents the graphs of the operating performance of the firms in our sample in each of the three years following the convertible bond issue. Panel A presents the graphs for the whole sample and shows that the pre-tax cash flow is stable in the three years following the issue. The median cash flow is 11.34% of total assets in the year following the issue and increases to 11.45% three years after the offering. Industry adjusted operating performance is similar to pre-issue levels. The median industry adjusted cash flow is 0.34%, -1.55%, and -0.54% in the three years following the offering.

Panel B presents the graphical representation of the operating performance of equity-like and debt-like convertibles separately. The graphs show that the operating performance of equity-like convertible issuers is better for that that of debt-like convertible issuers in each of the three years following the issues. The median ratio of pre-tax cash flow to total assets range between 12.31% and 13.70% for equity-like convertible issuers 8.57% and 9.47% for debt-like convertible issuers. The largest difference in the industry adjusted performance of equity-like and debt-like issuers is in the first year following the issue.

In the first year following the issue, the median industry adjusted operating performance cash flows is positive (2.70%) for equity-like convertible issuers while the performance is negative (-2.08%) for debt-like convertible issuers. The median industry adjusted cash flows is 0.69% and 0.03% of total assets for equity-like issuers and -2.93% and -1.03% for debt-like convertible issuers in the two and three years following the offering.

Table 2: Univariate Comparisons of Long-run Operating Performance

Variables	All Convertibles	Equity-like Convertibles	Debt-like Convertibles	Difference Equity-like – Debt-like Convertibles
Relative Operating Performance (-1,+1)	-0.0428 (-0.0596)	-0.0247 (-0.0535)	-0.0619 (-0.0820)	0.6232 (0.6776)
Relative Operating Performance (-1,+2)	-0.0988 [b] (-0.0667 [c])	-0.0329 (-0.0447)	-0.1647 [b] (-0.1590)	0.1496 (0.2075)
Relative Operating Performance (-1,+3)	-0.0315 (-0.0661)	0.0151 (-0.0449)	-0.0740 (-0.0661)	0.3686 (0.5461)
Industry-adjusted Relative Operating Performance (-1,+1)	-0.6029 [a] (-0.5316 [a])	-0.5994 [c] (-0.4971)	-0.6048 [a] (-0.5661 [b])	0.9882 (0.7611)
Industry-adjusted Relative Operating Performance (-1,+2)	-0.8113 [a] (-0.5650 [a])	-0.9326 [b] (-0.8259 [c])	-0.7614 [b] (-0.4952 [b])	0.7292 (0.4890)
Industry-adjusted Relative Operating Performance (-1,+3)	-0.5203 [b] (-0.4586 [a])	-0.9934 [b] (-0.9729 [a])	-0.3282 (-0.3892 [b])	0.1581 (0.1235)

This table presents Relative operating performance is defined as the operating income before depreciation and amortization divided by the book value of total assets for years 1 to 3 in proportion to the performance in the year before the issue. Industry-adjusted relative operating performance is the relative operating performance of the firm minus the median relative operating performance in the issuing firm's industry for years 1 to 3. We use t-test to test the significance of the means and sign test for the medians. The numbers in "Difference Equity-like – Debt-like" column represent p-values of t-tests (Wilcoxon tests) for the differences in means (medians) for the equity-like convertibles sample from those of the debt-like convertibles sample. [a], [b], and [c] denote significance at 1, 5 and 10 percent levels respectively.

Table 2 shows the operating performance of the sample firms in the three years following the offering compared to the year before the offering. The relative operating performance figures in this table show the percentage difference of the pre-tax cash flow in each of the three years following the issue from the pre-tax cash flow in the year prior to the offering. For the whole sample the difference in performance is significant only in the second year following the issue. In this year both the mean and median operating performance are significantly lower than the performance in year -1. The relative performance of equity-like convertible issuers does not change significantly in the three years following the offering compared to the year before the offering. For debt-like issuers the average operating performance is 16% lower than the year before the offering. However, in the first and third years after the offering the relative performance of debt-like convertible issuers does not change either. When we use the relative operating performance as our proxy, equity-like convertible issuers continue to perform better in each of the three years following the offering, although the difference in performances of equity-like and debt-like convertible issuers is not significant. In this table when we define operating performance as the relative operating performance adjusted by the median relative performance in the firm's industry, performance is

significant for the whole sample and the equity-like and bond-like convertible issuer sub-samples. The difference in performance is not significantly different for the two sub-samples with this proxy either. These findings are consistent with Hansen and Crutchley (1990) and McLaughlin et al. (1998b) who show that that both equity-like and debt-like convertible issuers have negative long-run performance.

Table 3: Determinants of Long-run Operating Performance

| Variable | Operating Performance (-1,+3) | | | Operating Performance (-1,+1) | | |
	1	2	3	4	5	6
intercept	141.4680	13.0811	17.7803	40.7029	163.9008	-53.2822
	(1.83)	(0.21)	(0.22)	(0.62)	(1.96)	(-0.93)
Standardized Issue Size	-129.1741[a]		-92.4502[c]		-151.3624[a]	
	(-2.74)		(-1.90)		(-2.78)	
Type * Standardized Issue Size	-124.4843		-66.6086		35.1461	
	(-1.36)		(-0.79)		(0.46)	
Bond Rating	-29.7558	-20.7972		-36.5375	-47.7768	
	(-0.77)	(-0.53)		(-0.82)	(-1.08)	
Type * Bond Rating	132.3776[b]	144.7683[b]		154.5145[b]	166.6190[b]	
	(2.06)	(2.15)		(2.12)	(2.31)	
Market-to-Book Ratio		-7.5050[c]		-8.3596[c]		
		(-1.91)		(-1.82)		
Type * Market-to-Book Ratio		-6.1395		1.2223		
		(-0.67)		(0.13)		
Market Value of Equity	-10.5312	2.7122		0.5956	-11.3756	
	(-1.20)	(0.29)		(0.06)	(-1.15)	
Type * Market Value of Equity	-3.3028	-5.7805		-5.4156	-8.3385	
	(-0.33)	(-0.51)		(-0.42)	(-0.73)	
Total Assets			-1.2521			0.6192
			(-0.14)			(0.07)
Type * Total Assets			8.4133[c]			17.5048[b]
			(1.85)			(2.27)
Debt Ratio	-0.6506	-0.2969		-0.4488	-0.8940	0.5487
	(-0.64)	(-0.29)		(-0.38)	(-0.76)	(0.45)
Type * Debt Ratio	-0.7203	-0.8396		-1.4998	-1.5031	-2.3702
	(-0.54)	(-0.61)		(-0.99)	(-1.02)	(-1.44)
Standardized Property	-14.6733		-7.4678		-8.0530	18.6908
	(-0.45)		(-0.23)		(-0.22)	(0.51)
Change in Stand. Property		62.6520		81.8257		
		(0.59)		(0.71)		
CAR(-1,0)	-295.8590		-371.5125		-128.7577	
	(-1.18)		(-1.46)		(-0.46)	
CAR(1,1)		-90.5134		-94.6046		-133.7757
		(-0.46)		(-0.42)		(-0.59)
R^2	0.1384	0.1099	0.0982	0.0956	0.1165	0.0427
F-statistic	2.15[b]	1.64[c]	2.51[b]	1.63[c]	2.03[b]	1.18
N	144	143	144	164	164	164

*This table presents OLS regressions of the determinants of the long-run operating performance of equity-like and debt-like convertible bonds. In regressions 1-3 the dependent variable is the percentage change in operating performance three years after the offering from the year before the offering. In regressions 4-6 the dependent variable is the percentage change in operating performance one year after the offering from the year before the offering. Operating performance is defined as the operating income before depreciation and amortization divided by the book value of total assets. Type is a dummy variable that takes the value of one for equity-like convertibles and zero for debt-like convertibles where equity-*like convertibles are issues with probability of conversion above sample median and debt-like convertibles are issues with this probability below the sample median. Standardized Issue Size is the total proceeds divided by the book value of total assets at the end of the fiscal year before the issue. Bond Rating is a dummy variable that takes the value of one for bonds rated investment grade and above by Standard and Poor's and zero otherwise. Market-to-Book Ratio is the price *multiplied by* the company's common shares outstanding, *divided by* common equity, measured at the end of the fiscal year before the issue. Market Value of Equity is the natural logarithm of price *multiplied by* the number of common shares outstanding, measured at the end of the fiscal year before the issue. Total Assets is the natural logarithm of the total book value of assets, measured at the end of the fiscal year before the issue. Debt Ratio is the *sum of* long-term debt and debt in current liabilities, *divided by* the book value of total assets, measured at the end of the fiscal year before the issue. Standardized Property is the amount of tangible fixed property divided by the book value of total assets measured at the year of issue. Change in Standardized Property is the change in the standardized property in the year of the issue from the year before. CAR is the cumulative abnormal returns of the issuing firms around the announcement periods (-1, 0) and (-1,+1), where day 0 is the filing date. The numbers in parentheses are t-statistics. [a], [b], and [c] denote significance at 1, 5 and 10 percent levels respectively.

In Table 3 we study the determinants of the long-run operating performance of equity-like and debt-like convertibles. In the regressions in Tale 3 we use the following model:

$$OP = \beta_0 + \beta_1 IS + \beta_2(t*IS) + \beta_3 BR + \beta_4(t*BR) + \beta_5 MB + \beta_6(t*MB) + \beta_7 FS + \beta_8(t*FS) + \beta_9 DR + \beta_{10}(t*DR) + \beta_{11} PI + \beta_{12} AR$$

In these regressions, we test the impact of convertible bond design on the influence of firm- and issue-related factors on operating performance by interacting a dummy variable (t) with the independent variables. In the regressions we include the variables as well as their interactions with the dummy variable that takes the value of one for equity-like convertibles and zero for debt-like convertibles. The coefficient of the interactive term shows the incremental influence of the independent variable for the equity-like convertibles compared to the debt-like convertibles while the coefficient of the independent variable shows the influence of the variable for debt-like convertibles.

In the regressions in Table 3, the dependent variable *OP* is the operating performance and is measured using two alternative methods. In the first three regressions, the dependent variable is the percentage change in the operating performance of the issuer in year 3 relative to year -1 while in the last three regressions dependent variable is the operating performance in year 1 relative to year -1. *IS* is the issue size and is defined as the total proceeds from the bond sale adjusted by total assets of the firm. As in Jewell and Livingston (1997) we measure the riskiness of the bonds with the bond rating (*BR*). Bond rating is a dummy variable that takes the value of 1 for bonds rated investment grade (BBB or above) by Standard and Poor's and zero for bonds rated below investment grade or are unrated. We measure the growth opportunities of the firm with the market-to-book ratio (*MB*). *FS* is firm size and measures the information asymmetry between the company insiders and investors about the future prospects of the firm. As in D'Mello et al. (2003) we use the size of the firm as our measure of the level of information asymmetry because prior studies find that large firms have more information available to the public since they are more likely to be followed by analysts and the popular press. Hence, in general, small firms have more information asymmetry. We measure firm size using two alternative proxies; market value of equity and the total assets of the firm.

In Table 3, *PI* is the level of property investment made by the firm. We use the change in the investments of the firm in the year of the issue compared to the investments in the year prior to the issue as an additional proxy. We measure leverage with the debt ratio (*DR*). As in Bae et al. (2002), we also test the influence of the announcement returns on operating performance. We define announcement returns (*AR*) as the cumulative abnormal returns accumulated over days (-1,0) and (-1,+1).

Table 3 shows that for debt-like convertible issues the issue size has a negative influence on the long-run operating performance. This finding is consistent with Miller and Rock (1985)'s argument that issuers of large offerings should have more negative performance. This finding is also consistent with Hansen and Crutchley (1990) who show that the amount of capital raised is negatively related to long-term operating performance. However, contrary to the arguments of Myers and Majluf (1984), for large offerings, equity-like convertible issuers do not obtain lower long-run performance compared to debt-like convertible bond issuers. We also find that the coefficient of the rating interactive variable is positive. This finding is consistent with our hypothesis that the influence of bond rating should have a more positive (less negative) influence on long-run performance of equity-like convertibles compared to debt-like convertibles. The results show that debt-like convertibles with high growth opportunities obtain lower long-run performance. The influence of growth opportunities is similar for equity-like and debt-like convertibles. We find that the coefficient of the interaction of the asset size with the bond design dummy is positive. This finding is consistent with the arguments of McLaughlin et al. (1998b). However, this variable has an insignificant coefficient when we use the market value of equity as our proxy for information asymmetry. Hence, we find only limited support for our hypothesis that the influence of information asymmetry (small firms) is more negative for equity-like convertibles. We find

that leverage has similar influences on operating performances of debt-like and equity-like convertible issuers and the influences of property investment and announcement returns are insignificant.

CONCLUSIONS

In this paper, we study the impact of convertible bond design on the long-run operating performance of these bonds and the determinants of this performance. We classify convertible bonds with probability of conversion higher than the sample median as "equity-like" and bonds with probability of conversion lower than the sample median as "debt-like". Myers and Majluf (1984) suggest that equity-like convertible issuers should have better operating performance than debt-like convertible issuers before the offering. After the offering, the performance of the issuers of equity-like convertibles should deteriorate and be worse than the performance of the issuers of debt-like convertibles. Alternatively, Hansen and Crutchley (1990) and McLaughlin et al. (1998b) suggests that the performance of both equity-like and debt-like convertibles should be negative and similar to each other. Prior studies also suggest that convertible bond design affects the factors that determine the long-run operating performance of these bonds. The factors that affect the performance of convertible bonds may be more or less influential for equity-like and debt-like convertibles.

Our sample consists of 186 completed convertible bond issues offered by industrial firms in US markets between 1992 and 2004. We find that equity-like convertibles have better operating performance than debt-like convertibles in each of the three years before the offering. In the three years after the offering equity-like convertible bond issuers continue to perform better. However, the change in operating performance from the year before the issue is similar for equity-like and debt-like convertible issuers. We also find that convertible bond design affects the influence of several factors on the long-run performance of these bonds. For example, the riskiness of the bond has a more positive impact on the long-run performance of equity-like convertible bond issuers compared to debt-like bond issuers while the influence of information asymmetry has a more negative influence.

Our study points to the importance of controlling for security design in the analysis of the long-run operating performance of convertible bonds. Future research should study the impact of security design on other aspects of convertible bonds. Future research should also examine how the design of other securities affects their performance.

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ANALYZING THE INFLUENCE OF BRAND PERSONALITY OF INDIA'S MOST TRUSTED BRAND (2009) TO PERCEIVED QUALITY

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ABSTRACT

It was surprising to see that Nokia tops the list this year again among the India's most trusted brands. The purpose of this research is to analyze the influence of brand personality of NOKIA (India's most trusted brand , 2009) to perceived quality. 214 respondents approximately from a well known management institute (Mumbai, India) are selected for this purpose and respondents are asked to rate the five dimensions of brand personality (sincerity, excitement, competence, sophistication ,ruggedness) on a five point rating scale. Similarly, they are asked to rate the four dimensions of perceived quality on a three point rating scale.The data is analyzed using Microsoft excel and SPSS Software. This paper contributes to the field of research in Indian context. It will help marketers to frame proper marketing strategies for the same.

KEYWORDS: trusted brands, perceived quality, dimensions, sophistication, ruggedness

INTRODUCTION

It is very surprising to see the results of the Brand equity survey (2009) as Nokia tops the list among the trusted brands category leaving Colgate (most trusted brand of 2008) to the second number. The reasons for its success are many. Newspaper reports reveal that the quotation "Handle with care" fits well for the success of Nokia phones. The brand has been handled with lot of care and finally succeeded in maintaining and winning the trust of the people. This paper seeks to analyze the influence of brand personality to perceived quality. Before we deal with the paper in detail it is important for us to understand meaning of brand personality and perceived quality.

<u>Meaning of Brand Personality</u>

Brand personality is defined as the articulation of brand personality traits as possessed   by the brand .According to David Aaker, "Brand personality is a set of personal   characters associated and related with the brand." Jennifer Aaker defined brand personality as "a series of human characters associated with the brand". Brand personality has become an important tool for positioning of brands in the market. It also acts as an important tool for formulating policies for advertising and selling. There are various methods for measurement of brand personality. One of the most popular methods is the brand personality scale developed by Jennifer Aaker. The scale takes into consideration 42 traits which are later on divided into five dimensions viz; Sincerity, excitement ,competence, sophistication and ruggedness.

<u>Meaning of Perceived Quality</u>

Perceived quality is defined as the opinion which the customer forms about the ability of the product or brand to fulfill his or her expectations .Usually perceived quality is based on firms current public image, customer experience with the product and influence of opinion leaders and others .It is also defined as the customer perception of the overall quality or superiority of a product or service with respect to intended purpose, relative to alternatives.

Dimensions of Perceived Quality-Product Concept

The dimensions of perceived quality in case of product include, reliability, durability, serviceability and style and design. On the other hand, in case of services the   various dimensions of service quality includes tangibility, reliability, responsiveness, assurance and empathy.

LITERATURE REVIEW

Not much research appears to exist in relation to brand personality and perceived quality. However, few pieces of research appear in different fields are   as follows:

Ke   Xue and Chunzhun liu (2007) conducted a research taking mobile phones into consideration and concluded that competence personality of mobile phones had biggest influence to perceived quality Another research by B. Ramaseshan and Hsui-Yuan Tsao (2007) investigated the moderating effect of the brand concept on the relationship between brand personality and perceived quality. Results revealed that excitement and sophistication dimensions are strongly related with brand personality.

A research by Seongdo Cho Seongmin Jeong, Kyungho Jung studies the effect of perceived quality and brand extension evaluations. The study discovered that   brand personality dimensions could be changed by brand extensions in symbolic involvement products.

Another research by Gareth Smith, Loughborough University, Richard speed (2005) revealed that the core brand personality was resilient to change irrespective on the extension type and perceived quality.

Research Gap and Objective of the Study

Even though some research appears to exist there seems to be lack of research in this field in terms of Indian scenario. The study aims to fulfill the following objectives:
   • To find out the effect of brand personality to perceived quality.
   • To find out   which dimension of brand personality has a tremendous impact on perceived quality.
   • To study the demographic features of the respondents.

Hypothesis formulation

H1-Brand personality dimension   affects   perceived quality

DATA COLLECTION AND METHODOLOGY

For data collection 214 respondents from a well developed management institute are selected for the purpose. All the respondents are aged between 21-25 years and are dependant on their parents for their income .Students are given an overview of what the brand personality   is and its various dimensions. They are asked to rate   the 42 traits of brand personality on a five point rating scale, viz, (1-strongly disagree, 5-strongly agree). Later on these 42 traits are   categorized into five dimensions i.e., sincerity, excitement, competence, sophistication and ruggedness.

Similarly they are   asked to rate the five dimensions of perceived quality on five point rating scale, these include, reliability, durability, serviceability, style and design.

The data   is collected   analyzed with the help of SPSS software. Multiple regression analysis is used to find the effect of brand personality dimension to perceived quality.

RESULTS

With the help of descriptive statistics   mean and standard deviations are calculated which is shown in the table below.

Table 1 : Brand Personality Dimensions of Nokia

Brand Personality Dimensions	Mean	Standard Deviation
Sincerity	45.7536	2.90007
Excitement	44.0854	3.57426
Competence	33.5265	5.58436
Sophistication	18.5682	2.30014
Rugged	18.0009	2.62594
Perceived Quality	14.000	1.63120

This table shows the   mean and standard deviation of the brand personality dimensions of Nokia   .It also shows the mean and standard deviation of the perceived quality also. This   helps us in making comparison   between the various dimensions.

From the table it can be made clear that that it case of Nokia the mean of sincerity is (45.7356) and excitement (44.0854).Therefore, sincerity and excitement have an important role to play in case of Nokia .Whereas sophistication and ruggedness dimensions does not apply very strongly to Nokia.

Table 2: Correlation of Perceived Quality with Brand Personality Dimensions

Perceived Quality	Sincerity	Excitement	Competence	Sophistication	Ruggedness
1.00	.076	.059	.133	.098	-.041

The table shows the correlation between the various personality dimensions of   Nokia with perceived quality. It also helps in making comparison and finding out which dimension has the highest correlation.

From the table it can be made clear that competence dimension bears the highest correlation with perceived quality in relation to other dimensions. The ruggedness dimension has a negative correlation with perceived quality. Therefore, we can say that in case of Nokia competence dimension affects the perceived quality of the customers followed by sophistication and sincerity.

LIMITATION AND SCOPE FOR FUTURE RESEARCH

The sample chosen includes respondents from a particular age group only. The choice of brands is limited   and includes only Nokia from the trusted brands category.

More research can be conducted taking a more diverse sample and more brands from the mobile phones category .Even cross country analysis can be also take up. Research of similar nature can also be taken up taking the other brands in the trusted brands category.

CONCLUSION

Therefore, we can conclude that four dimensions of brand personality are positively related to perceived quality in case of Nokia. Competence dimension of brand personality affects the perceived quality of Nokia mobile users to the greatest degree followed by sophistication. Ruggedness, on the other hand, has a negative correlation to perceived quality. This means that the manufacturer of Nokia has endowed the brand Nokia with lot of competence, On the other hand it should try to improve upon the ruggedness dimension.

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MBA SHARE IN THE U.S. GRADUATE MANAGEMENT EDUCATION MARKET

Marina Murray, Graduate Management Admission Council (GMAC)

ABSTRACT

The MBA degree has captured public attention since the beginning of the 20th century when MBA programs were first established in the United States. Since then, hardly any master's-level degree created as many media impressions as the MBA. Extensive research has been conducted about MBA students, alumni, and employers, yet, several basic questions remain. How many MBA programs are offered? How many students graduate from these programs? How do these numbers compare with those for other programs in business fields? The U.S. Department of Education (DOE) tracks the number of graduate degrees awarded in business; however, the agency does not delineate which ones are MBA degrees. This paper aims to estimate the MBA share in the U.S. graduate management education market and looks at degree-granting institutions that offer master's-level programs. Based on a sampling from nearly 2,000 institutions, an estimate is provided for the number of organizations that offer an MBA degree in the United States. An estimated number of MBA students in a given year and the number of those who graduate with an MBA degree are calculated based on survey data from the Graduate Management Admission Council (GMAC) and the Council of Graduate Schools (CGS) combined with DOE data.

INTRODUCTION

In 1881, Joseph Wharton, a prominent American industrialist who made his fortune in the mining and metallurgical industries, came up with what many in the world of education perceived as a radical idea. He founded the first collegiate business school at the University of Pennsylvania ("Hall of Fame," 1998), The Wharton School of Finance and Commerce, which many labeled as a "struggling provincial experiment" (The Wharton School, 2009). At that time, some argued that business was not a university-level discipline (Schlossman, S., Gleeson, R.E., Sedlak, M., & Grayson Allen, D., 1994). Thirty years later, following the establishment of "the world's first MBA program" (Harvard Business School, 2009) by the Harvard Graduate School of Business Administration and the opening of schools of commerce at other prominent U.S. universities, such as New York University, Dartmouth, University of Chicago, and the State Universities of California, an animated public discussion continued about the value, principles, and place of commercial education in the educational system (Johnson, 1910).

Yet, by the end of the 20th century, Joseph Wharton's "radical idea" had sunk deep roots and spread worldwide. We now have an estimated 300,000 plus students graduating annually from more than 1,000 graduate and undergraduate business programs around the world (The Wharton School, 2009), a vivid testament to the tremendous interest in business credentials, including the MBA. News coverage related to graduate management education has also increased exponentially. In addition to discussion of broad higher education and economic topics connected to the MBA, school and program rankings, including the popular *BusinessWeek* survey that was first released in 1988 and subsequent undertakings by the *Economist*, *Forbes*, the *Financial Times*, *Wall Street Journal*, and *U.S. News & World Report* (Tyson, 2004), became a catalyst for increased public attention to the MBA.

Public and academic interest inspired numerous studies focusing on MBA curriculum, faculty, students, alumni, and employers, among them studies conducted by the Association to Advance Collegiate Schools of Business (AACSB), Association of MBAs (AMBA), and the Graduate Management Admission Council (GMAC), for example. Yet, several basic questions appear to have been left behind, including—

- How many MBA programs are offered?

- How many students graduate from these programs?
- How do these numbers compare with those for other programs in business fields?

While limiting the scope of study to U.S. primary providers of postsecondary education that offer degree-granting programs at master level or above, this paper aims to provide an estimate for the—
(1) proportion of institutions that offer MBA degrees within 5% of the population percentage with a 95% confidence interval,
(2) number of graduates that are awarded MBA degrees annually, and
(3) number of MBA students enrolled in a given year.

RESEARCH METHODOLOGY

Data Sources

This research is based on publicly available institution-level data from the National Center for Education Statistics (NCES), the primary U.S. federal entity for collecting education-related data. The NCES 2007–2008 Institutional Characteristics (IC) survey data used in the calculations are the core component of the Integrated Postsecondary Education Data System (IPEDS) and are collected annually (NCES, 2009). Completion of this survey is mandatory for open-to-public educational institutions that participate in federal student financial aid programs, which comprised of 6,624 schools as of fall 2007. Of the 7,052 institutions that NCES surveys, 1,957 offer a graduate degree or certificate. Table 1 shows how the sampling frame for this study was defined based on DOE/NCES IC survey data.

Table 1: Sampling Frame

	Number of institutions	Percentage of institutions
Total	7,052	100.0%
Participates in financial aid programs	6,624	93.9%
Degree-granting	4,605	65.3%
Offers graduate degree or certificate	2,005	28.4%
Minus administrative units	48	—
Study population	1,957	27.8%

This table shows how the sampling frame or the study was defined.
Source: DOE/NCES 2007-2008 IC Survey data.

The second major data source used in this study is primary research data collected by the Graduate Management Admission Council through its Application Trends Survey (ATS) conducted in 2008 (GMAC, 2008). The sample selection is drawn primarily from schools that use the GMAT exam for admissions. These schools received 42% of GMAT score reports sent during testing year 2008 (which ran from July 2007 to June 2008). For the purposes of this study, only data reported by institutions located in the United States were analyzed.

The third data source is taken from Council of Graduate Schools (CGS) statistics from its annual series titled Surveys of Graduate Enrollment and Degrees conducted from 2005 to 2008, which are based on yearly responses from about 700 U.S. colleges and universities that offer graduate programs (Bell, 2009, 2008; Redd, 2007; Brown, 2006). Participating institutions enroll more than 70% of all graduate students in the United States.

The population of schools was adjusted to exclude administrative units such as university system offices, and a simple random sample (SRS) was drawn to identify the proportion of institutions that offer MBA degrees within 5% of the population percentage with a 95% confidence interval.

Estimation Procedures

The size of the population of institutions offering an MBA was determined by extrapolating from a representative sample of all known institutions in the United States. The first task then was to determine the needed sample size.

Given that the universe of graduate degree offering institutions is 1,957, the initial estimated sample size needed to yield a margin of error of $\pm 2.5\%$, i.e., the 95% confidence interval is:

$$n'=1.96^2 \frac{P(1-P)}{.05^2} \tag{1}$$

where n' is an initial estimate of the sample size and P is an estimated population proportion.

This equation is a direct algebraic manipulation of the equation for standard error (SE):

$$1.96\,SE = 5\% \quad and$$

$$SE = \sqrt{\frac{P(1-P)}{n'}}$$

This initial estimate was then refined by applying the correction for a finite population

$$n = \frac{N*n'}{N+n'} \tag{2}$$

where N is the population size.

Applying equations 1 and 2, the needed sample size was determined to be 310.

$$n'=1.96^2 * \frac{.40*.60}{.05^2} = 369$$

$$n = \frac{1,957*369}{1,957+369} = 310 \tag{3}$$

For calculating the sample size, the population proportion of institutions offering MBA degrees was initially assumed to be .40 based on data from three small random samples (n=10) from the studied population.

Accreditation rosters, websites, and the other data files were consulted to determine characteristics of the sampled institutions and to derive estimates for various population parameters.

The MBA and other master-level business degree offerings (such as Master of Accounting, Finance, Management, etc.) were determined in June 2009 based on information posted on institution websites (98%) or by calling admissions offices (2%) if online information was unavailable or unclear.

Longitudinal statistics on master's degrees conferred by degree-granting institutions from the DOE/NCES Completions Survey were used to estimate the number of business degrees conferred in 2007–2008 by

applying a three-year average percentage change to the actual number of degrees conferred in the preceding period. Student attrition rates in MBA programs were assumed similar to those in other master's-level business programs.

Longitudinal statistics from CGS on the number of graduate students in business fields enrolled and the number of graduate business degrees awarded were used to estimate the award-to-enrollments ratio for graduate business programs. An average percentage based on the latest three-year period was used in calculations.

RESULTS

Proportion of Institutions Offering MBA Degrees

The 310-institution sample was representative of the studied population in terms of size, regional location, degree of area urbanization, and control of the institution—variables that may affect the number and type of degree offerings (Table 2).

Table 2: Selected Characteristics of the Population and Sample

	Population (n=1,957)	Sample (n=310)
Institution Size Category		
Under 1,000 students	31.4%	31.9%
1,000–4,999 students	38.4%	36.8%
5,000–9,999 students	13.0%	14.5%
10,000–19,999 students	9.6%	9.0%
20,000 and above	6.8%	7.4%
N/A	0.8%	0.3%
Total	100.0%	100.0%
Geographic Region		
U.S. Service Schools	0.2%	—
New England	7.7%	6.8%
Mid East	19.5%	21.0%
Great Lakes	15.9%	13.9%
Plains	9.4%	8.4%
Southeast	20.8%	21.9%
Southwest	8.2%	6.5%
Rocky Mountains	3.1%	4.5%
Far West	13.3%	14.5%
Outlying areas	2.0%	2.6%
Total	100.0%	100.0%
Degree of Urbanization		
City	54.9%	56.1%
Suburb	23.6%	22.3%
Town	13.4%	13.2%
Rural	8.0%	7.7%
N/A	0.1%	0.6%
Total	100.0%	100.0%
Control of Institution		
Public	28.1%	27.1%
Private not-for-profit	60.8%	62.3%
Private for-profit	11.1%	10.6%
Total	100.0%	100.0%

This table compares the population and the sample based on four variables that may influence degree offerings.
Source: DOE/ NCES 2007-08 IC Survey data.

Of 310 examined institutions, 180, or 58.1%, offered master's-level degrees in business fields, including an MBA; and 154, or 49.7%, offered an MBA degree. Notably, all institutions that offered an MBA degree also offered at least one other graduate business degree; and 26 institutions offered only master's-level degrees in business other than MBA.

Number of Graduates Awarded MBA Degrees

Applying sample percentages to the population of 1,957 institutions, we estimate that 1,136 schools (1,957*0.581) offer graduate degrees in business, including MBAs; 972 institutions (1,957*0.497) offer an MBA degree; 164 (1,136 - 972) offer other master's-level degrees in business, but not an MBA; and 821 (1,957 – 1,136) focus on disciplines other than business. Thus, in 2008, all graduate business degrees in the United States were awarded by an estimated 1,136 schools.

As Table 3 shows, the number of business degrees conferred by degree-granting institutions in the United States in 2007-08 was estimated at 160,529 by consecutively applying a three-year average percentage change to the latest available 2005-06 DOE data.

Table 3: Master's Degrees in Business Conferred by Degree-Granting Institutions, 2001-02–2007-08

	01–02	02–03	03–04	04–05	05–06	06–07 (est.)	07–08 (est.)
Number	119,725	127,685	139,347	142,617	146,406	153,305	160,529
Annual % change	3.6%	6.6%	9.1%	2.3%	2.7%	4.7% (est.)	4.7% (est.)
3-year % change	3.7%	4.6%	6.4%	6.0%	4.7%	—	—

This table shows how the number of master's degrees in business conferred in 2007–2008 was estimated.
Source: DOE/NCES 2007-08 Completions Survey, Fall 2000 through Fall 2006, Table 262.

According to the GMAC 2008 ATS data reported by 181 institutions in the United States that offered graduate management programs, U.S. schools offered an average of 4.38 business degree programs per school (Murray, 2008). Unlike the population of all U.S. schools that offered master's-level degrees or above, however, all 181 institutions that reported to the survey offered an MBA degree. Table 4 shows that, with all program types (e.g., full-time, part-time) combined, an average 2007-08 MBA class consisted of 104.8 students, and, with all majors combined, an average class of other master's programs specialized in business fields consisted of 50.8 students. Assuming that the student attrition rate is similar at MBA and other master's programs in business, we may expect that the MBA/master's student ratio of 2.06:1 will translate into the same ratio among those who successfully graduated from the program. Therefore, if an average institution that offers an MBA program, grants x master's degrees in business other than MBA, it would award $2.06x$ MBA degrees. Consequently, an estimated 972 institutions awarded a total of 972*($x+2.06x$) or $2,974x$ degrees to students from 1 MBA and 3.38 (4.38 - 1) master's programs at each institution, on average.

Table 4: Number of Graduate Business Degrees Offered and Average Class Size, by Institution Size

Institution Size	Mean Number of Degrees	Mean MBA Class Size	Mean Master's Class Size	Ratio
Under 1,000 students	1.00	48.0	35.0	1.37
1,000–4,999 students	2.68	82.4	20.5	4.02
5,000–9,999 students	3.81	68.4	40.1	1.71
10,000–19,999 students	4.42	128.4	33.3	3.85
20,000 and above	5.43	129.6	61.6	2.10
Total	4.38	104.8	50.8	2.06

This table shows that a strong correlation exists between the institution size and the number of degrees offered and provides the average absolute and relative class size for an MBA program and a master's program.
Source: GMAC 2008 ATS data.

As observed among schools that offered MBA degrees (Table 4), there is reason to believe that a strong correlation also will exist between the size of the institution and the number of graduate business degrees

offered among the estimated 164 institutions that only offered other graduate degrees in business fields. Based on the characteristics of schools in the sample, the majority of those that offered only other master's degrees in business (61.6%) were at institutions with fewer than 5,000 students, as displayed in Table 5. GMAC survey results highlighted in Table 4 showed that similar schools that offered MBA degrees had an average of 1 to 2.68 degree programs, including the MBA. Thus, using a conservative approach, we may assume that 164 institutions offered on average one master's program in business.

Table 5: Selected Characteristics of Sampled Institutions and 2008 ATS Respondents

	Sampled with MBA (n=154)	Sampled with Master's (n=26)	ATS Respondents (n=180)
Institution Size Category			
Under 1,000 students	11.7%	23.1%	1.1%
1,000–4,999 students	40.3%	38.5%	15.5%
5,000–9,999 students	20.8%	23.1%	17.7%
10,000–19,999 students	13.6%	11.5%	26.0%
20,000 and above	13.6%	3.8%	39.2%
N/A	—	—	0.6%
Total	100.0%	100.0%	100.0%
Geographic Region			
U.S. Service Schools	—	—	—
New England	6.5%	7.7%	11.0%
Mid East	17.5%	30.8%	15.5%
Great Lakes	10.4%	11.5%	16.0%
Plains	10.4%	3.8%	5.0%
Southeast	25.3%	26.9%	23.8%
Southwest	5.8%	3.8%	11.0%
Rocky Mountains	5.2%	7.7%	3.9%
Far West	14.9%	3.8%	13.3%
Outlying areas	3.9%	3.8%	0.6%
Total	100.0%	100.0%	100.0%
Degree of Urbanization			
City	54.5%	61.5%	64.1%
Suburb	24.7%	15.4%	24.3%
Town	13.0%	23.1%	8.3%
Rural	6.5%	—	2.8%
N/A	1.3%	—	0.6%
Total	100.0%	100.0%	100.0%
Control of Institution			
Public	33.8%	38.5%	53.6%
Private not-for-profit	52.6%	53.8%	45.9%
Private for-profit	13.6%	7.7%	0.6%
Total	100.0%	100.0%	100.0%

This table compares characteristics of institutions in the 310-unit sample that offer MBA degrees or only other master's degrees, and characteristics of institutions that reported to the GMAC 2008 ATS based on four variables.
Source: DOE/ NCES 2007-2008 IC Survey data and GMAC 2008 ATS data.

If 3.38 degree programs per school (4.38 - 1) awarded x master's degrees other than MBA, one program would award $x/3.38$ degrees, on average, and 164 institutions would award 164*($x/3.38$) or 48.52x degrees. Therefore, solving the following equation would provide an estimate of an average number of MBA (2.06x) and other master's degrees in business (x) awarded per institution.

$$972*(x+2.06x)+164*\frac{x}{3.38}=160,529$$

$$x = 53.11 \tag{3}$$

$$2.06x = 109.41$$

Multiplying the average number of MBA degrees offered by the number of institutions that grant these degrees (109.41*972), we can estimate that of all graduate business degrees awarded in 2007-08 (160,529), 106,347 or 66% were MBA degrees.

As institutions that reported to the GMAC Application Trends Survey were significantly different from the randomly selected schools offering MBA programs in terms of student body size with over-representation of larger organizations (Table 5), we may need to adjust calculations using a separate ratio of MBA to master's programs within each size group (Table 4). To identify the size of each group in the population, sample percentages of size distribution (Table 5) were applied to 972 schools that offered MBA degree, as displayed in Table 6.

Table 6: Number of Institutions Offering MBA Degree and MBA/Master's Ratio, by Size

Institution Size	Institutions with MBA	Ratio
Under 1,000 students	114	1.37
1,000–4,999 students	392	4.02
5,000–9,999 students	202	1.71
10,000–19,999 students	132	3.85
20,000 and above	132	2.10
Total	972	2.06

This table shows the number of institutions that offer an MBA degree by size category and provides MBA/master's program class-size ratio also found in Table 4.
Source: DOE/ NCES 2007-08 IC Survey data and GMAC 2008 ATS data.

Now, the first portion of our equation (3) will consist of five parts derived for each size subgroup starting from the smallest institutions likely to offer only one MBA program ($114*1.37x$) to the largest ($132*(x +2.10x)$). Solving this equation, the adjusted-for-size number of other master's degrees in business awarded per institution x=42.59, and the total estimated number of MBA degrees awarded in 2007-08 was 121,968 or 76% of all graduate business degrees conferred.

Based on different approaches to calculating the number of MBA degrees, the two estimates—66% and 76%—can be viewed as low and high alternatives that assume the range of outcomes where the actual population percentage may be. As the 2:1 MBA/master's ratio represents a conservative approach, it is reasonable to conclude that at least 66% of graduate business degrees conferred in the United States in 2007-08 were MBA degrees.

Number of MBA Students Enrolled in a Given Year

The number of graduate students enrolled in business fields (which include Business Administration and Management, Accounting, and Banking and Finance), as well as the number of graduate certificates and degrees awarded reported annually to CGS by the same institutions may serve as a basis for deriving the proportion of total enrolled students who also successfully received their diplomas. As shown in Table 7, the number of MBA students enrolled in a given year, including first-time and continuing students, can be estimated by applying the percentage of awards in enrollments to the estimated number of MBA degrees conferred. We applied a 2006–2008 three-year average percentage (39.1%), derived from institutions reporting to CGS for graduate business fields, to the conservative estimate of the number of MBA degrees awarded in 2008 (106,347). From this calculation, we estimate that 272,219 students may be enrolled in MBA programs annually.

Table 7: Graduate Enrollment and Degrees Conferred, Business and All Fields Combined, in Thousands

	04–05	05–06	06–07	07–08
Business (Source: CGS)				
Students enrolled	219.953	220.682	188.823	255.215
Degrees awarded	82.832	86.575	73.982	98.935
Percentage of enrolled	37.7%	39.2%	39.2%	38.8%
All fields combined (Source: DOE)				
Students enrolled	2,186	2,231	2,294	2,339*
Degrees awarded	627.249	650.132	665.223	681.800*
Percentage of enrolled	28.7%	29.1%	29.0%	29.1%

This table shows the percentage of graduate degrees awarded based on the total number of graduate students enrolled overall and in business fields each year.
* Projected.
Source: CGS 2006–2009, DOE/NCES (Hussar and Bailey, 2009).

Notably, a consistent 10 percentage-point difference exists between CGS statistics on business degree awards as percentage of enrollments and similar DOE statistics that cover all graduate fields at all U.S. degree-granting institutions (Table 7). It appears unlikely that in the population, business programs have higher graduation rates than non-business programs, and the observed difference may be attributed to specifics of the CGS sample, which primarily consists of CGS member schools. (CGS member schools tend to be larger institutions with accredited programs in several distinct disciplines, which are likely to graduate more students.) Thus, applying a three-year average percentage derived from all graduate schools' data (29.1%) to the conservative estimate of the number of MBA degrees awarded (106,347), we calculate a high alternative of 365,502 students that may be enrolled in MBA programs. The range of 272,219 to 365,502 potential students enrolled also includes 312,205 enrollments that are calculated by applying a percentage of business awards to enrollments (39.1%) to the high alternative estimate of MBA degrees awarded (121,968). Accordingly, at least 272,219 first-time enrolled and continuing students were in MBA programs in the United States in 2008.

RESEARCH LIMITATIONS

This study has several limitations, including use of assumptions based on logic or common sense rather than existing research and use of survey data that are a subject to sampling error and non-response error. In addition, this paper combined data for calculations from several different sources with timelines and samples that may not coincide precisely. A simplified approach based on three-year averages instead of comprehensive mathematical models was used to extrapolate trends from preceding periods to future periods. Overcoming the study's limitations may be a subject for future research.

CONCLUSION

The study results show that half of U.S. educational institutions that offered master's-level degrees (49.7%), or one-fifth of all 4,605 degree-granting institutions in the United States (21.1%), offered an MBA degree. These schools enrolled more than quarter million students in MBA programs and awarded more than 100,000 MBA degrees annually, which was at least 66% of all graduate business degrees conferred in the U.S. in 2008 (Table 8).

Table 8: Summary of Results

	Number	Percentage
Institutions		
Offer Graduate Degrees	1,957	100.0%
Offer Graduate Degrees in Business	1,136	58.1%
Offer MBA Degrees	972	49.7%
Students		
Master's Degrees in Business Conferred	160,529	100.0%
MBA Degrees Conferred—Low Alternative	106,347	66.2%
MBA Degrees Conferred—High Alternative	121,968	76.0%
MBA Students Enrolled—Low Alternative	272,219	—
MBA Students Enrolled—High Alternative	365,502	—

This table summarizes results of the calculations presented in the paper.

This study may be helpful in defining sampling frames for MBA-related research and providing a broader context for evaluating conclusions of existing research.

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APPLICATION OF A HIGH-ORDER ASYMPTOTIC EXPANSION SCHEME TO LONG-TERM CURRENCY OPTIONS

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ABSTRACT

Recently, not only academic researchers but also many practitioners have used the methodology so-called ``an asymptotic expansion method" in their proposed techniques for a variety of financial issues. e.g. pricing or hedging complex derivatives under high-dimensional stochastic environments. This methodology is mathematically justified by Watanabe theory (Watanabe [17], Yoshida [18], [19]) in Malliavin calculus and essentially based on the framework initiated by Kunitomo and Takahashi [4], Takahashi [8], [9] in a financial context. In practical applications, it is desirable to investigate the accuracy and stability of the method especially with expansion up to high orders in situations where the underlying processes are highly volatile as seen in recent financial markets. After [8], [9] and Takahashi and Takehara [11] had provided explicit formulas for the expansion up to the third order, Takahashi, Takehara and Toda[14] develops general computation schemes and formulas for an arbitrary-order expansion under general diffusion-type stochastic environments. In this paper, we describe them in a simple setting to illustrate thier key idea, and to demonstrate their effectiveness apply them to pricing long-term currency options under a cross-currency Libor market model and a general stochastic volatility of a spot exchange rate with maturities up to twenty years.

Keywords: Asymptotic Expansion, Malliavin Calculus, Stochastic Volatility, Libor Market Model, Currency Options

INTRODUCTION

This paper explains two alternative schemes for computation proposed by Takahashi, Takehara and Toda [14] in the method so-called "an asymptotic expansion approach" based on Watanabe theory(Watanabe [17]) in Malliavin calculus in a simple setting and apply them to pricing long-term currency options under a cross-currency Libor market model and a general stochastic volatility of a spot exchange rate.

To our best knowledge, the asymptotic expansion is first applied to finance for evaluation of an average option that is a popular derivative in commodity markets. [2] and [8] derive the approximation formulas for an average option by an asymptotic method based on log-normal approximations of an average price distribution when the underlying asset price follows a geometric Brownian motion. [19] applies a formula derived by the asymptotic expansion of certain statistical estimators for small diffusion processes. Thereafter, the asymptotic expansion have been applied to a broad class of problems in finance: See [9], [10], Kunitomo and Takahashi [3], [4], Matsuoka, Takahshi and Uchida [5], Takahashi and Yoshida [15], [16], Muroi [6], and Takahashi and Takehara [11], [12], [13].

Recently, not only academic researchers but also many practitioners have used the asymptotic expansion method based on Watanabe theory in their proposed techniques for a variety of financial issues. e.g. pricing or hedging complex derivatives under high-dimensional underlying stochastic environments. These methods are fully or partially based on the framework developed by [2], [8], [9] in a financial literature.

In theory, this method provides us the expansion of underlying stochastic processes which has a proper meaning in the limit of some ideal situations such as cases where they come deterministic ones (for details see [17], [18] or [4]).

In practice, however, we are often interested in cases far from that situation, where the underlying processes are highly volatile as seen in the recent financial markets especially after the crisis on 2008. Then from the view point of the accuracy or stability of the techniques in practical uses, it is desirable to investigate behaviors of its estimators in such situations especially with expansion up to high orders.

In application of the asymptotic expansion, the crucial step is computation of certain conditional expectations appearing in the expansions, especially in the expansion up to high orders which is important in the cases with long maturities or/and with highly volatile underlying variables. [14] developed two alternative schemes for these computations in a general diffusion-type stochastic environment.

This paper describes the essence of their method in a much simpler setting and to demonstrate their effectiveness, apply them to evaluation of long-term currency options with maturities up to twenty years under a cross-currency Libor market model and a general stochastic volatility of a spot exchange rate, which is very complex to obtain closed-form formulas.

Organization of this paper is as follows: After Section 2 will develop our methods in the simple setting, Section 3 applies our algorithms described in the previous section to the concrete financial models, and confirms the effectiveness of the higher order expansions by numerical examples in a cross-currency Libor market model with a general stochastic volatility model of the spot foreign exchange rate. Detailed proofs, formulas, or argument of the applied technique in a general setting including our complex example are found in [14].

LITERATURE REVIEW

In this section, our essential idea is explained in a simple Black-Scholes-type economy. For discussions in more general settings, refer to [14].

An Asymptotic Expansion Approach in a Black-Scholes Economy

Let (W, P) be a one-dimensional Wiener space. Hereafter P is considered as a risk-neutral equivalent martingale measure and a risk-free interest rate is set to be zero for simplicity. Then, the underlying economy is specified with a ($\mathbf{R}_+$-valued)single risky asset $S^{(\varepsilon)} = \{S_t^{(\varepsilon)}\}$ satisfying

$$S_t^{(\varepsilon)} = S_0 + \varepsilon \int_0^t \sigma(S_s^{(\varepsilon)}, s) dW_s \qquad (1)$$

where $\varepsilon \in (0,1]$ is a constant parameter; $\sigma : \mathbf{R}_+^2 \mapsto \mathbf{R}$ satisfies some regularity conditions. We will consider the following pricing problem;

$$V(0, T) = \mathbf{E}[\Phi(S_T^{(\varepsilon)})] \qquad (2)$$

where Φ is a payoff function written on $S_T^{(\varepsilon)}$ (for example, $\Phi(x) = \max(x - K, 0)$ for call options or $\Phi(x) = \delta_x(x)$, a delta function with mass at x for the density function) and $\mathbf{E}[\cdot]$ is an expectation operator under the probability measure P. Rigorously speaking, they are a generalized function on the Wiener functional $S^{(\varepsilon)}$ and a generalized expectation defined for generalized functions respectively, whose mathematically proper definitions will be given in Section 2 of [14].

Let $A_{kt} = \frac{\partial^k S_t^{(\varepsilon)}}{\partial \varepsilon^k}\big|_{\varepsilon=0}$. Here we represent A_{1t}, A_{2t} and A_{3t} explicitly by

$$A_{1t} = \int_0^t \sigma(S_s^{(0)}, s) dW_s, \tag{3}$$

$$A_{2t} = 2 \int_0^t \partial \sigma(S_s^{(0)}, s) A_{1s} dW_s, \tag{4}$$

$$A_{3t} = 3 \int_0^t \left(\partial^2 \sigma(S_s^{(0)}, s)(A_{1s})^2 + \partial \sigma(S_s^{(0)}, s)(A_{2s}) \right) d \quad \ \tag{5}$$

recursively and then $S_T^{(\varepsilon)}$ has its asymptotic expansion

$$S_T^{(\varepsilon)} = S_0 + \varepsilon A_{1T} + \frac{\varepsilon^2}{2!} A_{2T} + \frac{\varepsilon^3}{3!} A_{3T} + o(\varepsilon^3). \tag{6}$$

Note that $S_t^{(0)} = \lim_{\varepsilon \downarrow 0} S_t^{(\varepsilon)} = S_0$ for all t.

Next, normalize $S_T^{(\varepsilon)}$ with respect to ε as $G^{(\varepsilon)} = \frac{S_T^{(\varepsilon)} - S_T^{(0)}}{\varepsilon}$ for $\varepsilon \in (0,1]$. Then,

$$G^{(\varepsilon)} = A_{1T} + \frac{\varepsilon}{2!} A_{2T} + \frac{\varepsilon^2}{3!} A_{3T} + o(\varepsilon^2) \tag{7}$$

in L^P for every $p > 1$. Here the following assumption is made: $\Sigma_T = \int_0^T \sigma^2(S_t^{(0)}, t) dt > 0$. Note that A_{1T} follows a normal distribution with mean 0 and variance Σ_T, and hence this assumption means that the distribution of A_{1T} does not degenerate. It is clear that this assumption is satisfied when $\sigma(S_t^{(0)}, t) > 0$ for some $t > 0$.

Then, the expectation of $\Phi(G^{(\varepsilon)})$ is expanded around $\varepsilon = 0$ up to ε^2-order in the sense of Watanabe([17], Yoshida[18]) as follows (hereafter the asymptotic expansion of $\mathbf{E}[\Phi(G^{(\varepsilon)})]$ up to the second order will be considered):

$$\mathbf{E}[\Phi(G^{(\varepsilon)})] = \mathbf{E}\left[\Phi(A_{1T})\right] + \varepsilon \mathbf{E}\left[\Phi^{(1)}(A_{1T}) A_{2T}\right]$$

$$+ \varepsilon^2 \left\{ \mathbf{E}\left[\Phi^{(1)}(A_{1T}) A_{3T}\right] + \frac{1}{2} \mathbf{E}\left[\Phi^{(2)}(A_{1T})(A_{2T})^2\right] \right\} + o(\varepsilon^2)$$

$$= \mathbf{E}\left[\Phi(A_{1T})\right] + \varepsilon \mathbf{E}\left[\Phi^{(1)}(A_{1T}) \mathbf{E}\left[A_{2T} \mid A_{1T}\right]\right]$$

$$+ \varepsilon^2 \left\{ \mathbf{E}\left[\Phi^{(1)}(A_{1T}) \mathbf{E}\left[A_{3T} \mid A_{1T}\right]\right] + \frac{1}{2} \mathbf{E}\left[\Phi^{(2)}(A_{1T}) \mathbf{E}\left[(A_{2T})^2 \mid A_{1T}\right]\right] \right\} + o(\varepsilon^2)$$

$$= \int_{\mathbf{R}} \Phi(x) f_{A_{1T}}(x) dx + \varepsilon \int_{\mathbf{R}} \Phi^{(1)}(x) \mathbf{E}\left[A_{2T} \mid A_{1T} = x\right] f_{A_{1T}}(x) dx$$

$$+ \varepsilon^2 \left\{ \int_{\mathbf{R}} \Phi^{(1)}(x) \mathbf{E}\left[A_{3T} \mid A_{1T} = x\right] f_{A_{1T}}(x) dx + \frac{1}{2} \int_{\mathbf{R}} \Phi^{(2)}(x) \mathbf{E}\left[(A_{2T})^2 \mid A_{1T} = x\right] f_{A_{1T}}(x) dx \right\} + o(\varepsilon^2)$$

$$= \int_{\mathbf{R}} \Phi(x) f_{A_{1T}}(x) dx + \varepsilon \int_{\mathbf{R}} \Phi(x)(-1) \frac{\partial}{\partial x} \{ \mathbf{E}\left[A_{2T} \mid A_{1T} = x\right] f_{A_{1T}}(x) \} dx$$

$$+\varepsilon^2\left(\int_{\mathbf{R}}\Phi(x)(-1)\frac{\partial}{\partial x}\{\mathbf{E}\left[A_{3T}|A_{1T}=x\right]f_{A_{1T}}(x)\}dx\right.$$

$$+\frac{1}{2}\int_{\mathbf{R}}\Phi(x)(-1)^2\frac{\partial^2}{\partial x^2}\{\mathbf{E}\left[(A_{2T})^2|A_{1T}=x\right]f_{A_{1T}}(x)\}dx\right)+o(\varepsilon^2). \tag{8}$$

where $\Phi^{(m)}(x)$ is m-th order derivative of $\Phi(x)$ and $f_{A_{1T}}(x)$ is a probability density function of A_{1T} following a normal distribution; $f_{A_{1T}}(x):=\frac{1}{\sqrt{2\pi\Sigma_T}}\exp\left(-\frac{x^2}{2\Sigma_T}\right)$. In particular, letting $\Phi=\delta_x$, we have the asymptotic expansion of the density function of $G^{(\varepsilon)}$ as seen later.

Then, all we have to do to evaluate this expansion is a computation of these conditional expectations. In Particular, we present two alternative approaches.

<u>An Approach with an Expansion into Iterated Itô Integrals</u>

In this subsection we show an approach with a further expansion of A_{2T}, A_{3T} and $(A_{2T})^2$ into iterated Itô integrals to compute the conditional expectations in (8).

Recall that we have

$$\mathbf{E}[\Phi(G^{(\varepsilon)})]=\int_{\mathbf{R}}\Phi(x)f_{A_{1T}}(x)dx+\varepsilon\int_{\mathbf{R}}\Phi(x)(-1)\frac{\partial}{\partial x}\{\mathbf{E}\left[A_{2T}|A_{1T}=x\right]f_{A_{1T}}(x)\}dx$$

$$+\varepsilon^2\left(\int_{\mathbf{R}}\Phi(x)(-1)\frac{\partial}{\partial x}\{\mathbf{E}\left[A_{3T}|A_{1T}=x\right]f_{A_{1T}}(x)\}dx\right.$$

$$+\frac{1}{2}\int_{\mathbf{R}}\Phi(x)(-1)^2\frac{\partial^2}{\partial x^2}\{\mathbf{E}\left[(A_{2T})^2|A_{1T}=x\right]f_{A_{1T}}(x)\}dx\right)+o(\varepsilon^2). \tag{9}$$

Next, it is shown that A_{2T}, A_{3T}, $(A_{2T})^2$ can be expressed as summations of iterated Itô integrals. First, note that A_{2T} is

$$A_{2T}=2\int_0^T\int_0^{t_1}\partial\sigma(S_{t_1}^{(0)},t_1)\sigma(S_{t_2}^{(0)},t_2)dW_{t_2}dW_{t_1} \tag{10}$$

Next, by application of Itô's formula to (5) we obtain

$$A_{3T}=6\int_0^T\int_0^{t_1}\int_0^{t_2}\partial\sigma(S_{t_1}^{(0)},t_1)\partial\sigma(S_{t_2}^{(0)},t_2)\sigma(S_{t_3}^{(0)},t_3)dW_{t_3}dW_{t_2}dW_{t_1}$$

$$+6\int_0^T\int_0^{t_1}\int_0^{t_2}\partial^2\sigma(S_{t_1}^{(0)},t_1)\sigma(S_{t_2}^{(0)},t_2)\sigma(S_{t_3}^{(0)},t_3)dW_{t_3}dW_{t_2}dW_{t_1}$$

$$+3\int_0^T\int_0^{t_1}\partial^2\sigma(S_{t_1}^{(0)},t_1)\sigma^2(S_{t_2}^{(0)},t_2)dt_2dW_{t_1}. \tag{11}$$

Similarly,

$$(A_{2T})^2 = 1 \; \oint_0^T \int_0^{t_1} \int_0^{t_2} \int_0^{t_3} \partial\sigma(S_{t_1}^{(0)},t_1)\partial\sigma(S_{t_2}^{(0)},t_2)\sigma(S_{t_3}^{(0)},t_3)\sigma(S_{t_4}^{(0)},t_4)dW_{t_4}dW_{t_3}dW_{t_2}dW_{t_1}$$

$$+8\int_0^T \int_0^{t_1} \int_0^{t_2} \int_0^{t_3} \partial\sigma(S_{t_1}^{(0)},t_1)\sigma(S_{t_2}^{(0)},t_2)\partial\sigma(S_{t_3}^{(0)},t_3)\sigma(S_{t_4}^{(0)},t_4)dW_{t_4}dW_{t_3}dW_{t_2}dW_{t_1}$$

$$+8\int_0^T \int_0^{t_1} \int_0^{t_2} \partial\sigma(S_{t_1}^{(0)},t_1)\partial\sigma(S_{t_2}^{(0)},t_2)\sigma^2(S_{t_3}^{(0)},t_3)dt_3 dW_{t_2}dW_{t_1}$$

$$+8\int_0^T \int_0^{t_1} \int_0^{t_2} \partial\sigma(S_{t_1}^{(0)},t_1)\partial\sigma(S_{t_2}^{(0)},t_2)\sigma(S_{t_2}^{(0)},t_2)\sigma(S_{t_3}^{(0)},t_3)d_{t_3}W_2 dt_{t_1}$$

$$+8\int_0^T \int_0^{t_1} \int_0^{t_2} \left(\partial\sigma(S_{t_1}^{(0)},t_1)\right)^2 \sigma(S_{t_2}^{(0)},t_2)\sigma(S_{t_3}^{(0)},t_3)dW_{t_3}dW_{t_2}dt_1$$

$$+4\int_0^T \int_0^{t_1} \left(\partial\sigma(S_{t_1}^{(0)},t_1)\right)^2 \sigma^2(S_{t_2}^{(0)},t_2)dt_2 dt_1. \tag{12}$$

Then, by Proposition 1 in [14], the conditional expectations in (9) can be computed as

$$\mathbf{E}[A_{2T} \mid A_{1T} = x] = 2F_2\left(\partial\sigma^{(0)}\sigma^{(0)},(\sigma^{(0)})^2\right)\frac{H_2(x;\Sigma_T)}{\Sigma_T^2} =: c_2^{2,1}H_2(x;\Sigma_T) \tag{13}$$

$$\mathbf{E}[A_{3T} \mid A_{1T} = x] = \left(6F_3\left(\partial\sigma^{(0)}\sigma^{(0)},\partial\sigma^{(0)}\sigma^{(0)},(\sigma^{(0)})^2\right) + 6F_3\left(\partial^2\sigma^{(0)}\sigma^{(0)},(\sigma^{(0)})^2,(\sigma^{(0)})^2\right)\right)\frac{H_3(x;\Sigma_T)}{\Sigma_T^3}$$

$$+3F_2\left(\partial\sigma^{(0)}\sigma^{(0)},(\sigma^{(0)})^2\right)\frac{H_1(x;\Sigma_T)}{\Sigma_T} \tag{14}$$

$$=: c_3^{3,1}H_3(x;\Sigma_T) + c_1^{3,1}H_1(x;\Sigma_T)$$

and
$$\mathbf{E}[(A_{2T})^2 \mid A_{1T} = x]$$

$$= \left(1 \; F_4\left(\partial\sigma^{(0)}\sigma^{(0)},\partial\sigma^{(0)}\sigma^{(0)},(\sigma^{(0)})^2,(\sigma^{(0)})^2\right) + 8F_4\left(\partial\sigma^{(0)}\sigma^{(0)},(\sigma^{(0)})^2,\partial\sigma^{(0)}\sigma^{(0)},(\sigma^{(0)})^2\right)\right)\frac{H_4(x;\Sigma_T)}{\Sigma_T^4}$$

$$+ \left(1 \; F_3\left(\partial\sigma^{(0)}\sigma^{(0)},\partial\sigma^{(0)}\sigma^{(0)},(\sigma^{(0)})^2\right) + 8F_3\left((\partial\sigma^{(0)})^2,(\sigma^{(0)})^2,(\sigma^{(0)})^2\right)\right)\frac{H_2(x;\Sigma_T)}{\Sigma_T^2}$$

$$+4F_3\left((\partial\sigma^{(0)})^2,(\sigma^{(0)})^2\right)H_0(x;\Sigma_T) \tag{15}$$

$$=: c_4^{2,2}H_4(x;\Sigma_T) + c_2^{2,2}H_2(x;\Sigma_T) + c_0^{2,2}H_0(x;\Sigma_T)$$

where $H_n(x;\Sigma)$ is a n-th order Hermite polynomial defined by

$$H_n(x;\Sigma) := (-\Sigma)^n e^{x^2/2\Sigma} \frac{d^n}{dx^n} e^{-x^2/2\Sigma},$$

with notations $F_n(f_1,\cdots,f_n) := \int_0^T \int_0^{t_1} \cdots \int_0^{t_{n-1}} f_1(t_1)\cdots f_n(t_n) dt_n \cdots dt_1, n \geq 1,$

$\sigma^{(0)} = \sigma(S_t^{(0)}, t)$ and $\partial^i \sigma^{(0)} = \partial^i \sigma(S_t^{(0)}, t)$.

Substituting these into (9), we have the asymptotic expansion of $\mathbf{E}\left[\Phi(G^{(\varepsilon)})\right]$ up to ε^2-order. Further,

letting $\Phi = \delta_x$, we have the expansion of $f_{G^{(\varepsilon)}}$, the density function of $G^{(\varepsilon)}$:

$$f_{G^{(\varepsilon)}} = f_{A_{1T}}(x) + \varepsilon(-1)\frac{\partial}{\partial x}\{\mathbf{E}\left[A_{2T}\big|A_{1T} = x\right]f_{A_{1T}}(x)\}$$

$$+\varepsilon^2\left((-1)\frac{\partial}{\partial x}\{\mathbf{E}\left[A_{3T}\big|A_{1T} = x\right]f_{A_{1T}}(x)\} + \frac{1}{2}(-1)^2\frac{\partial^2}{\partial x^2}\{\mathbf{E}\left[(A_{2T})^2\big|A_{1T} = x\right]f_{A_{1T}}(x)\}\right) + o(\varepsilon^2)$$

$$= f_{A_{1T}}(x) + \varepsilon(-1)\frac{\partial}{\partial x}\{c_2^{2,1}H_2(x;\Sigma_T)f_{A_{1T}}(x)\} \tag{16}$$

$$+\varepsilon^2\left((-1)\frac{\partial}{\partial x}\{\sum_{i=1,3} c_i^{3,1}H_i(x;\Sigma_T)f_{A_{1T}}(x)\} + \frac{1}{2}(-1)^2\frac{\partial^2}{\partial x^2}\{\sum_{i=0,2,4} c_i^{2,2}H_i(x;\Sigma_T)f_{A_{1T}}(x)\}\right) + o(\varepsilon^2).$$

An Alternative Approach with a System of Ordinary Differential Equations

In this subsection, we present an alternative approachin which the conditional expectations are computed through some system of ordinary differential equations.

Again the asymptotic expansion of $\mathbf{E}\left[\Phi(G^{(\varepsilon)})\right]$ up to ε^2-order is considered in this subsection.

Note that the expectations of A_{2T}, A_{3T} and $(A_{2T})^2$ conditional on A_{1T} are expressed by linear combinations of a finite number of Hermite polynomials as in (13), (14) and (15). Thus, by Lemma 4 in [14], we have we have

$$\mathbf{E}[A_{2T} \mid A_{1T} = x] = \sum_{n=0}^{2} a_n^{2,1} H_n(x;\Sigma_T), \tag{17}$$

$$\mathbf{E}[A_{3T} \mid A_{1T} = x] = \sum_{n=0}^{3} a_n^{3,1} H_n(x;\Sigma_T), \tag{18}$$

and $\mathbf{E}[(A_{2T})^2 \mid A_{1T} = x] = \sum_{n=0}^{4} a_n^{2,2} H_n(x;\Sigma_T), \tag{19}$

where the coefficients are given by

$$a_n^{2,1} = \frac{1}{n!}\frac{1}{(i\Sigma)^n}\frac{\partial^n}{\partial\xi^n}\bigg|_{\xi=0}\{\mathbf{E}[Z_T^{<\xi>}A_{2T}]\}, a_n^{3,1} = \frac{1}{n!}\frac{1}{(i\Sigma)^n}\frac{\partial^n}{\partial\xi^n}\bigg|_{\xi=0}\{\mathbf{E}[Z_T^{<\xi>}A_{3T}]\},$$

$$a_n^{2,2} = \frac{1}{n!}\frac{1}{(i\Sigma)^n}\frac{\partial^n}{\partial\xi^n}\bigg|_{\xi=0}\{\mathbf{E}[Z_T^{<\xi>}(A_{2T})^2]\}, \text{and} Z_t^{<\xi>} := \exp\left(i\xi A_{1t} + \frac{\xi^2}{2}\Sigma_t\right).$$

Note that $Z^{<\xi>}$ is a martingale with $Z_0^{<\xi>} = 1$. Since these conditional expectations can be represented by linear combinations of Hermite polynomials as seen in the previous subsection, the following should hold, which can be confirmed easily with results of this subsection:

$$\begin{cases} a_2^{2,1} = c_2^{2,1}; a_1^{2,1} = a_0^{2,1} = 0; a_3^{3,1} = c_3^{3,1}; a_1^{3,1} = c_1^{3,1}; a_2^{3,1} = a_0^{3,1} = 0; (20) \\ \quad a_4^{2,2} = c_4^{2,2}; a_2^{2,2} = c_2^{2,2}; a_0^{2,2} = c_0^{2,2}; a_3^{2,2} = a_1^{2,2} = 0. \end{cases} \tag{21}$$

Then, computation of these conditional expectations is equivalent to that of the unconditional expectations $\mathbf{E}[Z_T^{<\xi>} A_{2T}]$, $\mathbf{E}[Z_T^{<\xi>} A_{3T}]$ and $\mathbf{E}[Z_T^{<\xi>} (A_{2T})^2]$.

First, applying Itô's formula to $\left(Z_t^{<\xi>} A_{2t} \right)$ we have

$$\mathbf{E}\left[Z_t^{<\xi>} A_{2t} \right] = \mathbf{E}\left[\int_0^t Z_s^{<\xi>} dA_{2s} + \int_0^t A_{2s} dZ_s^{<\xi>} + \left\langle A_2, Z^{<\xi>} \right\rangle_t \right]$$

$$= 2 \, i\xi) \int_0^t \partial\sigma(S_s^{(0)}, s)\sigma(S_s^{(0)}, s)\mathbf{E}\left[Z_s^{<\xi>} A_{1s} \right] d \tag{22}$$

Then, applying Itô's formula to $\left(Z_t^{<\xi>} A_{1t} \right)$ again, we also have

$$\mathbf{E}\left[Z_t^{<\xi>} A_{1t} \right] = \mathbf{E}\left[\int_0^t Z_s^{<\xi>} dA_{1s} + \int_0^t A_{1s} dZ_s^{<\xi>} + \left\langle A_1, Z^{<\xi>} \right\rangle_t \right]$$

$$= (i\xi) \int_0^t \sigma^2(S_s^{(0)}, s)\mathbf{E}\left[Z_s^{<\xi>} \right] ds = (i\xi) \int_0^t \sigma^2(S_s^{(0)}, s) ds \tag{23}$$

since $\mathbf{E}\left[Z_t^{<\xi>} \right] = 1$ for all t.

Similarly, the followings are obtained;

$$\mathbf{E}\left[Z_t^{<\xi>} A_{3t} \right] = 3(i\xi)\left(\int_0^t \partial^2\sigma(S_s^{(0)}, s)\sigma(S_s^{(0)}, s)\mathbf{E}\left[Z_s^{<\xi>} (A_{1s})^2 \right] d \right.$$

$$\left. + \int_0^t \partial\sigma(S_s^{(0)}, s)\sigma(S_s^{(0)}, s)\mathbf{E}\left[Z_s^{<\xi>} A_{2s} \right] d \right) \tag{24}$$

$$\mathbf{E}\left[Z_t^{<\xi>} (A_{1t})^2 \right] = \int_0^t \sigma^2(S_s^{(0)}, s) ds + 2 \, i\xi) \int_0^t (\sigma^2(S_s^{(0)}, s)\mathbf{E}\left[Z_s^{<\xi>} A_{1s} \right] ds \tag{25}$$

$$\mathbf{E}\left[Z_t^{<\xi>} (A_{2t})^2 \right] = 4\int_0^t \left(\partial\sigma(S_s^{(0)}, s) \right)^2 \mathbf{E}\left[Z_s^{<\xi>} (A_{1s})^2 \right] d$$

$$+ 4 \, i\xi) \int_0^t \partial\sigma(S_s^{(0)}, s)\sigma(S_s^{(0)}, s)\mathbf{E}\left[Z_s^{<\xi>} A_{2s} A_{1s} \right] d \tag{26}$$

$$\mathbf{E}\left[Z_t^{<\xi>} A_{2t} A_{1t} \right] = 2\int_0^t \partial\sigma(S_s^{(0)}, s)\sigma(S_s^{(0)}, s)\mathbf{E}\left[Z_s^{<\xi>} A_{1s} \right] d \tag{27}$$

$$+ (i\xi) \int_0^t (\sigma(S_s^{(0)}, s))^2 \mathbf{E}\left[Z_s^{<\xi>} A_{2s} \right] d \; + 2 \, i\xi) \int_0^t \partial\sigma(S_s^{(0)}, s)\sigma(S_s^{(0)}, s)\mathbf{E}\left[Z_s^{<\xi>} (A_{1s})^2 \right] d \; .$$

Then, $\mathbf{E}[Z_T^{<\xi>} A_{2T}]$, $\mathbf{E}[Z_T^{<\xi>} A_{3T}]$ and $\mathbf{E}[Z_T^{<\xi>}(A_{2T})^2]$ can be obtained as solutions of the system of ordinary differential equations (22), (23), (24), (25), (26) and (27). In fact, since they have a grading structure that the higher-order equations depend only on the lower ones, they can be easily solved with substituting each solution into the next ordinary differential equation recursively. Moreover, since these solutions are clearly the polynomial of $(i\xi)$, we can easily implement differentiations with respect to ξ in, (18) and (19). It is obvious that the resulting coefficients given by these solutions are equivalent to the results in the previous subsection.

Here, at the end of this section, we state a brief summary. In the Black-Scholes-type economy, we consider the risky asset $S^{(\varepsilon)}$ and evaluate some quantities, expressed as an expectation of the function of the terminal price, such as prices or risk sensitivities of the securities on this asset. First we expand them around the limit to $\varepsilon = 0$ so that we obtain the expansion (8) which contains some conditional expectations. Then, by approaches described in Section 2 or 3, we compute these conditional expectation. Finally, substituting computation results into (8), we obtain the asymptotic expansion of those quantities.

NUMERICAL EXAMPLES: APPLICATION TO LONG-TERM CURRENCY OPTIONS

In this section we apply our methods to pricing options on currencies under Libor Market Models(LMMs) of interest rates and a stochastic volatility of the spot foreign exchange rate(Forex), which is much more complex then Black-Scholes-type case in the previous section. Due to limitation of space, only the structure of the stochastic differential equations of our model is described here. For details of the underlying model, see [11]. Detailed discussions in a general setting including following examples are found in Section 3 and 4 of [14].

Cross-Currency Libor Market Models
Let $(\Omega, F, \tilde{P}, \{F_t\}_{0 \le t \le T^* < \infty})$ be a complete probability space with a filtration satisfying the usual conditions. We consider the following pricing problem for the call option with maturity $T \in (0, T^*]$ and strike rate $K > 0$;

$$V^C(0;T,K) = P_d(0,T) \times \mathbf{E}^P\left[(S(T)-K)^+\right] = P_d(0,T) \times \mathbf{E}^P\left[(F_T(T)-K)^+\right] \qquad (28)$$

where $V^C(0;T,K)$ denotes the value of an European call option at time 0 with maturity T and strike rate K, $S(T)$ denotes the spot exchange rate at time $t \ge 0$ and $F_T(t)$ denotes the time t value of the forex forward rate with maturity T. Similarly, for the put option we consider

$$V^P(0;T,K) = P_d(0,T) \times \mathbf{E}^P\left[(K-S(T))^+\right] = P_d(0,T) \times \mathbf{E}^P\left[(K-F_T(T))^+\right]. \qquad (29)$$

It is well known that the arbitrage-free relation between the forex spot rate and the forex forward rate are given by $F_T(t) = S(t)\frac{P_f(t,T)}{P_d(t,T)}$ where $P_d(t,T)$ and $P_f(t,T)$ denote the time t values of domestic and foreign zero coupon bonds with maturity T respectively. $\mathbf{E}^P[\cdot]$ denotes an expectation operator under EMM(Equivalent Martingale Measure) P whose associated numeraire is the domestic zero coupon bond maturing at T.
For these pricing problems, a market model and a stochastic volatility model are applied to modeling interest rates' and the spot exchange rate's dynamics respectively.

We first define domestic and foreign forward interest rates as $f_{dj}(t) = \left(\frac{P_d(t,T_j)}{P_d(t,T_{j+1})} - 1\right)\frac{1}{\tau_j}$ and $f_{fj}(t) = \left(\frac{P_f(t,T_j)}{P_f(t,T_{j+1})} - 1\right)\frac{1}{\tau_j}$ respectively, where $j = n(t), n(t)+1, \cdots, N$, $\tau_j = T_{j+1} - T_j$, and $P_d(t,T_j)$ and

$P_f(t, T_j)$ denote the prices of domestic/foreign zero coupon bonds with maturity T_j at time $t (\le T_j)$ respectively; $n(t) = \min\{i : t \le T_i\}$. We also define spot interest rates to the nearest fixing date denoted by $f_{d,n(t)-1}(t)$ and $f_{f,n(t)-1}(t)$ as $f_{d,n(t)-1}(t) = \left(\frac{1}{P_d(t,T_{n(t)})} - 1\right)\frac{1}{(T_{n(t)}-t)}$ and $f_{f,n(t)-1}(t) = \left(\frac{1}{P_f(t,T_{n(t)})} - 1\right)\frac{1}{(T_{n(t)}-t)}$. Finally, we set $T = T_{N+1}$ and will abbreviate $F_{T_{N+1}}(t)$ to $F_{N+1}(t)$ in what follows.

Under the framework of the asymptotic expansion in the standard cross-currency libor market model, we have to consider the following system of stochastic differential equations(henceforth called S.D.E.s) under the domestic terminal measure P to price options. For detailed arguments on the framework of these S.D.E.s see [11].

As for the domestic and foreign interest rates we assume forward market models; for $j = n(t)-1, n(t), n(t)+1, \cdots, N$,

$$f_{dj}^{(\varepsilon)}(t) = f_{dj}(0) + \varepsilon^2 \sum_{i=j+1}^{N} \int_0^t g_{di}^{0,(\varepsilon)}(u)' \gamma_{dj}(u) f_{dj}^{(\varepsilon)}(u) d + \varepsilon \int_0^t f_{dj}^{(\varepsilon)}(u) \gamma_{dj}'(u) d_u, \tag{30}$$

$$f_{fj}^{(\varepsilon)}(t) = f_{fj}(0) + \varepsilon^2 \sum_{i=0}^{j} \int_0^t g_{fi}^{0,(\varepsilon)}(u)' \gamma_{fj}(u) f_{fj}^{(\varepsilon)}(u) d + \varepsilon^2 \sum_{i=0}^{N} \int_0^t g_{di}^{0,(\varepsilon)}(u)' \gamma_{fj}(u) f_{fj}^{(\varepsilon)}(u) d$$

$$- \varepsilon^2 \int_0^t \sigma^{(\varepsilon)}(u) \bar{\sigma}' \gamma_{fj}(u) f_{fj}^{(\varepsilon)}(u) du + \varepsilon \int_0^t f_{fj}^{(\varepsilon)}(u) \gamma_{fj}'(u) dW_u, \tag{31}$$

where $g_{dj}^{0,(\varepsilon)}(t) := \frac{-\tau_j f_{dj}^{(\varepsilon)}(t)}{1+\tau_j f_{dj}^{(\varepsilon)}(t)} \gamma_{dj}(t), g_{fj}^{0,(\varepsilon)}(t) := \frac{-\tau_j f_{fj}^{(\varepsilon)}(t)}{1+\tau_j f_{fj}^{(\varepsilon)}(t)} \gamma_{fj}(t)$; x' denotes the transpose of x and W is a r-dimensional standard Wiener process under the domestic terminal measure P; $\gamma_{dj}(s), \gamma_{fj}(s)$ are r-dimensional vector-valued functions of time-parameter s; $\bar{\sigma}$ denotes a r-dimensional constant vector satisfying $\| \bar{\sigma} \| = 1$ and $\sigma^{(\varepsilon)}(t)$, the volatility of the spot exchange rate, is specified to follow a $\mathbf{R}_{++}$-valued general time-inhomogeneous Markovian process as follows: (32)
where $\mu(s, x)$ and $\omega(s, x)$ are functions of s and x.

$$\sigma^{(\varepsilon)}(t) = \sigma(0) + \int_0^t \mu(u, \sigma^{(\varepsilon)}(u)) du + \varepsilon^2 \sum_{j=1}^{N} \int_0^t g_{dj}^{0,(\varepsilon)}(u)' \omega(u, \sigma^{(\varepsilon)}(u)) du + \varepsilon \int_0^t \omega'(u, \sigma^{(\varepsilon)}(u)) dW_u,$$

Finally, we consider the process of the forex forward $F_{N+1}(t)$. Since $F_{N+1}(t) \equiv F_{T_{N+1}}(t)$ can be expressed as $F_{N+1}(t) = S(t)\frac{P_f(t,T_{N+1})}{P_d(t,T_{N+1})}$, we easily notice that it is a martingale under the domestic terminal measure. In particular, it satisfies the following stochastic differential equation

$$F_{N+1}^{(\varepsilon)}(t) = F_{N+1}(0) + \varepsilon \int_0^t \sigma_F^{(\varepsilon)}(u)' F_{N+1}^{(\varepsilon)}(u) d_u \tag{33}$$

where $\sigma_F^{(\varepsilon)}(t) := \sum_{j=0}^{N} \left(g_{fj}^{0,(\varepsilon)}(t) - g_{dj}^{0,(\varepsilon)}(t)\right) + \sigma^{(\varepsilon)}(t)$.

Numerical Examples

We here specify our model and parameters, and confirm the effectiveness of our method in this cross-currency framework. First of all, the processes of domestic and foreign forward interest rates and of the

volatility of the spot exchange rate are specified. We suppose $r = 4$, that is the dimension of a Brownian motion is set to be four; it represents the uncertainty of domestic and foreign interest rates, the spot exchange rate, and its volatility. Note that in this framework correlations among all factors are allowed. We also suppose $S(0) = 100$.

Next, we specify a volatility process of the spot exchange rate in (32) with

$$\begin{cases} \mu(s,x) = \kappa(\theta - x), (34) \\ \quad \omega(s,x) = \omega\sqrt{x}, \end{cases} \tag{35}$$

where θ and κ represent the level and speed of its mean-reversion respectively, and ω denotes a volatility vector on the volatility. In this section the parameters are set as follows; $\varepsilon = 1$, $\sigma(0) = \theta = 0.1$, and $\kappa = 0.1$; $\omega = \omega^*\overline{v}$ where $\omega^* = 0.3$ and $\overline{v}$ denotes a four dimensional constant vector given below. We further suppose that initial term structures of domestic and foreign forward interest rates are flat, and their volatilities also have flat structures and are constant over time: that is, for all $j, f_{dj}(0) = f_d$, $f_{fj}(0) = f_f$, $\gamma_{dj}(t) = \gamma_d^* \overline{\gamma}_d 1_{\{t < T_j\}}(t)$ and $\gamma_{fj}(t) = \gamma_f^* \overline{\gamma}_f 1_{\{t < T_j\}}(t)$. Here, γ_d^* and γ_f^* are constant scalars, and $\overline{\gamma}_d$ and $\overline{\gamma}_f$ denote four dimensional constant vectors. Moreover, given a correlation matrix $\underline{C}$ among all four factors, the constant vectors $\overline{\gamma}_d$, $\overline{\gamma}_f$, $\overline{\sigma}$ and $\overline{v}$ can be determined to satisfy $\|\overline{\gamma}_d\| = \|\overline{\gamma}_f\| = \|\overline{\sigma}\| = \|\overline{v}\| = 1$ and $V'V = \underline{C}$ where $V := (\overline{\gamma}_d, \overline{\gamma}_f, \overline{\sigma}, \overline{v})$.

In this subsection, we consider four different cases for f_d, γ_d^*, f_f and γ_f^* as in Table 1. For correlations, the parameters are set as follows: the correlation between interest rates and the spot exchange rate are allowed while there are no correlations among the others; the correlation between domestic ones and the spot forex is 0.5($\overline{\gamma}_d'\overline{\sigma} = 0.5$) and the correlation between foreign ones and the spot forex is -0.5($\overline{\gamma}_f'\overline{\sigma} = -0.5$): It is well known that (both of exact and approximate)evaluation of the long-term options is a hard task in the case with such complex structures of correlations.

Table 1: Initial Domestic/Foreign Forward Interest Rates and Their Volatilities

	f_d	γ_d^*	f_f	γ_f^*
case (i)	0.05	0.12	0.05	0.12
case (ii)	0.02	0.3	0.05	0.12
case (iii)	0.05	0.12	0.02	0.3
case (iv)	0.02	0.3	0.02	0.3

Lastly, we make an assumption that $\gamma_{dn(t)-1}(t)$ and $\gamma_{fn(t)-1}(t)$, volatilities of the domestic and foreign interest rates applied to the period from t to the next fixing date $T_{n(t)}$, are equal to be zero for arbitrary $t \in [t, T_{n(t)}]$.

In Figure 1, we compare our estimations of the values of call and put options whose maturities are from ten to twenty years by an asymptotic expansion up to the fourth order to the benchmarks estimated by 10^6 trials of Monte Carlo simulation. The simulation we discretized the underlying processes by Euler-Maruyama scheme with time step 0.05 and applied the Antithetic Variable Method. For the moneynesses(defined by $K / F_{N+1}(0)$) less than one, the prices of put options are shown; otherwise, the prices of call options are displayed. As seen in this figure, in general the estimators seems more accurate as the order of the expansion increases. Especially, for the deep OTM-put options the fourth order approximation performs much better and is stabler than the approximation with the lower order.

Figure 1: Values of Call and Put Options (Maturity 10 to 20 years)
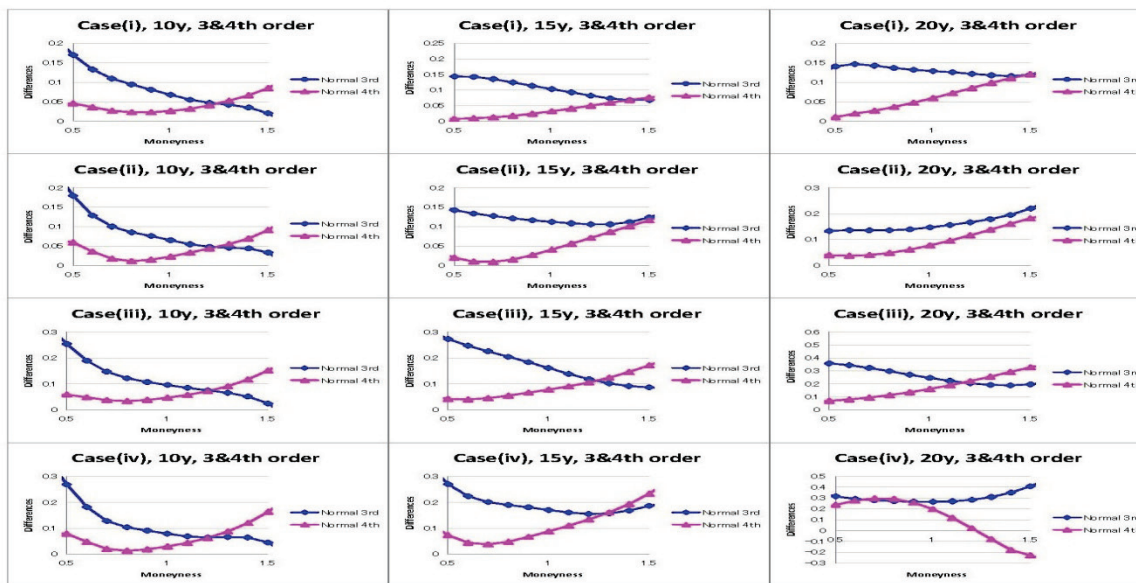
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THE USE OF CASE STUDIES IN PREPARING POSTGRADUATE DISSERTATIONS ON SMALL AND MEDIUM SIZED FIRMS

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ABSTRACT:

In recent years the methodology of case studies has been used much more than before in conducting research on firms. This increase is due to the needs and requirements associated with approaching this object of study, and to the perception that the results obtained by using such a methodology are of superior quality.

The growing acceptance of case studies has been impelled by a wider knowledge and discussion of the criteria for assessing quality that can be used in the evaluation of research following such a methodology, and this has led to a better understanding of how the inclusion of case studies can be used to resolve certain problems connected to the study of organizations, in particular small and medium sized businesses.

Hence the present work therefore proposes a design for conducting research that will be suitable for writing a postgraduate dissertation on the subject of small and medium sized businesses, while at the same time fulfilling the conditions of quality required in a project conducted through the use of case studies, and one that it will be possible to complete within a limited period of time, thus improving the rate of students who graduate after completing their studies.

JEL A23, B40 M00

KEYWORDS: Case study, SMEs. Dissertation

EDUCATION AND GENDER EQUITY

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ABSTRACT

The net of civic associations Social Watch created the alternative indicators for measurement of situation development within equality of men and women (GEI – Gender Equity Index) and satisfying of basic human needs (BCI – Basic Capability Index). This paper is devoted to gender inequity, i. e. education, participation in the economy and empowerment. The primary attention is devoted to the education, let us say tertiary education. The questions of tertiary education are solved not only from the global view, but also from the national view, i. e. from the view of the Czech Republic. Our republic is in the front places of the imaginary rank within this GEI dimension (education), within the remaining two dimensions (participation in the economy, empowerment) the situation is not so positive and it is necessary to find any solutions leading to the improvement of the current position.

INTRODUCTION

At the conferences of the United Nations Organization about Social development (Copenhagen, 1995) and about Women (Peking, 1995) poverty removal and gender equality were for the first time defined – as the collective global target, one of the main target next to the peace and human rights. The interconnection of national and global level is playing very important role also by creation of various indexes and statistical comparisons. They provide comparable international information and macroperspective, and they also offer the data about the situation of individual countries. The net of civic associations Social Watch found the alternative indicators for measurement of situation development (setback or improvement) within equality of men and women (GEI – Gender Equity Index) and satisfying of basic human needs (BCI – Basic Capability Index). (Ekumenická akademie, 2008)

GENDER EQUITY

The Gender Equity Index is based on internationally available comparable data and it makes it possible to position and classify countries according to a selection of indicators relevant to gender inequity in three different dimensions: *education,* participation in the economy and empowerment (see Figure 1 and Table 1).

Figure 1: The Stairway to Gender Equity
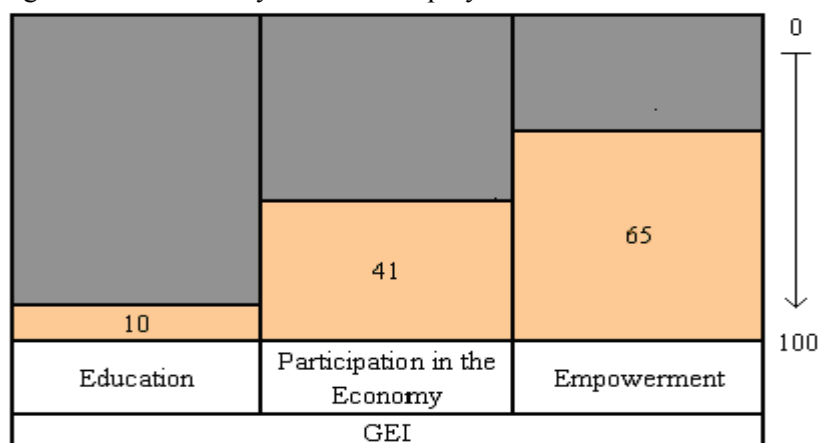
Source: own elaboration of the data provided by (Bissio, 2008). Measure of inequality (the size of the gap) = index points needed to achieve equity (100) globally in each dimension of the GEI.

In 2008, the GEI ranks the present situation of 157 countries, based on the most recent statistics available, and is able to determine evolution trends in the near future. The index has a maximum possible value of 100, which would indicate no gender gap at all in each of the three watched dimensions. The GEI measures the gap between women and men, not their welfare (i. e. the total level of education, participation in the economy and empowerment).

Table 1: GEI Regional Average by Component

Dimension	1.Dimension Education	2.Dimension Economic Activity	3.Dimension Empowerment
WORLDWIDE	90	59	35
Central Asia	92	65	30
East Asia	94	62	37
Europe	99	68	49
Latin America and Caribbean	99	57	45
Middle East and North Africa	90	35	19
North America	100	73	53
South Asia	80	47	20
Sub-Saharan Africa	73	61	24

Source: (Social Watch, 2008)

Education is the only component in the index where many countries have actually reached parity level (indeed on terms when education is not available to great number of children and only the gender disparity in access to education has decreased). When parity has been reached, obviously no further progress is possible. But beyond the fact that many countries do not progress, the GEI education component reveals that many of them are regressing. In the two other dimensions, related to women's integration into economic and political life, no country shows complete parity yet. The GEI evidences that income differences between countries are no justification for gender-based inequities. Many poor countries have achieved a high level of equity, which is a positive achievement, even when that means an equitable distribution of poverty. In fact, the reverse is often true: many countries that have acceptable average figures in social indicators frequently hide behind those averages enormous disparities between men and women. The elimination of gender disparities can be achieved with active policies and does not require that countries improve their income levels in order to succeed.

Sweden, Finland and Norway continue to have the highest rankings in the 2008 GEI (see Table 2). Although the three countries do not lead in all the dimensions that make up the index (see gaps in Education, Economic Activity and Empowerment) they have good performances in all of them. Germany ranks fourth and Rwanda – one of the poorest countries in the world – takes the fifth place. In all these cases, the gender gap has been reduced through active policies, including gender quotas for political participation in elected bodies and pro-equity regulations in the labour market (on behalf of major equity).

Czech Republic is with GEI (year 2008) 69 on the 52nd position together with Cyprus, China, Honduras, Peru and Brazil and simultaneously our republic belongs to countries with decreasing index value. It is ranked among those countries where the inequalities and disproportions in general social status of men and women are increasing. This result, though only in the context of international comparison, confirms the regressive development within gender equity area. Nonprofit sector and also scientific community have adverted methodically to this situation for a long time already. Non-surprisingly the Czech Republic shows the worst result (43) in women´s empowerment (i. e. women´s representation in political and other

power management and technical positions). Nevertheless neither the women´s participation in the Czech economy does not afar reach the gender equity (64).

In education the Czech Republic reaches to the index value 97, so almost the equality of men´s and women´s education. The comparison of our republic with other countries is also quite interesting, because these countries are stereotypically presented by Czech media as gender oppressed. For example the same index value of China and better results of index values in countries like Russian Federation, Philippines, Ukraine and Cuba. We may not generalize this comparison to the total social situation, nevertheless it offers us any value of women´s and men´s position within the economy which shows the negative social development in our country, including the level of (non)democratism of our social configuration, if it is viewed also by gender perspective. (Uhde, 2009)

FIRST DIMENSION – INEQUALITY IN EDUCATION

Inequality in education is derived from the gender difference in the following indicators:
- level of literacy,
- participation in primary school,
- participation in secondary school,
- participation in tertiary education.

Education is the GEI dimension with the highest number of countries amounting to the satisfactory level of equity. Nevertheless the situation is alarming and in 40 % of countries it is getting worst; badness appears in many of these countries. According to the United Nations Population Fund (UNFPA), while in 2000 31 % of women lacked school education, only 18 % of men were in the same situation. School education, only 18 % of men were in the same situation. What is the total development in sphere of education? The proportion of improving and worsening countries is disquieting. The cases of setback overtop the cases of improvement more than twice!

Table 2: Gender versus Tertiary Education and Incomes (Selected Countries by GEI 100-75)

Countries (BCI value ♣, 0-100)	GEI Ranking	Gross Tertiary Enrolment Ratio Gap (women/men) ●	Estimated Earned Income Ratio (women/men) ♠
Australia (99)	76	1,25	0,7
Barbados (99)	77	2,46	0,6
Denmark (98)	80	1,39	0,7
Philippines (77)	76	1,23	0,6
Finland (100)	85	1,21	0,7
Iceland (100)	78	1,91	0,7
Canada (99)	76	1,36	0,6
Kazakhstan (98)	75	1,43	0,6
Columbia (90)	75	1,09	0,6
Congo (79)	78	1,91	0,5
Lithuania (99)	77	1,56	0,7
Latvia (99)	76	1,79	0,7
Netherlands (100)	78	1,07	0,6

Countries (BCI value ♣, 0-100)	GEI Ranking	Gross Tertiary Enrolment Ratio Gap (women/men) ●	Estimated Earned Income Ratio (women/men) ♠
Norway (100)	84	1,53	0,8
New Zealand (98)	78	1,49	0,7
Russian Federation (98)	76	1,37	0,6
Rwanda (23)	80	0,62	0,7
United Kingdom (99)	75	1,39	0,7
United States (99)	75	1,41	0,6
Spain (99)	77	1,22	0,5
Sweden (100)	89	1,55	0,8
Uruguay (96)	75	2,02	0,6
... Czech Republic (99)	... 69	1,16	0,5

Source: own elaboration of the data provided by (Social Watch, 2008)
Note:

- ♣ *BCI = Basic Capabilities Index*
- ● *share of brutto percentage of women registered into the school offering the tertiary education, towards brutto percentage of men registered into the school offering the tertiary education*
- ♠ *proportion of estimated women´s incomes towards estimated men´s incomes; inasmuch as all the data structured by gender are not available – the United Nations Development Program prejudged the incomes of women and men on the basis of the following data: rate of nonfarm women´s wages towards nonfarm men´s wages, share of women and men in economically active population, total women and men population, and GDP per capita (in purchasing power parity, in USD)*

Education and Worldwide Regions

Inequity of access to education for reasons of gender is concentrated in few regions and therefore becomes invisible or at least 'opaque' when analyzed jointly. At regional level, major differences are found in North Africa and minor differences in South Asia, Latin America and Central Asia (see Figure 2). On the other hand, gender discrimination mechanisms in the area of education do not only refer to access, but also operate within the system itself, making access to the education system an important element but not the sole one. These mechanisms are very often reiterative and become more elusive. For this reason, it is crucial to pay attention to the approaches to education and the running of educational organizations. In many cases it is precisely the teaching materials that perpetuate models of behaviour that reproduce negative gender stereotypes. (Řehořová, 2007)

When we measure the "Equity in education", the gender gap varies in access to the different levels of education. The indicator for the literacy gap shows categorical differences: in countries in the worse situation there are two illiterate women for every man, while in those in the better situation the impact of illiteracy by sex is more even, though still not entirely equitable. This is because in countries in the better relative situation illiteracy is found in older generations, when the education system had not yet implemented equal opportunities for men and women. This goes to show the inherent inertia that distinguishes gender inequality, a fact that alerts us to the importance of starting equity actions early on and in particular to keep them going over time. This conclusion is validated when we consider that the enrolment gaps in primary, secondary and tertiary education not only do not harm women but also show that they have higher enrolment figures than men. (Bissio, 2008) This tendency in countries in the better

situation becomes particularly striking in *tertiary level,* where for every five people enrolled, three are women and only two are men.

Figure 2: Current Regional Situation of Gender Inequalities in Education
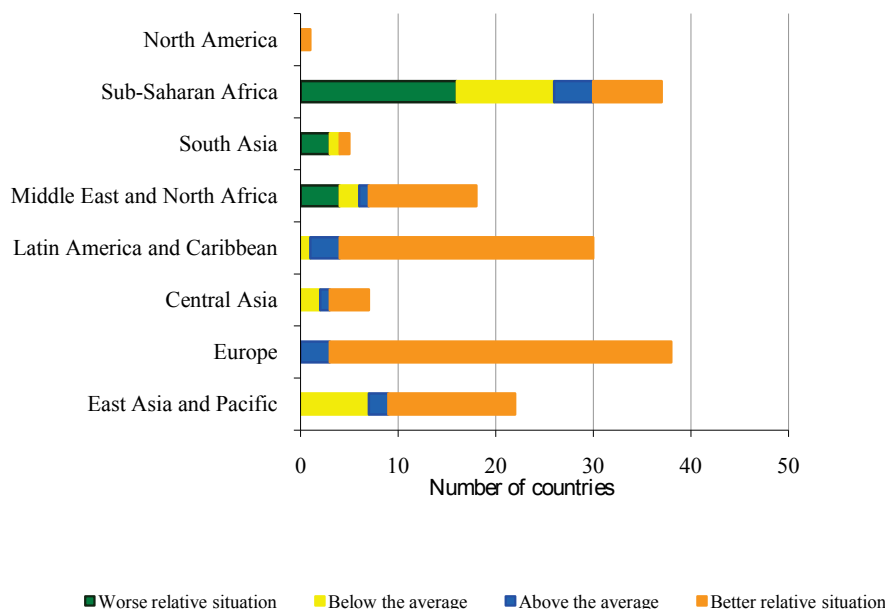
Source: (UNESCO Institute for Statistics, 2008)

Education in the Czech Republic

Czech Republic started to struggle for filling the targets of the European strategy within the area of education and employment in the first half of nineties of the twentieth century. The Lisbon strategy targets are included in all fundamental strategic documents and policies elaborated in the Czech Republic still before the EU admission (e. g. National action plan of employment, National development program of education in the Czech Republic, Development strategy of human resources for the Czech Republic, Long-term plan of education and development, etc.).

As it was said in the second chapter – the Czech Republic within the first GEI dimension, i. e. „Education", reached almost the gender equity (i. e. index value 97 – see Figure 3). But it does not mean that there is nothing to improve, just vice versa: at the end of year 2008 the long discussed reform of tertiary education has been started.

The reasons for mentioned reform were following (MŠMT, 2008):
- the system of tertiary education was underfinanced (the sources for financing from public sources are limited and private sources are minimal),
- the system was not so diversified (the expansion would be able to threaten the quality, it is necessary to move ahead from quantity to quality),
- the system was managed by methods which do not correspond to the new role of tertiary education in the society and in the economy (weak role of management in the institutions of tertiary education),
- the system was not so efficient, i. e. its participants have the tendency to maximalize the inputs without any responsibility for the outputs; the competition also lacks in the system.

Figure 3: Gender Equity Index in the Czech Republic
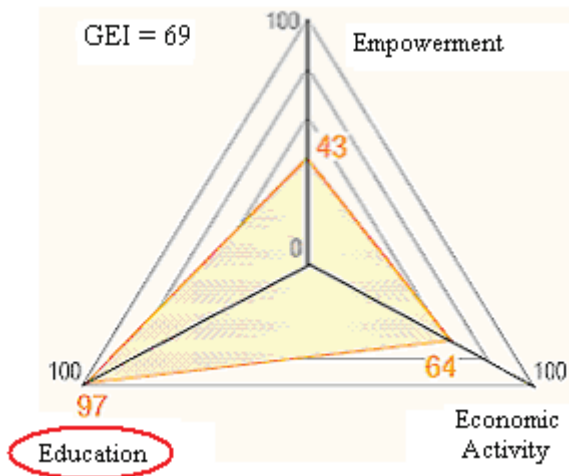
Source: (UNESCO Institute for Statistics, 2008)

The main characteristics of tertiary education reform are:
- autonomy recruital,
- recruital of executive council powers,
- establishment of Council for tertiary education,
- formation of typical research universities (faculties), i. e. centres of top research with the emphasis on Ph.D. students education and training, basic and applied research, creation of the innovative potential,
- existence of the segment providing the professionally oriented education (i. e. linking the labour market, cooperation with the employers),
- monolithic system of accreditation for all institutions of tertiary education (i. e. academical and also professional),
- existence of the internal system for valuation and quality management,
- emphasis of „LLL – Life Long Learning",
- individual national project – Operational Programme, Education for Competitiveness – Tertiary education reform, etc.

Rate of Return to Czech Higher Education - Survey

There are differences between higher education systems in the world, let us say in Europe. In many countries the government has been the major paymaster of higher education. In the Czech Republic there is a free entry for students to public universities as well as a support of phenomenon of private universities with fee payments in last couple of years. Why go people go to study on private schools when they have to pay much more? On the base of human capital theory we can expect that these students also await higher salary and other forms of profit from their education than those from public universities. Can we confirm this hypothesis on the base of data we got from a questionnaire? (Urbánek, Maršíková, 2005)

During the academic years 2004/2005 – 2007/2008 *(note: within the research and development project No. 402/09/1123 we continue also in the academic years 2008/2009 and 2009/2010)* survey of earnings expectations was undertaken of first year students at three Czech economics universities (Technical University of Liberec, University of Economics Prague and University of Pardubice) and at the University of Huddersfield Business School (UK). Students completed questionnaire in Czech (Prague,

Liberec and Pardubice) or English (Huddersfield) and altogether there were 2,609 respondents. First year students were surveyed, during their first term, because their decision to enter higher education had been a recent one. The questionnaire began with general questions relating to gender and age in an attempt to diversify the data. In the second part the students were asked about their expectations of income immediately after graduation in their first job and then after ten years of work experience, at a minimum, average and maximum level. They were also asked about the level of earnings they would expect if they had only secondary-level education. They should also estimate the income of their possible acquaintances – graduates without and with working experience. Last several questions concerned their family background, education and income of their parents.

Table 3: Rates of Return (in %) According to Gender

Academic year	Huddersfield (UK)				Czech Republic			
	Graduates		10 Years Experience		Graduates		10 Years Experience	
	Men	Women	Men	Women	Men	Women	Men	Women
2004/2005	14.64	19.38	22.53	29.20	11.72	11.39	15.12	13.85
2005/2006	12.66	15.38	17.76	18.02	13.45	11.86	22.30	7.19
2006/2007	9.95	15.18	18.50	14.77	12.26	11.65	23.65	17.62
2007/2008	13.48	13.00	18.12	29.67	12.72	10.59	22.69	18.10
Total Average	12.68	15.74	19.23	22.92	12.54	11.37	20.94	14.19

Source: (Urbánek, Maršíková, Řehořová, 2008)

Table 3 presents a gender break-down of rates of return from the Czech Republic and Huddersfield. For Huddersfield the results reflex the result of other studies focused on actual returns i. e. women expect a higher rate of return to higher education than men. On the other hand, the data from Czech universities provide different results. Male respondents expect higher rate of return than females. It is also interesting to see that female students in Huddersfield expect higher rates of return than those from the Czech Republic whereas male students from Huddersfield expect lower returns than thein Czech peers.

The result of the surveys of Czech and British students show that students are very well aware of their possible (expected) earnings. There are some differences among men and women expectations, especially in relation to expected returns immediately after graduation. (see more in [12] [13] [14])   It is intended to replicate the results of this research by obtaining further samples in England. It would be especially useful to include at least two more Business Schools to provide direct comparability with the Czech data. It may also be beneficial to extend the geographical scope of this study of student perceptions of the financial returns to higher education. Although the results of this study show a striking similarity between student perceptions in the Czech Republic (GEI 69) and United Kingdom (GEI 75), this does not automatically mean that the same will be true in other countries.

CONCLUSION

The attention from national levels to multinational level is being started to move within the various studies with the progressing globalization. Tariq Banuri recommends to perceive the whole world as an „Earthland". On the global level we will find today more inequalities than within every country of the world. Therefore it is possible to consider the world just as only one, wrong managed developing country (Banuri, 2008). „North" and „South" are being drawn apart always faster: in developing countries we may find the islands of extreme wealth and in developed countries there are wide islands of poverty. Undoubtedly just the poverty is the most important way of men and women disadvantage, therefore it is necessary to file it close into the gender, sort, ethnicity, etc. People fighting against global poorness and do not taking into account the inequalities among men and women; and people fighting for women´s

rights without any interest in poorness (above all poorness of „South") are not in their research solid. They would not study all poor humans and all women, but they would conduct their research only within the framework of narrow interest groups, i. e. rich women of „North" or poor men of „South".

As it was mentioned in the introduction, it is possible to see the gender inequity within three different dimensions: education, participation in the economy and empowerment. According to GEI index (year 2008) many countries have actually reached parity level (i. e. gender equality) within the component of education (100). In the two other components, related to women's integration into economic and political life, there is the situation much more serious and in most of the countries the components´ index values move only at the level or even under the level of the medial value (50). Currently I am not able to determine the time period necessary for reaching parity level also within the second and third GEI dimension, i. e. within economic activity and empowerment. Realized research at our university (see Chapter 3.3) devoted to the rate of return to higher education does not also give us any closer answer so far.

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GLOBAL FINANCIAL CRISIS AND THE PERFORMANCE OF COUNTRY INDEX FUNDS IN THE OCTOBER 9, 2007-MARCH 9, 2009 BEAR MARKET

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ABSTRACT

Exchange-traded country index funds make it easy for investors to achieve global diversification. In a recent article, Meric et al. (2008) study the risks and returns of 21 Ishares country index funds during the July 2003-June 2007 bull market and they conclude that investing in country index funds can provide high returns and significant portfolio diversification benefits to U.S. investors in bull markets.

During the October 9, 2007-March 9, 2009 period, the U.S. stock market experienced the worst bear market in its history since the Great Depression. In this paper, we study the performance of 23 exchange-traded Ishares country index funds during this period. In a previous study, Meric et al. (2002) find that correlation between national stock markets increases and global investments do not provide significant return and portfolio diversification benefits to investors in bear markets. In this paper, we provide additional empirical support for the Meric et al. (2002) finding by demonstrating that investing in country index funds did not provide significant return and diversification benefits to U.S. investors in the October 9, 2007-March 9, 2009 bear market.

JEL: G11; G15; G21; G28

KEYWORDS: Financial crisis, bear market, country index funds, Sharpe and Treynor portfolio performance measures, principal components analysis, portfolio diversification

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A NEW HEDGE FUND REPLICATION METHOD WITH THE DYNAMIC OPTIMAL PORTFOLIO

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ABSTRACT

This paper provides a new hedge fund replication method, which extends Kat and Palaro (2005) and Papageorgiou, Remillard and Hocquard (2008) to multiple trading assets with both long and short positions. The method generates a target payoff distribution by the cheapest dynamic portfolio. It is regarded as an extension of Dybvig (1988) to continuous-time framework and dynamic portfolio optimization where the dynamic trading strategy is derived analytically by applying Malliavin calculus. It is shown that the cost minimization is equivalent to maximization of a certain class of von Neumann-Morgenstern utility functions.

INTRODUCTION

Hedge fund replication products appeared in the financial markets recently. Large investment banks and asset management companies launched the products one after another at that time. Some of these institutions developed replication techniques collaborating with the pioneers in hedge fund research. Therefore, these products have gained increased attention.

In the period of the subprime and Lehman shocks, most hedge fund strategies recorded large losses. The slump in this period kept investors away from hedge funds, and therefore maybe from hedge fund replication products. However, hedge fund replication overcomes the following difficulties in hedge fund investing: high cost, low transparency, and low liquidity. The importance of transparency and liquidity was recognized because of these market crises. Therefore, hedge fund replication products are attractive investment vehicles as long as the performance of the replication target is worth investing.

The methodologies can be categorized in the following three approaches. The first is a rule-based approach that mimics trading strategies that the target hedge fund employs. This is the most primitive way. The second approach is a factor-based clone that tries to replicate risk exposures of the target fund. If this method succeeds, then the return of the replica tracks that of the target fund on a month-to-month basis. This is the ideal replication, but this method requires finding tradable market factors that drive the return of the target hedge fund. The third approach is distribution replication that gives up month-to-month return replication, and aims to replicate the distribution of hedge fund returns. Amin and Kat (2003) first tried the replication. However, an attractive character of the hedge fund returns is the low dependence with returns of traditional asset classes. Further, Kat and Palaro (2005) presented a modified method to replicate the dependence structure with the investor's existing portfolio, too. Papageorgiou *et al.* (2008) proposed an alternative way to perform Kat-Palaro's replication methodology by utilizing a hedging scheme of options in an incomplete market. See Takahashi and Yamamoto (2009a) for the analysis of these methodologies.

This article extends the works of Kat and Palaro (2005) and Papageorgiou *et al.* (2008). Since the methods developed by the two research papers use one reserve asset with long positions only, the choice of the asset is crucial, and the user of the methods should pay much attention to the choice of the reserve asset. On the other hand, our new method allows multiple reserve assets with both long and short positions for creating a replicating portfolio.

When the investment universe is extended to multiple reserve assets, a criterion that chooses a payoff should be introduced because there are infinitely many payoffs that have the same statistical properties as the target hedge fund. This paper proposes to choose the cheapest one. By extending the work of Dybvig (1988) to continuous-time framework, the cheapest payoff is obtained. Then, the dynamic trading strategy is derived analytically by applying Malliavin calculus. For the case of replicating the marginal distribution of the target hedge fund return, it is shown that the cost minimization is equivalent to maximization of a certain class of von Neumann-Morgenstern utility functions.

In the subprime and Lehman shocks, CTA/Managed Futures funds enjoyed high returns. (See figure 1.) Therefore, this paper replicates CTA/Managed Futures Index. The distribution replicating approach is a powerful method for the strategy, because it is difficult to find factors that drive the return of CTAs or managed futures funds (See, for example, Hakamada *et al.* (2007).). Therefore, factor-based replications for the funds are impossible or very tough.

Many CTAs or managed futures funds are seeking for attractive investment opportunities in financial markets around the world. They employ dynamic trading strategies including leverage and short sales to exploit them. Our methodology is also able to reflect their investment behaviors while the existing methods are not. A historical out-of-sample simulation shows that our scheme provides a much better performance than the replication by one reserve asset with only long position.

Figure 1: Performance of Eurekahedge Hedge Fund indices by investment strategy (Jan 2007-Dec 2008)
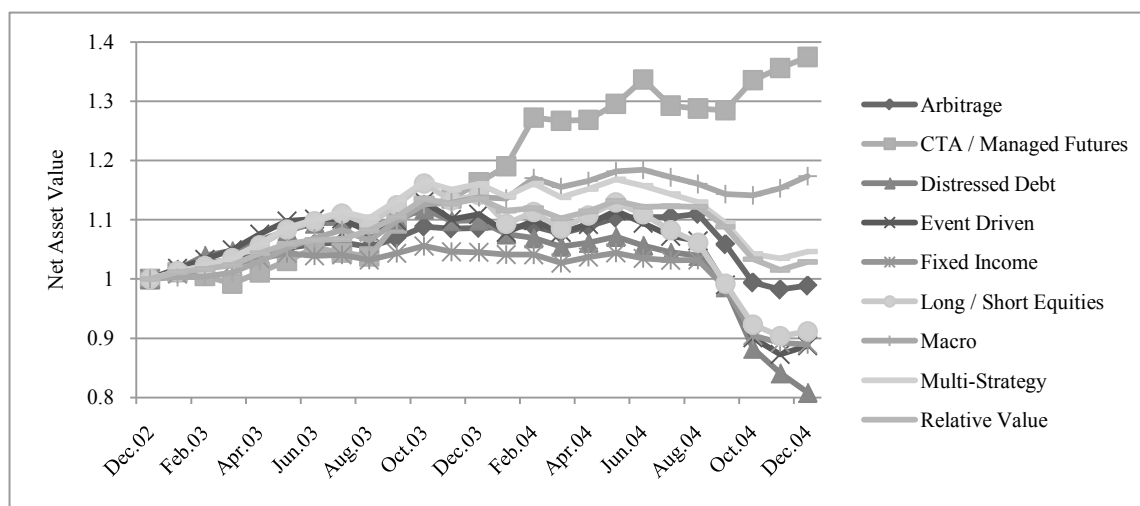
REVIEW OF KAT-PALARO'S METHOD: LONG ONLY ONE RESERVE ASSET CASE

Let us review the method of distribution replication of hedge fund returns proposed by Kat and Palaro (2005). Consider an investor who has been investing in traditional assets such as stocks and bonds, and plans to invest in a hedge fund. It is assumed that he is attracted to the hedge fund because of the distribution of the return and the dependence structure with his portfolio. Suppose that S^0 is a risk-free asset, S^1 is an investor's existing portfolio, and S^2 is a risky reserve asset. Assume that S^1 is also tradable. (It is proxied by a portfolio of stock index and bond futures.) Let 0 and T be the start and terminal dates of the investment, respectively. Kat-Palaro's approach tries to the return distribution of the hedge fund and dependence structure with the investor's existing portfolio by the dynamic trading strategy of the investor's portfolio and a reserve asset.

To implement the replicating strategy, we need to proceed with the following steps. First, the stochastic processes $\{S_t^1\}_{t=0}^T$ and $\{S_t^2\}_{t=0}^T$ are inferred. The initial asset values are normalized so that $S_0^1 = S_0^2 = 1$. Following that, the joint distribution of $R_T^1 = \log S_T^1$ and $R_T^2 = \log S_T^2$ is also obtained. Let R_T be the random variable that represents the log return of the target hedge fund. Second, the joint distribution of the investor's portfolio and hedge fund returns (R_T^1, R_T) is estimated. This is the target joint distribution to replicate. Third, the payoff function, which transforms the joint distribution of (R_T^1, R_T^2) to that of (R_T^1, R_T), is determined. Finally, the payoff is priced and replicated through the dynamic trading of S^1 and S^2.

In the first step (inference of $\{S_t^1\}_{t=0}^T$ and $\{S_t^2\}_{t=0}^T$), Kat and Palaro (2005) and Papageorgiou *et al.* (2008) modeled them by Gaussian and non-Gaussian distributions, and selected the best-fitted one.

As hedge funds exhibit skewness and fat-tails, and are non-linearly related to traditional asset classes, in the second step (estimation of (R_T^1, R)), Kat and Palaro (2005) proposed to model R_T^1 and R_T separately, and then connect them by a copula. For hedge fund returns, it is desirable to use the distribution class that can capture its skewness and fat-tails. For example, Kat and Palaro (2005) and Papageorgiou *et al.* (2008) used Gaussian, Student-t, Gaussian mixture and Johnson distributions. Some copulas can capture the asymmetric dependence structure flexibly.

After estimating the parameters and selecting models of the asset returns and price processes, a payoff function is determined. To obtain the joint distribution of the investor's portfolio and hedge fund returns through the dynamic trading of the investor's portfolio and a reserve asset, a function $\tilde{g}$ that satisfies the following equation is required.

$$P(R_T^1 \le a, \tilde{g}(R_T^1, R_T^2) \le b) = P(R_T^1 \le a, R_T \le b) \quad \text{for any } a, b, \quad (1)$$

or equivalently,

$$P(\tilde{g}(R_T^1, R_T^2) \le b \mid R_T^1 = a) = P(R_T \le b \mid R_T^1 = a) \quad \text{for any } a, b. \quad (2)$$

Then, $\tilde{g}$ is given by

$$\tilde{g}(a, b) = F_{R_T|a}^{-1}(F_{R_T^2|a}(b)), \quad (3)$$

where $F_{R_T|a}$ and $F_{R_T^2|a}$ are the conditional distribution functions of R_T and R_T^2 under $R_T^1 = a$. In terms of the asset prices, the payoff function is represented as

$$\hat{g}(S_T^1, S_T^2) = \exp\{\tilde{g}(\log S_T^1, \log S_T^2)\}. \quad (4)$$

If one obtained the payoff function, the replicating strategy encounters the same problem with pricing and hedging of derivatives. The dynamic replicating strategy is given by the *delta*-hedging strategy of the payoff $\hat{g}(S_T^1, S_T^2)$. If the initial cost for the trading strategy is less (more) than 1, then the target payoff can be realized by a lower (higher) cost. The remaining (shortage of) money is invested (funded) in the risk-free asset. The shape of the probability density can be replicated, but the mean return is higher (lower) than the target fund by the difference of the initial cost. In this case, the reserve asset does (does not) include greater investment opportunity than the target hedge fund. Note that the payoff function $\hat{g}(\cdot, \cdot)$ is an increasing function with respect to the second argument. Then, the *delta*-hedging strategy never takes a short position for S^2. In page 17-18 of Kat and Palaro (2005), the authors claim that users of this method should choose the reserve asset S^2 that has the positive expected return factor uncorrelated to the return of the investor's portfolio. Then, the long position for S^2 is justified. In this case, the choice of a reserve asset is crucial.

As described here, this methodology can replicate the shape of the probability density, but cannot fit the mean. If you found a greater investment opportunity than the target fund, the mean return would be superior and vice versa. Therefore, the usage of only one reserve asset is restrictive. Papageorgiou *et al.* (2008) synthesized multiple assets to create one reserve asset by equal-weighing, but there would be inefficiencies in the *ad hoc* fixed weighted portfolio. The extension of the investment universe would bring in higher mean returns.

EXTENTION TO MULTIPLE RESERVE ASSETS

Let us extend the replication method to multiple reserve assets. See Takahashi and Yamamoto (2009b) for a rigorous argument. Suppose that $S^2, \cdots, S^n$ are risky reserve assets. Suppose that the price processes of the financial assets $\{S_t^i\}_{t=0}^T$ ($i = 0, \cdots, n$) follow stochastic differential equations (SDEs)

$$dS_t^0 = r_t S_t^0 dt, \tag{5}$$

$$dS_t^i = \mu_t^i S_t^i dt + \sum_{j=1}^i \sigma_t^{ij} S_t^i dW_t^j \quad (i = 1, \mathsf{L} \ n), \tag{6}$$

where $W_t = (W_t^1, \cdots, W_t^n)'$ is *n*-dimensional standard Brownian motion. $r_t, \mu_t^i,$ and σ_t^{ij} satisfy appropriate measurability and integrability conditions. All of the initial asset values are normalized, so that $S_0^0 = \mathsf{L} = S_0^n = 1$. The following notations by *n*-dimensional vectors and a $n \times n$ matrix are introduced: $S_t = (S_t^1, \cdots, S_t^n)', \mu_t = (\mu_t^1, \cdots, \mu_t^n)', 1 = (1, \cdots, 1)'$, and

$$\sigma_t = \begin{pmatrix} \sigma_t^{11} & & O \\ \vdots & \ddots & \\ \sigma_t^{n1} & \cdots & \sigma_t^{nn} \end{pmatrix}. \tag{7}$$

Suppose that σ_t is invertible almost surely. Then, there exists the unique market price of risk $\theta_t = \sigma_t^{-1}(\mu_t - r_t 1)$. In other words, the financial market is complete. The financial market is denoted by $M = (r, \mu, \sigma)$.

In complete market *M*, the unique state price density process is given by

$$H_t = \exp\left\{-\int_0^t r_u du - \frac{1}{2}\int_0^t \|\theta_u\|^2 du - \int_0^t \theta_u' dW_u\right\}. \tag{8}$$

The no-arbitrage price of any measurable payoff *X* at *T* is given by $x = E[H_T X]$. By the standard argument of martingale method, *X* can be replicated by a dynamic trading of the financial assets with initial cost *x*.

For convenience, the minus logarithm state price density process L_t is introduced:

$$L_t = -\log H_t = \int_0^t r_u du + \frac{1}{2}\int_0^t \|\theta_u\|^2 du + \int_0^t \theta_u' dW_u. \tag{9}$$

Let ξ be a positive payoff at time *T*. Denote the conditional distribution functions of ξ and L_T under condition $S_T^1 = s$ $F_{\xi|s}$ and $F_{L_T|s}$ respectively. Assume that $F_{\xi|s}$ and $F_{L_T|s}$ are continuous and strictly increasing for any $s > 0$. If *X* is defined as follows, (S_T^1, *X*) has the same joint distribution with (S_T^1, ξ):

$$X = g(S_T^1, L_T), \tag{10}$$

where

$$g(s, l) = F_{\xi|s}^{-1}(F_{L_T|s}(l)). \tag{11}$$

The next theorem asserts that X is the unique cheapest payoff among the random variables whose joint distributions with S_T^1 are same with that of (S_T^1, ξ).

Theorem 1 *Assume ξ is a positive payoff at time T, and $F_{\xi|s}$ and $F_{L_T|s}$ are continuous and strictly increasing for any s > 0. In a complete market M, the unique cheapest payoff X among the random variables whose joint distributions with S_T^1 are same with that of (S_T^1, ξ) by equation (10).*

See Takahashi and Yamamoto (2009b) for the proof. If condition $S_T^1 = s$ is not considered, the following claim can be proven. Let F_ξ and F_{L_T} be the distribution functions of ξ and L_T respectively. Assume that F_ξ and F_{L_T} are continuous and strictly increasing. If X is defined by $X = F_\xi^{-1}(F_{L_T}(L_T))$, X is the unique cheapest payoff among the random variables that has the same distribution with ξ. The next theorem asserts that the cost minimization is equivalent to an expected utility maximization. Theorem 2 in Dybvig (1988) is the equally probable finite state setting version of the theorem. To state the theorem in continuous-time framework, two additional conditions are required for the utility function.

Theorem 2 *Assume ξ is a positive payoff at time T, and F_ξ and F_{L_T} are continuous and strictly increasing. If X is the cheapest payoff that has the same distribution with ξ, then, in a complete market M, there exists a strictly increasing and strictly concave von Neumann-Morgenstern utility function $u(\cdot)$ such that (a) $\lim_{z \to +0} u'(z) = +\infty$, (b) $\lim_{z \to +\infty} u'(z) = 0$, and the dynamic trading strategy that attains payoff X is the optimal investment strategy for $u(\cdot)$. Conversely, if a dynamic trading strategy maximizes a strictly increasing and strictly concave von Neumann-Morgenstern utility function $u(\cdot)$ that satisfies conditions (a) and (b), it attains the cheapest payoff for some distribution.*

See Takahashi and Yamamoto (2009b) for the proof. This theorem supports our method theoretically. Moreover, it ensures that our method is applicable to not only hedge fund replication but also dynamic portfolio optimization in investment management.

Let us see the dynamic portfolio that replicates the cheapest payoff. Let π_t^i $(i = 0,..., n)$ represent the money amount invested in asset i at time t. n-dimensional vector π_t^i is defined by $\pi_t = (\pi_t^1, \text{L}, \pi_t^n)$, which denotes the portfolio of risky assets. Let x be the initial cost required to realize the cheapest payoff X_T for some payoff distribution. The initial cost x is invested in the financial assets by a dynamic self-financing trading strategy to generate payoff X_T. In other words, the portfolio value at time t, X_t, satisfies

$$X_t = \pi_t^0 + \pi_t'1 \qquad\qquad (12)$$

for any t. In a differential form this is,

$$dX_t = r_t X_t dt + \pi_t'(\mu_t - r_t 1)dt + \pi'\sigma_t dW_t. \qquad (13)$$

The dynamic portfolio can be obtained for the case of Markovian coefficients. (See Takahashi and Yamamoto (2009b).) This paper assumes that r, μ, σ are deterministic functions of t. By applying Malliavin calculus, the dynamic portfolio generating the cheapest payoff is obtained.

Proposition 1 *Assume that r, μ and σ are deterministic functions of t. Then, in a complete market M, The dynamic portfolio generating payoff $g(S_T^1, L_T)$ is given by*

$$\pi_t = \sigma'(t)^{-1}\phi_t, \qquad\qquad (14)$$

where $\phi_t = (\phi_t^1, \text{L}, \phi_t^n)'$ is given by

$$\phi_t^1 = \frac{\theta^1(t)}{H_t} E_t[H_T g_2(S_T^1, L_T)] + \frac{\sigma^{11}(t)}{H_t} E_t[H_T g_1(S_T^1, L_T) S_T^1], \quad (15)$$

$$\phi_t^i = \frac{\theta^i(t)}{|\Pi|} \frac{1}{H_t} E_t[H_T g_2(S_T^1, L_T)] \quad for\ i = 2, \mathsf{L}\ n. \qquad (16)$$

The interpretations for the optimal portfolio constituent factors are as follows. $\frac{1}{H_t} E_t[H_T g_2(S_T^1, L_T)]$ is

the present value of the sensitivity of the terminal payoff to the change of L_T. This quantity corresponds to *delta* in the option theory. The volume of the risky asset portfolio increases in this quantity. This factor contributes to generating the target distribution. In addition, the replicating strategy allocates the wealth to tradable assets according to the market price of risk $\theta^i(t)$. Through this operation, the cheapest strategy is realized. The second term of ϕ_t^1 is the present value of the sensitivity of the terminal payoff to the change of W_T^1. This term contributes to the generation of the dependence structure on the investor's existing portfolio.

REPLICATION OF CTA/MANAGED FUTURES INDEX

Let us replicate Eurekahedge CTA/Managed Futures Index. This paper uses the following investor's existing portfolio and reserve assets. Assume that the investor's portfolio S^1 is composed of 50% Japanese stocks and 50% Japanese government bonds (JGB). Since these assets are traded dynamically, TOPIX futures and long-term JGB futures were used as the proxies. Both of these securities are listed on the Tokyo Stock Exchange. The S&P 500 futures, NYMEX WTI crude oil futures, COMEX gold futures, and JPY against USD spot currency are used as the reserve assets. It is considered that CTAs and managed futures funds invest in these assets. All the data are obtained from Bloomberg. The log returns on futures are calculated by rolling the front contract. The front contract is rolled on the last trading day of the maturity month. Our base currency is USD. Since TOPIX and JGB futures are denominated in JPY, a currency hedge is applied. Accordingly, the log returns of these assets are adjusted by the difference between the interest rates of USD and JPY. Libor rates are used for the interest rates.

Using past data, the following procedures were performed on a monthly basis to estimate and select the best-fitted model of the target return distribution and its dependence structure on the investor's portfolio. First, the parameter estimation and model selection for the marginal distribution of monthly log returns of the CTA/Managed Futures Index are performed using the same method as with Papageorgiou *et al.* (2008). The best-fitted model is chosen from a Gaussian mixture with *m* regimes (*m* = 1, 2, 3, 4, 5) and Johnson unbounded distribution. Next, the copula model between the monthly log returns of the replication target and the investor's portfolio is estimated and selected in the same manner as that in Papageorgiou *et al.* (2008), which is based on the ranking of the time-series data. The copula is selected from the Gaussian, Student, Clayton, Frank and Gumbel.

In this example, it is assumed that the coefficients of the investor's portfolio and the reserve asset processes are constant during a month. The parameters for the investor's portfolio and the reserve assets are estimated by maximum likelihood. The daily data in the previous month are used for the estimation in order to reflect the trend-following investment strategy. Finally, payoff function (10) is replicated by dynamic replicating portfolio (14). The portfolio is rebalanced on a daily basis. The conditional expectations in equations (15) and (16) can be numerically calculated by Monte Carlo simulations with two-dimensional Gaussian distributions. Therefore, the computational burden to obtain the dynamic replicating strategy is not different from that of the one reserve asset case. For the purpose of comparison, the replication result of one reserve asset with long positions only (Kat-Palaro's method) is also shown.

Here, the reserve asset is the equally weighted portfolio of the four assets used by our method. The transaction costs are assumed to be 1 basis point for the sale and purchase of all assets.

The inception month of Eurekahedge CTA/Managed Futures Index is January 2000. The data from the first two years since inception are used to estimate the return distributions while the monthly log returns from January 2002 to October 2009 were replicated by multi-reserve assets (our method) and uni-reserve asset (Kat and Palaro's method), which is composed by the equal-weighted portfolio of the four reserve assets.

Figure 2 shows the growth of the net asset values. It can be seen that the replication by multiple reserve assets performed better than the target. However, note that the performance of the replication target is after deduction of management and performance fees, while those of replications are not. Although uni-reserve asset performed well before July 2007, it incurred a large drawdown after this period. This is because the reserve asset substantially declined but the method could not take the short position for the reserve asset. CTAs or managed futures funds attract investors because they enjoy high returns during the financial market crises. However, the replication by one reserve asset with long positions only failed to reproduce the character. On the other hand, the replication by multi-reserve assets attained near the return level to the target even under the subprime and Lehman shocks.

Figure 2: Growth of the net asset values of the target (Eurekahedge CTA/Managed Futures Index) and the replicated portfolios (Jan 2002-Oct 2009)
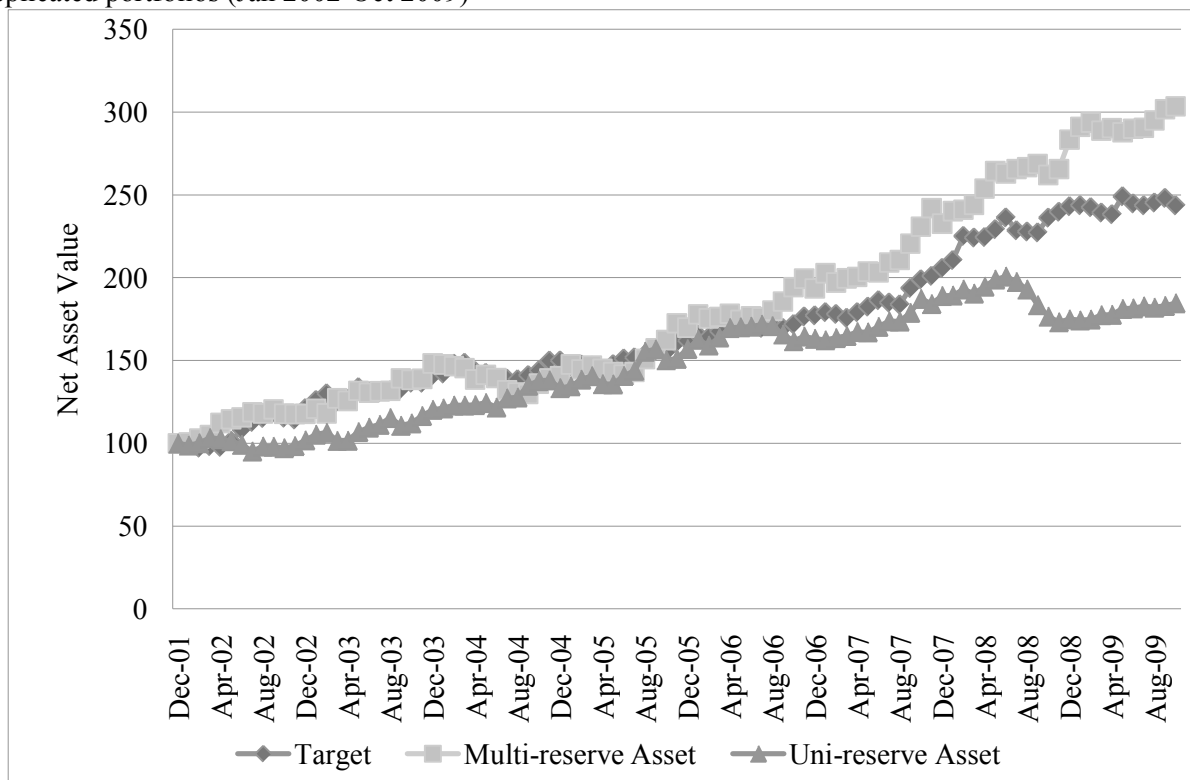
Table 1 shows the summary statistics of the target and replicated returns. As seen in figure 13, the replication by multiple reserve assets resulted in higher mean return than the target, while that by single reserve asset did not. Moreover, extension to the multiple reserve assets succeeded in replicating the positive skew and negative excess kurtosis, while one reserve asset did not. It also made the correlation with the investor's existing portfolio closer to the target. This confirms that the extension of Kat and

Palaro (2005) and Papageorgiou et al. (2008) to multiple trading assets with both long and short positions improves the performance of the replication.

Table 1: Statistics of the target and replicated log returns (Jan2002-Oct 2009)

	Target	Multi-reserve Assets	Uni-reserve Asset
Mean	0.95%	1.18%	0.65%
Std. Dev.	2.23%	2.64%	2.41%
Mean/Std. Dev.	0.43	0.45	0.27
Skew	0.34	0.16	-0.14
Excess Kurtosis	-0.06	-0.17	0.26
Correlation with investor's portfolio	-0.01	0.17	0.38

CONCLUSION

This article presented a new hedge fund replication method with the dynamic optimal portfolio by extending Kat and Palaro (2005) and Papageorgiou, Remillard and Hocquard (2008) to multiple trading assets with both long and short positions. It generates a target payoff distribution by the cheapest dynamic portfolio. It was shown that the cost minimization is equivalent to maximization of a certain class of von Neumann-Morgenstern utility functions. The dynamic trading strategy was derived analytically by applying Malliavin calculus. The method was applied to the replication of CTA/Managed Futures Index. The result showed that the performance of the replication was improved substantially compared to the one reserve asset with only long position case. Our replication method was able to obtain high returns after the subprime and Lehman shocks as the replication target while the replication based on the one reserve asset with only long position incurred a large loss during this period.

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TAX EVASION AS A CRIME: A SURVEY OF PERCEPTION IN YEMEN

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ABSTRACT

This paper measures the perception of Yemeni citizens of the severity of tax evasion relative to other crimes and violations. Perception of tax evasion may somewhat explain the degree of non-compliance with the tax laws. Using data from a self- administered survey and a personnel structured interview, the results of mean and comparative analysis show that tax evasion items were ranked as the three least crimes of 30 listed crimes. Further, Tax evasion is categorized the least serious category out of six categories. The results of this study should be useful to policy makers in Yemen and elsewhere, as it was found that there is an alarming signal that tax evasion is relatively ranked as the least serious offence, which could lead to an environment where taxpayers may not be afraid of cheating on their tax returns.

KEYWORDS: Tax Evasion as a Crime, Other Offences, Yemen

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THE ETHICS OF TAX EVASION: A SURVEY OF BACHELOR ACCOUNTING STUDNETS AT HADHRAMOUT UNIVERSITY OF SCIENCE AND TECHNOLOGY (HUST) IN YEMEN

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ABSTRACT

In the tax evasion issue, most of the studies conducted focused on the economic and public finance perspectives rather than they did it from the philosophical and theoretical perspectives (McGee, 2005). The current study is conducted to survey 86 accounting students enrolled for the academic year 2008/2009 in College of Business at HUST in an effort to examine their perceptions as to the agreement of the ethics of tax evasion. In a like manner, 86 usable surveys are received. The results of the study show that tax evasion is ethical under some circumstances. The majority of the respondents were opposed to the view that tax evasion is always or almost always ethical. But when it comes to the religious perspective, respondents indicated the point of view that, as Muslims, there is Zakat System, the Islamic system, which differs from the existing tax systems, western systems.

KEYWORDS: Ethics of Tax Evasion, Accounting Students, Yemen.

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MOVING ON, LETTING GO: AN ANALYSIS OF UK FAMILY BUSINESSES

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ABSTRACT

In business succession planning the success of the change over depends greatly on the availability of competent successors. Globally, a lack of effective succession planning is considered to be a growing problem for owner-managed businesses, largely caused by an ageing population. In the UK in particular, the number of family business closures is also increasing due to transfer failures often caused by emotional ties and a lack of forward planning. This paper focuses on identifying such detrimental effects, which afflict small family firms and are particularly noticeable during these economic times. Drawing on research completed from June-August of 2009 these detrimental effects will be highlighted through the analysis of both case studies from financial firms in the UK as well as narrative interviews with family business owners in the UK. Some initial questionnaire findings will also be provided. In addition, the findings from the research conducted will be contrasted to existing contemporary theories on family business succession. Furthermore, a map will be used to illustrate the regional perspective of the locations of the family businesses considered in this research.

INTRODUCTION

"Succession planning is all about taking the helm and setting the course for your eventual exit from the business... Failure to plan, communicate, and manage succession is the greatest threat to the survival of a business" (Weigl, 2006). Business succession planning involves planning and preparing for the smooth continuation and success of a business where the success of the change over depends greatly on the availability of competent people. The lack of effective succession planning is the biggest growth barrier faced by many firms, especially those which are owner-managed businesses hence business succession is becoming an increasingly important business development issue (Barry, 2007). This is due in part to an ageing population, with rising numbers of both SME owners due for retirement and the numbers of business closures due to an unsuccessful transfer of ownership (ONS, 2009). This suggests that many business owners leave succession planning to chance. Yet, within family businesses succession planning is deemed to be of considerate importance due to the very nature of the relationship and emotional issues involved.

This research has been carried out in Wales as Wales is a country which is often overlooked within the United Kingdom- where the focus often has a tendency to lean towards England- and given the University's position within its capital of Cardiff it seemed an obvious starting point for this study. According to DTI data there are over 675,000 small-medium enterprises (SMEs) in London alone (DTI, 2006). Latest figures show that within Wales there are 188,900 employing 581,300 people and generating some £36.5bn in turnover (Hamilton, 2009). Unsurprisingly, Cardiff has the highest number of SMEs within Wales and around 75% of Wales' businesses are run by members of the same family (Size Analysis of Welsh Business 2006), (Miloudi, 2009).

Family businesses are considered by many to be "at the cutting edge of corporate performance, job creation, wealth creation, return-on-investment, quality of product and service, flexibility, customisation capacity and speed to market" (DIFC, 2008, p3). However, they are equally well known for their vulnerability to decline and death beyond the founding entrepreneurial generation, and in my interviews I have noted the use of the popular phrase "shirt sleeves to shirt sleeves in three generations" (Bennett, Interview, 09/2009). The underlying circumstances contributing to their continued survival, health and

growth potential, or to their decline and demise, have, consequently been subjects of increasing concern and research efforts.

This paper will proceed by discussing literature which both defines succession planning and the challenges which are posed by it as well as looking at why family firms fail and thus how the problems associated with succession planning can be addressed. This will be followed by a discussion of the methodology applied to this study and after this analysis will be made of both the interviews carried out and some early questionnaire data. Subsequent to this data analysis will be the findings and finally, succeeding this, the paper will end with the conclusions of this research study to date.

LITERATURE REVIEW

Succession planning can be described as a process through which firms plan for their future transfer of ownership. This occurs when the owner of a company wishes to leave the firm, usually to retire, but wants the business to continue. As stated by Rothwell, succession planning can be classed as any effort which is designed to ensure the continued and effective performance of an organisation, division, department or work group by making provision over time for the development, replacement and strategic application of people in key positions (Rothwell, 2005). This exit can be achieved by transferring ownership to members of the owner's family, to employees of the company or to external buyers. Succession planning is generally considered to be a unique, case-by-case process, where a one-size fits-all mentality is simply not appropriate (Sambrook, 2005). A properly planned and executed succession plan can deliver significant benefits for the owners of a business in terms of maximisation of shareholder value through effective tax planning and a smoother transition of ownership which minimises disruption to the business.

Gallo (2000) considers business culture an important element of the family enterprise. From his perspective, a firm can be considered a family business when both the family and the business share their assumptions and values. It is reasonable to assume that owners or managers who regard their enterprise as a family business are highly likely to be attentive to issues and opinions of family members, as well as meeting the needs of those family members (Aronoff & Ward, 1995). Inherently, the intersection of ownership, management and family found in family businesses creates challenges for succession, for example, the state of trust and harmony within the family at the time of succession may complicate the transition process (Handler, 1992). In addition, business factors such as previous experience with the handling of succession and the influence of a board of directors have often been highlighted as elements which will affect family business succession. The family business can often be conceptualised by using three interlocking circles as a representation of family, business and individual. Due to the fact that these circles often have different primary orientations, the challenges facing a family firm often derive from the challenge of managing the overlap of these circles (Bork, 1993).

In the context of family businesses succession planning is considered to be very important as the survival rate of family firms is very low compared to that of non-family firms (Ibrahim et al., 2003). Incumbent leaders of family businesses can exert a great deal of control over the process of succession within the company but there is often an unwillingness to cede this control. It is suggested that this can be due to a psychological loss, which those in positions of work leadership often experience when they reach retirement, in the sense that their work role has afforded them a level of admiration and respect that they may well not then be able to recover elsewhere. In family businesses, the emotional burden of choosing a successor from their own offspring can also play a part in the delay of planning for business succession (Sten, 2004). As is the case with many family businesses, the incumbents will rely heavily on income from the business to fund their own retirement and therefore they may choose not to progress with succession if they are of the opinion that the business cannot function without their presence. In most businesses, successors gain control and authority through experience and their demonstrated competence

however, in family run businesses it is more a case of taking into account the extent to which the successor is prepared to take over. Effective successors have a more positive attitude about the business than non-effective ones (Goldberg, 1996).   A typical family business scenario is often shown as the following: The family patriarch founded the business, the second generation then grew the company, and the third generation lacked the initiative as the tough part had already been done. This third generation almost has a 'silver spoon' problem where passion, energy, drive and perhaps even interest in the business are lacking by this time. Sten found that while most founders of family businesses still wish to transfer ownership to the next generation, the descendants increasingly wish to sell the business to a non-family member to relieve the pressure on them (Sten, 2004).

That said emotional ownership is the critical pathway between the next generation and the family business. People feel it but it is both hard to measure and to define; a starting point is human psychology for the 19th century psychologist William James discussed the instinct of ownership is fundamental in man's nature and that in a healthy growing family it is normal for the children to have a sense of 'owning' their family and that which it possesses (James, 1890). This is recognised as the default condition but the question posed here is does this extend to owning a family business? The instinct of ownership is easily disturbed and this is considered to be especially true when that ownership relates to a business; Emotional ownership towards a business has to be built in the first place and hence families have to take the right measures to create and sustain this emotional ownership, or they have to foster the conditions under which it will grow naturally (Northup, 2004). It is defined as a sense of closeness and belonging to the family business – what psychologists call 'attachment' and it penetrates below the surface of the mind into the identity of the person who experiences the emotional ownership (Nicholson, N. & Björnberg, Å., 2008). Hence, it is something to do with the subject (the next generation family member) as well as the object (the business). It captures the idea that the business is, in some sense, part of who you are as a person- this is what psychologists refer to as 'identification' (Nicholson, N. & Björnberg, Å., 2008).

In brief, the main questions for a succession plan are: who will lead the company? Who will buy out the retired or deceased partner? In the case of a family business there is also a decision to be made as to whether the successor will come from within the company or from within the family? On the one hand capable 'insiders' hold the advantage of knowing the capabilities, weaknesses, and culture of their company; They understand how things are carried out and who can complete the task at hand effectively. If they are plausible candidates for the position of CEO, then there will be a large cohort of other executives who will support them and help them to succeed. However, the downside is that as 'insiders' they are rarely able to see how much change will be needed to gain advantage in the future. Where internal succession occurs, family members usually have a similar lifeworld, worldliness or set of experiences; which is often seen to simplify the communication processes and enhance trust building (Orgplus, 2008). However when dealing with the succession issues within any family business, it is useful to remember the phrase 'acorns seldom flourish in the shade of great oaks' (Karlsson et al 2008) as the founders of the business can often be found guilty of overshadowing any new management. It therefore seems reasonable to argue that family members or internal family successors have advantages compared to outsider successors with regard to knowledge elements and transfer costs but a potential problem is that an inside-family successor may not possess the capabilities, competencies, and talent to manage the firm adequately (Rawls, 2007).

Often the relevance of the experiential knowledge is so central that such firms die when no offspring is ready to take over (Stavrou, 1999). It may also be difficult to take an 'outsider' as an employed successor if this 'outsider' has not already worked in the firm and thereby achieved the status of a quasi-family member (Tian, 2007). One other common reason given for turning to an outsider is that a company has grown beyond the scope of its top executives' leadership experience. Another side to the argument is that these so-called 'outsiders' have the beneficial advantage of a clean slate. That is to say, they are not invested in any of the arrangements that they will inherit. They recognise that change is needed because

that is almost always the mandate that they receive from the Board that hired them (Bower, 2007). The unfortunate fact is that some 'outsiders' are not familiar with the company's industries, its competitors, or its key technologies. It is often the case that they do not understand the people of the organisation well enough to calibrate what they have to say and it may take years for them to gain that valuable knowledge.

More than 20 percent of all CEOs are brought in from outside the company, despite the fact that in North America and Europe, outsiders, on average, underperform insiders. (Karlsson et al 2008). For the ten years studied, companies in Europe headed by outsider CEOs underperformed regional market returns by, on average, 2.2% (Karlsson et al 2008). Europe also led the world in CEO turnover in 2007 with an overall rate of 17.6 % compared with 9.1% for the rest of the world (Karlsson et al 2008). Of the 17.6%, 5.8% were classed as forced successions in Europe which means that 37% of all European successions were forced (Karlsson et al 2008). The most promising potential CEOs are those who can combine the 'insider's' deep knowledge of how the company works with an 'outsider's' ability to sense external change and understand the problems the company faces and the consequences of ignoring them. Bower uses the term 'inside-outsider' to describe someone who has grown up in the organisation but has retained their objectivity and developed the strategic perspective necessary to drive the change (Bower, 2007) .This means that they are able to see the magnitude of change needed, and because they are in a sense 'insiders' to the business that they have a real chance of success as they already know the people, systems, culture and assets of the company.

The oldest family business in the world is Houshi Onsen, a hotel and spa business based in Japan which was founded in 718 and is currently in its 46th generation of management (Offner, 2009). That said, Japan's family businesses in general have a longer life span than those in many other countries; as many as 100,000 Japanese businesses are more than 100 years old, and nearly 100 are more than 600 years old, according to some estimates (Kristie, 2008). One reason for this may not only be the long-term orientation of these businesses but also the clear preference for internal successors or at least quasi-family members, such as sons-in-law who are transformed into family insiders. Expanding on Bower's theory, quintessentially the transformation of an outsider into an insider substitute would require an understanding of all stakeholder relationships and internal firm processes. To acquire this idiosyncratic knowledge, the external successor needs time, but work and industry-specific experience could accelerate this process hence, unsurprisingly it is family firms which seem to be especially profitable in sectors such as construction or different kinds of craft (Colli, 2003). This agrees with the idea that succession in the family firm may be considered a form of knowledge transfer (Cabrera-Sua´rez et al, 2001).

A question often asked is why do so many family firms fail? Its answer may lie in the correct identification and utilisation of their tacit experiential knowledge. Conceivably in some cases an individual is selected who has the correct knowledge but is relatively unaware of the reasons for her or his succession or perhaps is unaware of how to utilise this knowledge to full effect for the benefit of the business. This ongoing lack of awareness is then further compounded in subsequent successions. An early level of exposure to the business is needed in order to allow the potential successor to establish relationships with key suppliers, customers and lenders; to build credibility within the company; and to understand the culture and intricacies of the firm (Lansberg & Astrachan, 1994). If the potential successor is exposed to the business too late, then these aspects may be lacking thus preventing a successful succession from taking place. According to CEO Succession 2007 – the Performance Paradox, insiders perform better than outsiders, for total shareholder returns for insiders were 3 percent above the regionally adjusted market returns per year during their tenure, whereas outsiders' adjusted returns were 1.4% lower (Karlsson et al 2008).

A recent analysis shows that one quarter of family firms surveyed globally (PricewaterhouseCoopers) expect to change hands within the next five years and, of these, more than half expect to remain in family hands. Of the 55% of companies with a succession plan, some of the most important details had not been

worked out (PricewaterhouseCoopers, 2008). For example, 48% of companies with a succession plan are yet to choose a successor. The global picture is similar to that of the UK with 28% of companies expected to change hands in the next five years, of which 44% are expected to stay in the family (PricewaterhouseCoopers, 2008). In the UK, 47% had a succession plan in place, but of those, only 30% had chosen a successor (PricewaterhouseCoopers, 2008), and in a separate survey by Bibby Financial Services, over 38% of SME owners in the UK admit that the likelihood is that when they finish their business will close down (Auxesia, 2007). Fascinatingly, the survey from PricewaterhouseCoopers also shows that UK companies are somewhat more open than their international peers with regard to bringing in senior management from outside; and a third of those with succession plans expect key senior roles to be appointed from outside the family, as opposed to 17% globally (PricewaterhouseCoopers, 2008). Globally, figures estimate that over 50% of people are employed in family businesses with one in four family businesses, in both the private and public sectors, expecting to change ownership in the next 4 years and 44% of those that are expecting to change ownership in the next five years also have the intention of passing their business on to the next generation in the family (PricewaterhouseCoopers, 2008). Recent DTI figures show that only around a third of family firms are passed onto the second generation and just a tenth actually reach the third (KPMG, 2009). There is a long history of great family businesses which have failed as a result of sleepwalking into succession. There is a paradox here for the mere fact that a business is family controlled can be both its primary strength and its principal weakness or put differently, a family business has its own unique strengths and needs (Drucker & Landman, 1990).

By comparison, in the United States almost 60% of all majority shareholders in family businesses are aged 55 or older (30% are 65 years old or older) yet less than 30% of these have succession plans and less than 40% have a successor in mind (O'Brien, 2007). Some 25% are of the opinion that the next generation is not competent enough to take the reins. Family-owned businesses, both publicly and privately held, account for about 85% of all US businesses and generate approximately 64% of America's gross domestic product (O'Brien, 2007). Most of these family businesses fail to address succession until they are forced to when, for example, an owner falls sick or they receive a third-party buyout offer and even though numerous models exist to help guide families through the succession process there appears to be little consensus on a universal approach to the situation. The U.S Trust, Bank of America Private Wealth Management sponsored a survey called "Protecting the Family Fortune" which examined the wealth planning strategies and practices of extremely affluent global family business owners which found that while three-quarters of family businesses valued at $300 million or more had succession plans, only 38% had actually implemented them (Prince & Associates/Campden Research, 2008).

As the global workforce ages and the skills gap increases, increasing attention needs to be paid to establishing and maintaining effective succession planning programmes within family enterprises. If organisations are to establish and sustain systematic efforts a practical approach is required to ensure that the right people are in the right place at the right time, doing the right things to achieve the right result; people need to see that succession planning is a part of life. Plant the seeds of new hires, but reap the knowledge and experience of experienced workers (Fenner 2008).

METHODOLOGY

There are 4.3 million SMEs in the UK with 3.8 million of them located in England (DTI, 2006). Almost a third of these, 32%, are situated in London and the South-East- with each of these areas housing over 675,000 businesses (DTI, 2006). In comparison, there are 188,900 SMEs within Wales; employing 581,300 people and generating £35.8bn in turnover (Hamilton, 2009). Cardiff has the highest number of SMEs within Wales, with 19,700 SMEs in total (Size Analysis of Welsh Business, 2006). This can be broken down into 18,300 micro enterprises, 900 small enterprises and 500 medium enterprises, all of which are the highest in Wales for each category (Size Analysis of Welsh Business, 2006). In order to put this into context, the next highest number of SMEs by region within Wales is in Powys, which has a total

of 15,600 enterprises (Size Analysis of Welsh Business, 2006). Broken down into the subsequent categories, Powys has the second highest number of micro enterprises with 15,100, while Flintshire has 500 small enterprises and Flintshire, Swansea and Rhondda Cynon Taf have 200 medium enterprises each (Size Analysis of Welsh Business, 2006). Around 75% of Wales' businesses are run by members of the same family (Carter, 2009).

The decision to carry out this study stemmed from previous research which stated that while family succession is often the owner's ideal, the reality is that many end up as transfer failures hence it is becoming increasingly rare for these businesses to be passed on to the next generation; approximately only 24% survive through to the second generation and only 14% make it beyond the third (Leach & Bogod, 1999).

In order to effectively carry out this study I took a sample of 430 family firms and proceeded to carry out both semi-structured and narrative interviews to allow me to find out more about the businesses and how they are run and especially in the case of the latter technique to encourage the narrator to tell their story – from how they came to be a part of the business to where they see themselves in the future and perhaps even how they envisage the final chapter and the role that they will have to play. To start this process, I used the Corpfin database which is available to me and which I can readily access over the internet to find my initial companies by carrying out a basic search which allowed me to set the location and age of director. I chose to use this over other options available to me as I find it more efficient and user friendly than other providers of Companies House data such as FAME. I then started out with some semi-structured interviews with companies that I was already familiar with in order to find out the methods which best suited my research. Although these worked initially they became more of a marker for a later stage as they allowed me to discover that given the notion of emotional ownership as discussed in my literature review, a narrative interview technique would work more effectively when I wanted the interviewee to open up about their business and tell me their own individual story.

These narrative interviews followed on from a postal questionnaire which I also carried out as part of this study using the 430 companies found through Corpfin and from those surveys (130 thus far) which were completed and returned to me I was then able to make further contact with the firms which were happy to participate in my narrative interviews as they had left me their contact details for this purpose. Primarily, with this type of interview, the researcher needs to familiarise him or herself with the field and in my case the secondary research completed with regard to my literature review and the primary research already carried out- that is to say the responses gained through my questionnaires- as well as the individuals' own initial responses to the questionnaire- have already allowed me significant insight into the situation at hand. When using this technique, it is important to always remember that it is the respondent who controls the structure, length and content for they are the ones painting their own picture.

ANALYSIS

For the analysis of my data, I transcribed the 15 interviews and I have used NVIVO 8 software in order to derive concrete conclusions from my study by using the methods of grounded theory. The phrase "grounded theory" refers to theory that is developed inductively from a corpus of data. This means that when completed the resulting theory should fit at least one dataset perfectly. This contrasts with theory derived deductively from grand theory, without the help of data, and which could therefore turn out to fit no data at all. This form of theory takes a case rather than variable perspective which in part means that the researcher takes different cases to be wholes, in which the variables interact as a unit to produce certain outcomes. A case-oriented perspective tends to assume that variables interact in complex ways and part and parcel of the case-orientation is therefore a comparative orientation. Cases similar on many variables but with different outcomes are compared to see where the key causal differences may lie.

Grounded theory was appropriate for my analysis as given the nature of the discussion it was feasible that a clear structure would appear with issues such as "insider", "outsider", "passing on the mantle" and "shirtsleeves to shirtsleeves"), being considered on several occasions (Richardson, 2009), (Bennett, 2009), (Cunningham, 2009). Open coding is the part of the analysis concerned with identifying, naming, categorizing and describing phenomena found in the text. Essentially, each line, sentence, paragraph etc. is read in search of the answer to the repeated question "what is this about? What is being referenced here?" I found it important to have fairly abstract categories in addition to very concrete ones, as it is the abstract ones help to generate general theory. Axial coding is the process of then relating these initial codes (categories and their properties) to each other, via a combination of both inductive and deductive thinking. To simplify this process, rather than look for any and all kind of relations, grounded theorists emphasise causal relationships, and fit things into a basic frame of generic relationships. I have done this and as I have worked through the interviews the relationships have made themselves clear. Selective coding is then the process of choosing one category to be the core category, and henceforth relating all other categories to that category. The essential idea is to develop a single storyline around which everything else is draped; there is a belief that such a core concept always exists (Strauss and Corbin, 1990). In addition to this, the succession planning questionnaire was analysed using SPSS 16.0.

FINDINGS

In my analysis of these interviews, I have been able to deduce from my findings that there are similar themes that run as constant threads throughout. Given the current economic situation it is not surprising that the current recession plays a part in much of the analysis alongside the perhaps less obvious problem of companies growing too large to remain wholly within family hands and so needing an outsider's interception. As expected, some of the issues with succession seem to stem from a lack of communication between both the family members and the next generation and an outcome of this is that it can become a source of conflict with regard to ownership issues moving forward. On the other hand, there are instances where the next generation has clearly communicated that they do not wish to continue within the family business and that their interests lie elsewhere. The case studies have illustrated that issues of emotional ownership and owners not wanting to let go or to cede control of their business are prevalent and they tie in to the beliefs and trends shown in family business literature which I have researched. Previously, it has been shown that globally 44% of the family businesses expecting to change ownership in the next five years also intend to pass their business on to the next generation in their family (PricewaterhouseCoopers, 2008). However, interestingly, from my research it seems that more and more family businesses are realising that the next generation do not necessarily wish to take on the mantle of running the business.

> *"I have a lazy lazy son who is not going to do anything with the business side of the business he has never shown any interest in it"* (Bennett, 2009)

Instead, they are looking outside of the business or in some cases grooming non-family members in the route to succession for the benefit of the continued success of the enterprise; which links to Goldberg's views on effective successors (Goldberg, 1996). External factors are seen to play a part here for given the economic situation many feel that their businesses can no longer be seen as safe and so they need someone who is competent enough to carry the business through the current challenging conditions.

> *"...until I joined the business there was, as with many family businesses, a 'we cannot do it because we are too scared to do it' attitude, so I think I have dragged them through this and shown them that if we do this, and they do trust me then we will see the benefits, so I think there is a mutual trust both ways between the family and the outsider, which is me, and they have stuck with it even when they have not liked it, but dragging and screaming, they have got there and they are getting the benefits of it.* (Richardson, 2009)

Initial findings from my questionnaire data have shown me that 57% of the companies surveyed are less than 25 years old with a mere 8% being more than 100 years old. From the point of view of business succession, of the 10% in the 26-50 year old bracket, only 40% have planned to transfer the business with the number increasing to 50% for those in the 51-100 year old category.

Figure 1: Relationship between the length of family ownership and transfer plans
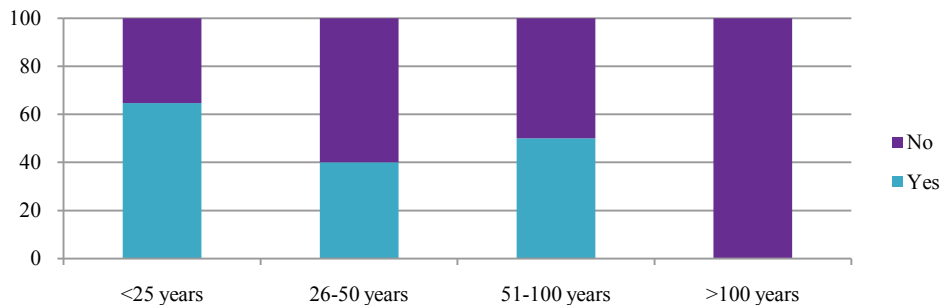
Figure 1 shows the relationship between the length of time a business has been owned by the family and whether or not the family have planned for the transfer of their business. These results have come from my postal questionnaire data

In reality, many of the companies who say that they have already planned for succession have only done so by means of hypothetical discussion, 50% with 44% having a formal plan that is to be actioned in the future and 6% only even considering this form of planning in response to a recent offer for their business. The likelihood of these businesses transferring in the foreseeable future is outlined in Figure 2 below, with many saying that they will only pass on the business outside of the family if there are no family members willing to take over. It should be noted that the economic downturn has had its part to play with 34% of those surveyed saying that it has decreased the possibility of them transferring the business.

Figure 2: The likelihood of shareholders transferring the business in the next 2-5 years
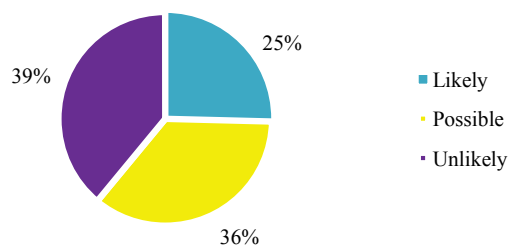
Figure 2 shows the likelihood of shareholders transferring the business within the next 2-5 years regardless of whether they have actually planned for the change or not. These results have been drawn from the data in my postal questionnaire.

CONCLUSION

Patterns have emerged from these analyses which show that clear comparisons can be drawn between my literature and primary research as regards passing a business on to the next generation. Whereas in the past, businesses have been handed on with little regard for the successors true wishes – the idea that the family business was a legacy which had to be preserved – family firms, in Wales at least, seem to be more inclined to look at the right option for their business even if this means bringing in outsiders. In some instances this could be shown to be as a result of emotional ownership with the 'father' of the business wanting to ensure that the business remains 'healthy' in the years with the realisation that for the firm to follow the family line is not always the best solution (Bennett, 2009).

It would be interesting to see the results of a similar study pertaining to other countries of the UK in order to establish which of the issues highlighted in my literature review are most prevalent and whether it varies by region.

BIOGRAPHY

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TACKLING THE CHALLENGE OF INTERMEDIATE SKILLS SHORTAGE THROUGH OCCUPATIONAL LEARNING: LESSONS AND EXPERIENCE FROM A DEVELOPING ECONOMY

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ABSTRACT

South Africa was besieged by an apartheid regime, separating communities across racial and ethnic lines. This system of governance caused incalculable damage to the general education and training systems. The colour bar perpetuated during this period meant that there was no point in training Africans as artisans or professionals and it was statutorily illegal to award apprenticeship to Africans. The education system was fragmented; the training system was decentralized and un-integrated. This paper outlines and presents the newly introduced Occupational Learning System (OLS) in South Africa. This system is aimed to integrate education and workplace training. It is important to note that an education and training system that does not serve the needs of the business world is irrelevant, no matter how much else it can do. This is not because the interests of business are paramount, but because unemployment and poverty can only be solved by better employment prospects. The paper describes the components of the OLS and how this system can address intermediate skills problems in South Africa. Furthermore, the paper dissects the quality assurance (QA) regime and recommends suggestions for the successful implementation of OLS in South Africa.

KEYWORDS: Occupational learning system, skills development, quality assurance, education, training

INTRODUCTION

The year 1994 marked a watershed and complete revolution to the marginalised and discriminated communities in South Africa. Subsequent to this revolution, the country still faces deeply rooted social and economic problems; it has to reduce the levels of poverty and unemployment; it has to restructure the education and training systems and; it has to achieve employment equity and black economic empowerment targets at a rate which is faster than the slow and informal pace at which experience is normally accumulated for progression at work. In order to effectively deal with these problems, the country cannot wait for new generation of learners to progress at a measured pace through formal education and training (Vorwerk, 2005: 2). Innovation is required to tackle these problems. South Africa has introduced a new system of skills development called occupational learning.

The Occupational Learning System (OLS) was brought about by the latest edition of reforms in skills development policy, an ongoing project in the post-democratic South Africa. This new approach is aimed to integrate South Africans who have been disadvantaged by politics, financial constraints or social pressure into a learning system that accelerates the redress of past unfair discrimination in education, training and employment opportunities; and thereby contribute to the full personal development of each learner and the social and economic development of the nation at large (RSA, 1995:1).

The recently enacted Skills Development Amendment Act (RSA, 2008a) ushered this new system of occupational learning in South Africa. This innovative way of learning was triggered by increasing pressure to integrate education and workplace training, something that proved difficult to achieve during the first two phases of the National Skills Development Strategy (NSDS). According to Bird and Heitmann (2009: 6), the NSDS was a closed system, whose implementation reach was circumscribed by

the scale of levy funds collected and the inability of these funds to reach those public providers principally responsible for training in many of the critically scarce skill areas, such as engineers. On the reverse side, public provision was still predominantly supply-led, without nuanced leavers to respond to demand. The disarticulation between the two had also hampered the delivery of apprenticeships resulting in a critical shortage of craft skills. The result was that key skill needs, including those for social development (such as civil engineers for local government) were being critically 'under-supplied'.

Furthermore, there is clear evidence of a systemic disconnect between education institutions and training programmes on the one hand, and employer expectations or labour market needs on the other (Vorwerk, 2005:9). This disconnect requires that systemic linkages be developed between the labour market and further and higher education in order to address the issue of scarce skills and unemployment successfully. The linkages would enable the learning system to collect and provide information on skills needs, on changes in occupational profiles, and on the requirements for new occupations. If the information on the changing needs of the labour market is provided to education and training institutions, they would be in a better position to align their programmes with labour market needs, and the education and training provision then become more responsive and relevant to the labour market. It is mainly for this reason that the OLS was conceptualised.

The OLS is a new approach to skills development focusing on job-related qualifications. However, in the post-democratic South Africa, the first major attempt to redesign learning to make it more relevant to the needs of workers and employers was legislated in 1995 with the repealed South African Qualifications Authority Act. This ushered the National Qualifications Framework (NQF), and was followed later by a set of skills development systems and structures broadly guided by the NSDS. Despite the NQF, the NSDS, large budgets and the hard work of many people, South Africa still finds itself unsuccessful in meeting its need for skilled workforce, its need to transform that workforce, and the need to provide basic services to its people (NSDH, 2009: 221). The next section outlines the components of the OLS.

COMPONENTS OF THE OLS

The OLS in South Africa consists of several elements, namely:

A) The Labor Market: South Africa's labour market has undergone a transformation since 1994, with an emphasis being placed on strategies that eliminate the labour inequalities of the past and improve general working conditions for all South Africans. This labour market is characterised by an oversupply of unskilled workers and a shortage of skilled ones. It is where the demand for skills comes from, and it is an end point for occupational graduates. It is a valuable source of information that provides insight to role-players regarding the decline of certain occupations and changing skills needs within occupations. All this information provides important signals that role-players must take into cognizance if they are to invest in relevant learning opportunities.

B) Reporting system and framework: These systems and frameworks are essential to capture accurate, real-time data from the labour market and report on it in a language and format that facilitates the design and improvement of appropriate learning solutions (NSDH, 2009: 228). The following are the system and framework for labour market data management.

1-Employment services for South Africa (ESSA): Employment Services South Africa (ESSA) is an application deployed by the Department of Labour that aims to facilitate employment. All employers and private employment agencies are required daily to register job vacancies with ESSA as and when they arise. Potential employees can register and search for job opportunities. Placement of individuals is also managed through the application. As part of its mandate, ESSA also has the responsibility to consolidate sector based information coming from Sector Education and Training Authorities (SETAs) which is itself

consolidated from individual workplace skills plans of organisations belonging to each sector. For example, in the banking sector, each bank will provide skills development information on its workplace skills plan that is submitted to BankSETA and thereafter, BankSETA consolidates the information for further referral to ESSA.

2- Organising Framework for Occupations (OFO): The OFO is a skill-based coded classification system, which encompasses all occupations in the South African context. It is built on similar principles to those of the South African Standards Classification of Occupations (SASCO), familiar to all players through its use by Statistics South Africa (Stats-SA) in October Household and Labour Force Surveys. It is a framework for categorising all occupations and groups of occupations from entry level to advanced levels of competence and its purpose is to enable labour market dialogue through the establishment of a common language for talking about skills demand and supply. This framework is cross-sectional so that snapshots of occupational supply and demand can be analysed at a national level. It clusters specialisations within an occupation, which allows broad occupational problems and solutions to be more easily identified and understood. The classification of occupations is based on a combination of skill level and skill specialisation, which makes it easy to locate a specific occupation within the framework. Skill is used in the context of competency rather than a description of tasks or functions. The skill level of an occupation is related to competent performance of tasks associated with an occupation. Comparison therefore can be made between the skill level of an occupation and the general education level associated with that occupation on the NQF as well as with the entry, intermediate and advanced levels referred to in the NSDS, as illustrated in Figure 1 below.

Figure 1: How the NQF links to the NSDS and OFO

The skill level of an occupation is a function of the field of knowledge required, tools and equipment used, materials worked on, and goods or services provided in relation to the tasks performed. Based on skill level and skill specialisation, occupations are divided into Major (one digit), Sub-Major (two digits), Minor (three digits), and Unit (four digits) groupings. Occupations (six digits) are subdivisions of the unit groups and are further detailed through specialisation and alternative occupational titles. The OFO indicates that detailed level of specialisation by the use of the singular form at the occupation level whereas all other groupings (Major or Units) are expressed in the plural.

C) Planning and management systems These systems are used to interpret the information gathered and structured by the reporting system and frameworks so that matching learning intervention can be designed (NSDH, 2009: 228).

1. National Occupational Pathways Framework (NOPF): The NOPF is used to take the analysis provided by the OFO data and translate it into appropriate skills development strategies and interventions. While the OFO interfaces with the labor market and helps to provide an understanding of occupational changes in the labor market, the NOPF interfaces with the NQF and seeks to respond to the patterns and trends with matching skills interventions. The NOPF is a mapping of the OFO data onto NQF levels, and the clustering of skills related occupations, so that vertical progression (within occupations) and horizontal progression (across occupations) can be achieved easily. It allows for the simple translation of the data from the ESSA into appropriate skills development strategies and interventions.

2. Occupational Qualifications Framework (OQF): This is a new sub-framework within the NQF that provides a structure for designing, delivering and assessing learning that is highly responsive to the needs of workplaces and the social development sector in contrast to the other two qualification frameworks, which are focused on learning for foundational knowledge and skills, and academic or discipline based knowledge and research. The OQF covers all NQF levels with regard to all occupational qualifications and related skills sets. Refer to Figure 2 below.

Figure 2: How the NQF links with the OQF

Source: SAQA

3. Sector Skills Plans (SSPs): All SETAs are by law required to develop sector skill plans (SSPs) outlining their skills priorities and possible interventions to achieve these skills. SSPs combine the skills plans and training reports of individual member organisations within their sectors, consolidate them into a sectoral snapshot and add research to arrive at a strategic skills development plan for the various SETAs. This includes an analysis on skills supply, skills demand, critical and scarce skills, and challenges and opportunities that lie ahead.

D) Learning systems: These are used to take the data on skills needs and develop appropriate learning solutions to match them and they include the following:

1-Quality Council for Trades and Occupations (QCTO): This is a quality assurance and standards setting body responsible for occupational qualifications. It assumes overall responsibility for the quality assurance functions that were previously given to SETA Education and Training Quality Assurance (ETQAs) bodies and professional bodies ETQAs, and may delegate some of these functions back to SETA quality assurance divisions. This body must collaborate with the other two quality councils so that learners can move across the three sub-frameworks of the NQF. The primary function of the QCTO is to establish and manage its sub-framework (the OQF) to ensure quality in the design, and development of occupational qualifications, and the delivery, assessment and certification processes required to develop occupational competence. Both functions must be met in support of labour market skills needs. The other two quality councils are Umalusi (for General and Further Education and Training) and Council for Higher Education (CHE) as indicated in Figure 2 above.

2-Communities of Expert Practice (CEP): These are groups of expert practitioners who are currently practicing in occupations and who will be convened to contribute to the development and quality assurance of occupational qualifications. Practitioners are involved in the quality assurance and standards setting responsibilities of the QCTO in order to ensure that occupational qualifications remain relevant and responsive to the labour market skills needs. Working jointly with skills development providers and facilitators, they design and develop occupational qualifications, curricula and qualification assessment specifications. They replace the Standards Generating Bodies that were central during the first NQF. Practitioners participating in these processes must be knowledgeable about the current practice of their occupation.

3-Occupational Qualification: An occupational qualification is a work relevant qualification, which encapsulates the response of the OLS to the labour market needs. It represents the achievement of a planned combination of learning outcomes, which is intended to provide qualifying learners with the applied competence to practice an occupation and to provide a basis for further learning. This qualification is designed by expert practitioners currently practicing the occupation and is registered with the NQF. It combines knowledge, practical skills and work experience skills into a meaningful, integrated description of what it means to be competent in an occupation. It contains more detailed information relating to curriculum, delivery and assessment than previous kinds of NQF qualifications and therefore promotes a more consistent and credible kind of qualification.

There are two types of occupational qualifications issued in the OQF, namely, National Occupational Awards and National Skills Certificates as provided in Figure 2 above. The National Occupational Awards certify achievements in terms of competence related to a specific occupation, for example, Ships Master – specialisation "Harbour Pilot." People with a National Occupational Award must have experience working in the occupation and proven competent in its workplace experience component, as well as its theory and practical components, in order to get the qualification. The National Skills Certificates certify a distinct occupationally related set of skills, for example, National skills certificate - Manage Loan Portfolios level 4.

Each of these qualifications must reflect three modes or forms of learning:

- the acquisition of general knowledge and theory (plus specialised and contextual theory and knowledge)
- the acquisition of general and occupationally relevant practical skills, and
- the requisite work experience in an occupationally relevant context.

THE NEED FOR AN OLS IN SOUTH AFRICA

The OLS is an important vehicle to tackle the chronic skills shortage besieging the South African economy. Attempts were made to address the skills problem since the dawn of democracy in 1994. Various interventions in the form of policy fundamentals were formulated and implemented, with some limited success recorded. There had been widespread challenges that were encountered in the quest to enhance skills development in South Africa.

For example, under the previous NQF dispensation, most employers felt that they were just being saddled with additional bureaucracy and red tape requirements. SETA administration was reportedly slow and complex, resulting in most employers being discouraged from participating in learnerships because of the slow rate of certification and grant payment processes. For those employers who did participate, there was often a frustration of graduates not possessing the competence needed in the workplace yet having their expectations raised about promotion opportunities and increased wages (NSDH, 2009: 229).

Kraak (2008: 11-16) also identified some of the problems that constrained the implementation of the new Skills Development framework and integration of education and training during the previous NQF dispensation as follows:

- Since the key element of the new education policy discourse was the idea of a single, unified and integrated regulatory system of education and training, the reality is that the integration of education and training has never really occurred. There must be one integrated framework for academic, vocational and occupational learning. This framework is necessary to bridge the traditional divides between education and business, between academics and trainers, between theorists and pragmatists, and between discipline-based learning and skills development.
- Sector agreements between SETAs, FET colleges, higher education institutions and employers were seen as crucial mechanisms for implementing the NSDS. Poor progress in this area has been recorded. This poor record is indicative most strongly of the failures of a truly integrated commitment to education and training in South Africa.
- Capacity problems stumbled the new skills development regime from effectively managing and steering a large new institutional assemblage comprising SETAs, National Standard Bodies (NSBs), Standard Generating Bodies (SGBs), and Education and Training Quality Assurance Bodies (ETQAs). Evidence also emerged in some sectors of an undue involvement of SETA boards in the day-to-day management of SETA work (Grawitzky, 2007: 28). In some cases, SETA ETQAs and SGBs ran into problems with the Council for Higher Education (CHE) when trying to design and accredit learning programmes above NQF level 4, with the CHE not recognising them. This created a glass ceiling for workers who found that they could not easily progress beyond the FET sector.
- A myriad of operational problems have also bedevilled the SETA structure. For example, many SETAs have suffered from very high staff turnover, especially at senior levels, and this has affected morale and institutional capacity. Some SETAs have had three to four Chief Executive Officers (CEOs) in the first five years of their existence (Grawitzky, 2007: 31).

All these challenges have inevitably informed the conceptualisation of the new OLS. The OLS approach to learning targets work relevant learning that is simple, flexible and of high quality. It puts the labour market at its centre, and places a high priority on reducing unemployment and poverty by equipping people with economically valuable skills. The OLS brings a much tighter link between skills demand and skills supply, involve professional bodies and practicing experts in the design of learning solutions, maps out clear career path options and matches one qualification to each occupation.

QUALITY ASSURANCE IN OLS

The quality assurance system for OLS should cut across all the components of the system. These include, amongst others, the labour market research, analysis, needs identification, monitoring, evaluation, and impact assessment at a systemic level; development activities, including standards and curriculum, partnerships, communities of expert practitioners; implementation activities, including accreditation, registration of assessors, alignment of activities between the various implementation partners (skills development providers and workplaces); and the learning process. All stakeholders must be part of the quality assurance process, for example, community of expert practitioners and professional bodies. They would play an active role in securing their own occupation or clusters of occupations, setting standards, influencing curriculum, quality assuring assessment and maintaining occupational and professional standards, quality of service and ethical behaviour. Accreditation criteria would need to be developed for participating workplaces, and these criteria would need to be sensitive to the capacity of small and micro enterprises to provide sufficient learner support.

SUGGESTIONS FOR OLS IMPLEMENTATION

The success of the OLS will largely depend on the levels of strategic engagement and strong commitment by all stakeholders to achieve economic growth and social development. The needs and competence levels of all stakeholders involved must be taken into cognizance for effective implementation of the OLS. Labour market analysis should be at the centre of the OLS implementation process. Recognizing that labour market needs can only be met by explicitly putting the labour market at the centre of the solution and designing an approach to learning which serve occupations is inevitable. The idea is that, if the needs of the labour market are understood, and the solutions are provided in a form usable by the labour market, then learning could be provided that would be relevant and lead to employment opportunities. The challenges identified in the previous NQF dispensation must be used as a springboard to avoid recurrence during the implementation of the OLS.

CONCLUSION

Despite the fact that the OLS is work in progress, all efforts must be placed to ensure effective implementation. The success of the new system will become a corrective to the already identified setbacks of the previous NQF dispensation. In order to re-connect the labour market and education and training systems, it becomes important to consider the purpose and intent of the OLS. In addition to that, quality assurance should be conceptualised systematically to respond to labour market needs and the provision of skills and knowledge. Quality assurance to achieve occupational excellence is not only about assuring the programme by considering the content, but is also about the purpose, the relevance and the impact of the programme in the labour market. It is important therefore, to ensure the quality of education and training in and for the workplace, thus contributing to skills development and poverty alleviation. Thus, the development of occupational qualifications need to take place in a systematic and responsive way to enhance efforts to address the skills development needs in the labour market.

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SKILLS DEVELOPMENT POLICY REFORMS IN THE POST-DEMOCRATIC SOUTH AFRICA: CHALLENGES AND OPPORTUNITIES FOR CHANGE

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ABSTRACT

The first democratically elected government of South Africa inherited a labour market in 1994 that had been subject to the long-run effects of an inadequate education system, international economic isolation and economic policies that favoured capital over labour. The government recognized these challenges and has introduced a dramatic series of changes in the architecture of skills and of training policies. This paper presents a critical analysis to a series of policy interventions promulgated by the post 1994 South African democratic government to address the challenges of skills shortage and skills development. The paper also outlines the challenges and opportunities faced by South Africa justifying the need for skills development policy reforms. To this end, the paper provides recommendations and argues for regular skills development policy review and stakeholder engagement to evaluate the impact at rock face.

KEYWORDS: Education, training, skills development

INTRODUCTION

Prior to 1994, South Africa was governed by an apartheid state that used race to keep the labour of the majority of its citizens cheap. Black people, who constituted more than 88 per cent of the population in 1994, were forced to live in separately demarcated (and very restricted) areas. These were the areas where social services were inferior or entirely absent, and where the costs of reproduction and retirement were largely carried by the communities themselves (Bird & Heitmann, 2009: 5).

When democracy was finally won, and Nelson Mandela led the African National Congress (ANC) to electoral victory in 1994, there were tremendous backlogs of housing and services (including education and training) in the townships and homelands where black people had previously been forced to stay. The negative effects of apartheid are still clearly evident today, despite comprehensive structural reforms over the last fifteen years. These challenges remain high on the political agenda.

The dawn of the democratic dispensation marked a significant milestone in South Africa where citizens from all walks of life were called upon to undertake the arduous, hazardous and crucial tasks of social and economic reconstruction. These citizens were compelled by extraordinary circumstances to make some of the grand choices of history; to determine in which direction they wanted to move the country; and to make decisions that will deeply affect the lives of generations of South Africans for decades ahead. These decisions concerned the incidence of economic and political power, the distribution of wealth and income, the relations of classes, races and nationalities, and the ends for which generations of South Africans are to strive for. In making these choices and decisions, the critical role of education and training could not be underestimated, especially given that education for black South Africans had been neglected for many years.

The country is currently faced with severe skills shortage across most sectors of its economy. The challenge of skills shortage became very glaring as a result of government's increased investment in public infrastructure development over the past five years. South Africa is a country that was, and to a large extent is still characterized by a high level of unskilled workers; low levels of productivity due to inadequate training; larger disparities in skills levels across racial groups with whites dominating; low

levels of training expenditure and; lack of training opportunities for employees. The country now has an entire generation of young black people that have been subjected to an education system gravely inferior to that provided for whites. Even after a decade into democracy, approximately 64 per cent of the white minority had obtained degrees, diplomas and certificates awarded by public universities and technikons, whilst only 36 per cent of the black majority had achieved a similar education status (SAIRR, 2006: 311).

This situation presents two implications for the socio-economic well-being of the country. Firstly, the majority of young black people who were subjected to insufficient and inferior basic education would find it difficult to participate meaningfully in the mainstream economy, hence the existing critical skills shortage in most occupational fields such as science, engineering, information and communication technology (ICT) and management. Secondly, the overall inferiority in the quality of education received by young black people who have completed part or all of their secondary schooling makes it difficult for them to meet the challenges of modern economy, thus contributing significantly to an increased pool of the unemployed and increased reliance on social security.

More and more young people are successfully graduating from school, colleges and universities but too many of them are unable to make the transition to work or start their own enterprises - not only because jobs and business opportunities are not available (although this is clearly part of the problem) but also because they have not acquired the relevant skills needed for employability and/or entrepreneurship due to the quality of education they went through.

It is for these enormous choices and decisions that reforms in education and training became inevitable. Clearly, the long-term responsibility for restructuring and reforming the education and training system that has been disadvantaged for so long lies with the government, upon which also falls the necessity of taking immediate and radical action in specific areas such as funding and redress. It is for the critical reason that black South Africans had to endure during the apartheid period (of being denied a good quality general education) that education and training became one of the first areas of intervention of the new democratic government (Bird, 1999: 1). It is for the same reason that South Africans have witnessed a dramatic series of reforms in education and training policies over the last 16 years. A series of these reforms and the reasons thereof are discussed hereunder.

THE NEED FOR EDUCATION AND TRAINING POLICY REFORMS IN SOUTH AFRICA

The pace of reforms in education and training policy witnessed since 1994 in South Africa has largely been driven by the greater goals of reconstruction and development, a central pillar of which is the development of human resources. The challenge faced by the country then, at the dawning of a democratic society, was to create an education and training system that would ensure that people are able to realise their full potential in the society as a basis and prerequisite for the successful achievement of all other goals in the reconstruction and development programme.

To meet this challenge, the new government chose the path of transformation, including the development of the national qualifications framework (NQF), which arguably constitutes the most comprehensive and complex component of curriculum transformation in the education and training system since the birth of apartheid in 1948. The origins of the NQF can be traced to two high-profile projects which were launched in 1992 and 1993, and which have substantially shaped numerous policy and legislative developments in education and training, including the White Papers on Education and Training of 1995, the Higher Education Act (RSA, 1997), the Further Education and Training Act (RSA, 1998b), the Skills Development Act (RSA, 1998a), the Skills Development Levies Act (RSA, 1999) and the National Qualifications Framework Act (RSA, 2008b).

THE GENESIS OF EDUCATION AND TRAINING POLICY REFORMS THROUGH THE NATIONAL TRAINING STRATEGY INITIATIVE (NTSI)

The National Training Strategy Initiative (NTSI) was first convened in 1993 under the auspices of the then National Training Board, and produced its main discussion document in April 1994. The significance of this initiative lies not only in its timing (the month of the first democratic elections in South Africa) and substance, but also on the effective participation of key stakeholders representing organised labour, organised business, technikons and various working committees. This gave legitimacy to the process and to its proposals for change, which in many respects, complemented those of a separate policy initiative, established by the African National Congress (ANC), which culminated in the production of the Implementation Plan for Education and Training (IPET) in May 1994.

The NTSI document sets out the vision for a new approach to education and training in terms of the following:

South Africa needs to develop:

'A human resource development system in which there is an integrated approach to education and training and which meets the economic and social needs of the country and the development needs of the individual' (NTSI, 1994: 6).

It goes further in articulating the core principles upon which such a system is to be built and assessed. These include the principles of integration, relevance, coherence and flexibility, standards, access, legitimacy, recognition of prior learning (RPL), and guidance of learners. With reference to the RPL, the NTSI document offers that the education and training should, through assessment, give credit to prior learning through formal, non-formal and informal learning and experience.

Of particular importance in South Africa were for the reasons of history, learners have been denied access to one or other of the formal, non-formal and informal learning systems, and have had to learn in some other way, for example, by experience or by correspondence in another country. This principle accepts that no person entering the learning situation is without learning, and it aims to measure and give credit for that prior learning. The IPET document derives its focus mainly from the principle that individuals have the right to access lifelong learning (NTSI, 1994: 6). These documents (NTSI and IPET) laid a solid foundation for education and training policy formulation in South Africa to date.

THE WHITE PAPER ON EDUCATION AND TRAINING

It is widely acknowledged that education and training are central activities of any society around the globe. They are of vital importance to every aspect of the community and to the prosperity of every nation's economy. South Africa's transition from apartheid and minority rule to democracy required that all existing practices, institutions and values be viewed anew and rethought in terms of their fitness for the new dispensation. It had to be understood that education and training were significant elements that play a central role in the social, cultural and economic development of modern societies.

Education and training must lay the foundation for the development of a learning society which can stimulate, direct and mobilise the creative and intellectual energies of all the people towards meeting the challenge of reconstruction and development. Thus, the South African government's policy for education and training is an important matter of national significance. The White Paper on Education and Training (1995) describes the next step taken by the first democratic government in education and training policy formation. It serves as a blue print for the transformation of education and training in South Africa.

The White Paper, among others, addressed the following aspects:

- Located education and training within the national Reconstruction and Development Programme (RDP), and outlined new priorities, values and principles for the education and training system.
- Previewed important developmental initiatives on which the Ministry of Education was engaged.
- Discussed the implications of the new Constitution of the Republic of South Africa for the education system, especially in respect to Fundamental Rights.
- Discussed the division of functions between national and provincial governments in the field of education and training.
- Provided information about how the national and provincial departments of education were to be established.
- Analysed the budget process in education, and the necessity for a strategic approach to education funding in relation to the national priority for human resource development.
- Discussed in detail the two significant policy initiatives for the school system: the organisation, governance and funding of schools, and the approach to the provision of free and compulsory general education.

Subsequent to this White Paper, a number of discussion documents, policies and legislative prescripts pertaining to education and training were formulated and enacted by the South African government. Some of these policies and legislations are briefly outlined below.

THE HIGHER EDUCATION SYSTEM

Following on the 1995 White Paper on Education and Training (DoE, 1995) and the 1996 Green Paper on Higher Education Transformation (DoE, 1996), government enacted the Higher Education Act (RSA, 1997). This legislation aims to regulate the higher education sector of South Africa; to provide for the establishment, composition and functions of a Council on Higher Education; to provide for the establishment, governance and funding of public higher education institutions; to provide for the appointment and functions of an independent assessor; to provide for the registration of private higher education institutions; and to provide, amongst others, for quality assurance and quality promotion in higher education.

Prior to the Higher Education Act, the higher education system perpetuated an inequitable distribution of access and opportunity for students and staff along lines of race, gender, class and geographical discrimination. There were gross discrepancies in the participation rates of students from different population groups and indefensible imbalances in the ratio of black and female staff compared to whites and males across the higher education sector. There were equally untenable disparities between historically black and historically white institutions in terms of facilities and capacities.

There was a high and chronic mismatch between higher education's output and the needs of a modernising economy. There was a shortage of highly trained graduates in fields such as science, engineering, technology and commerce (largely as a result of discriminatory practices that have limited the access of black and women students) and this has adversely affected the country's economic and social development. Lastly, there was inadequate consideration of and response to the needs of South African society and insufficient attention to the problems and challenges of the broader African context.

It was viewed that only higher education can deliver the requisite research, the training of highly skilled personnel, and the creation of relevant, useful knowledge to equip a developing society with the capacity to participate effectively in a rapidly changing national and global contexts. The existing higher education system was unable to make this contribution adequately, hence the enactment of the Higher Education Act (RSA, 1997).

THE SKILLS DEVELOPMENT FRAMEWORK

Then in March 1997, the Green Paper on Skills Development Strategy for Economic and Employment Growth in South Africa was published (DoL, 1997). It proposed a new approach to skills development which complements the formal education system. It linked skills formation to the requirements of a growing economy and extends education and training to people both within and outside formal employment. The document's primary concern was industry-based training, improving the intermediate level skills base of the country and labour market training for target groups (including the unemployed, retrenched workers, youth, women, people with disabilities and people in rural areas).

This Green Paper made provision for a new system of learning, referred to as learnerships, for young and unemployed people wishing to join the labour market. It located the approach to skills development within a broader policy context and was to be guided by the national priorities. It related to macro-economic, industrial, labour market, and science and technology policies. Implementation of the skills development strategy was to be supported by proposals for effective coordination at national level as well as a consolidated set of sectoral training intermediaries which were to support enterprise, pre-employment and target group education and training.

Discussions and feedback on this Green Paper culminated into the Skills Development Act (RSA, 1998a) and the Skills Development Levies Act (RSA, 1999). These two legislations form an important core in transforming workplace training in South Africa. The Skills Development Act (RSA, 1998a) provides an institutional framework to devise and implement national, sector, and workplace strategies to develop and improve the skills of the South African workforce. It integrates those strategies within the National Qualifications Framework (NQF); it provides for learnerships that lead to recognized occupational qualification; and amongst others, provides for the financing of skills development by means of a levy grant scheme and a National Skills Fund. Funding for skills development is provided for in the Skills Development Levies Act (RSA, 1999). All employers with an annual payroll in excess of R 500, 000 are liable to pay 1% of their payroll towards skills development.

The Skills Development Act (RSA, 1998a) has been the primary legislative instrument used to introduce the new training system in South Africa. At the core, this legislation provides for an institutional architecture comprising 23 Sector Education and Training Authorities (SETAs). These multipartite bodies are charged with the responsibility of distributing the financial grants acquired from a 1% levy-grant scheme aimed at promoting enterprise training in large and small firms operating in both the formal and informal economic sectors (Kraak, 2008: 1). Aside from SETAs, the Act proposes the establishment of a number of other institutional frameworks and strategies to ensure key objectives are met. These includes, amongst others, the National Skills Authority, the Skills Development Planning Unit and the National Skills Development Strategy (NSDS) (Grawitzky, 2007: 7).

The new system of training had recorded some successes. For example, a total of 95 503 small, medium and micro enterprises (SMME) employers benefited from skills development support. A cumulative total of 6, 306, 557 workers out of a total workforce of 10.8 million people embarked on structured learning programmes during the phase 1 of the NSDS. There is also an increase in the number of government departments submitting workplace skills plans, and a corresponding growth in training expenditure, reaching 1,84% of overall personnel expenditure in government in 2004/2005 (DoL, 2006: 21) – well above the 1% of payroll prescribed by the Skills Development Levies Act (Grawitzky, 2007: 12).

As pointed out by Kraak (2008: 11-16), the implementation of the new Skills Development framework and attempts to integrate education and training were marred by problems some of which are highlighted below:

- The key element of the new education policy discourse was the idea of a single, unified and integrated regulatory system of education and training. The reality is that the integration of education and training has never really occurred. There must be one integrated framework for academic, vocational and occupational learning. This framework is necessary to bridge the traditional divides between education and business, between academics and trainers, between theorists and pragmatists, and between discipline-based learning and skills development.
- Sector agreements between SETAs, FET colleges, higher education institutions and employers were seen as crucial mechanisms for implementing the NSDS. Poor progress in this area has been recorded. This poor record is indicative most strongly of the failures of a truly integrated commitment to education and training in South Africa.
- Capacity problems stumbled the new skills development regime from effectively managing and steering a large new institutional assemblage comprising SETAs, National Standard Bodies (NSBs), Standard Generating Bodies (SGBs), and Education and Training Quality Assurance Bodies (ETQAs). Evidence also emerged in some sectors of an undue involvement of SETA boards in the day-to-day management of SETA work (Grawitzky, 2007: 28). In some cases, SETA ETQAs and SGBs ran into problems with the Council for Higher Education (CHE) when trying to design and accredit learning programmes above NQF level 4, with the CHE not recognising them. This created a glass ceiling for workers who found that they could not easily progress beyond the FET sector.
- A myriad of operational problems have also bedevilled the SETA structure. For example, many SETAs have suffered from very high staff turnover, especially at senior levels, and this has affected morale and institutional capacity. Some SETAs have had three to four Chief Executive Officers (CEOs) in the first five years of their existence (Grawitzky, 2007: 31).

These problems were viewed as wide, deep and more serious. They called for a system-wide review, new thinking and serious considerations that were given during the reform and formulation of the skills development and NQF legislations respectively. Subsequent to this intense exercise, the Skills Development Act was amended in 2008 to provide anew for the functions of the National Skills Authority; to provide anew for the composition of the National Skills Authority; to provide anew for the function of the SETAs; to provide clarity on the continuation of apprenticeships training; and amongst others, to provide for the Quality Council for Trades and Occupations (QCTO).

The QCTO is intended to address the lack of uniformity on quality assurance between SETAs and to provide centralised oversight of quality assurance in trades and occupations. The new NQF Act (RSA, 2008b) was enacted as well to ensure integration of education and training. This new legislation presents exiting challenges for education and training provision in South Africa. It impacts tremendously on all education and training sectors, that is, the General and Further Education and Training, Higher Education and Training, and occupational learning.

FURTHER EDUCATION AND TRAINING SYSTEM

As Akoojee, McGrath and Visser (2008: 254) argue: "In 1994 the incoming democratic government was faced with a college sector that was not fit for its purpose". The FET sector in South Africa is consequently touted as a major contributor to the reduction of intermediate skills shortages (Gamble, 2004: 173). However, following the 1998 Green Paper on Further Education and Training (FET), government enacted the Further Education and Training Act (RSA, 1998b) to align the sector to its purpose.

The Green Paper provided baseline facts for change and transformation in the FET Sector. Some of the most pressing demands for change arose from the legacy of apartheid and the social inequalities it

generated. Others stemmed from the sense of system failure within the FET sector, in particular the deep-rooted problems that confront the public school system, the low morale of many staff, the poor quality of provision in certain institutions, the relative inability to place trained learners in jobs, and the lack of articulation between key FET institutions and the labour market.

The South African FET system was marred by problems such as the following:

- It lacked coherence and co-ordination as it was fragmented and unplanned.
- It lacked funding coherence. The funding of programmes was uneven across different sites of provision and created distorted incentives and disincentives.
- Programmes were poorly articulated, inhibiting students' mobility and leading to high levels of inefficiency. Programmes differed widely with respect to quality, standards of provision, outcomes and curriculum.
- Separate education and training tracks. FET provision reflected rigid and outmoded distinctions between 'academic' education and 'vocational' training.
- Weak linkages with the industry. Some of the programmes were labelled outdated and irrelevant by employers. According to the Centre for Enterprise and Development (CED, 2007: 49) the relationship between the FET sector, SETAs and industry must be resolved and strengthened if such institutions are to cater for the needs of industry, and especially assist in the delivery of artisans.
- Black technical colleges lacked meaningful linkages with industry and were largely disconnected from the local economy due to the discriminatory nature of apartheid education. According to Kraak (2008: 152) the homeland policy meant that many of the newer institutions intended for African learners were located far from centres of economic activity.
- Adverse working conditions and a breakdown in the culture of teaching and learning were reflected in the poor morale, poor work ethic, and low professional esteem amongst many FET educators.
- The labour market was so distorted across racial lines due to low enrolments in the fields of science, technology and engineering. This was particularly worse in historically black FETs where some of these programmes could not be sustained due to lack of infrastructure.

With all of these challenges taken into consideration, the South African government enacted the Further Education and Training Act (RSA, 1998b) to regulate further education and training; to provide for the establishment, governance and funding of public further education and training institutions; to provide for the registration of private further education and training institutions; and amongst others, to provide for quality assurance and quality promotion in further education and training.

The fundamental changes taking place in South Africa place new demands upon the FET system, centred on the themes of redress, lifelong learning, nation building and the creation of new relationship between the state and its citizens. It should be understood clearly that the FET system is indispensable to the economic future of South Africa, both in its immediate relationship to work and in its role in preparing learners for higher education.

These roles are profoundly affected, first, by the moral and social imperative to meet the basic needs of South African communities, and second, by changes in the local and global economies. The FET system is also fundamental towards the achievement of the National Human Resource Development Strategy (NHRDS) objectives.

THE NATIONAL HUMAN RESOURCE DEVELOPMENT STRATEGY (NHRDS)

The NHRDS is an overarching plan to co-ordinate both private and public sector approaches to education and skills development. It seeks to maintain the individual responsibility of each line ministry in the various parts of the human resource development system, while ensuring a common strategic focus and an enabling policy framework. The joint launch on 23 April 2001 by the Minister of Labour and the Minister of Education of the NHRDS reinforced the resolve to establish an integrated education, training and development strategy that will harness the potential of South Africa's young and adult learners. The NHRDS I was since revised during 2007.

The NHRDS co-ordinates education, skills development, the supply and demand forecasting of skills, employment growth, and national systems of innovation, research and development (NSDH, 2009: 65). It tries to ensure that there is effective co-ordination and integration of policies across government. Figure 1 below provides a diagrammatic presentation of the critical components of the NHRDS.

Figure 1: National Human Resource Development Strategy of South Africa, 2001

4. National Systems of Innovation, Research and Development
Support industrial and employment growth policies

2. Securing a supply of skills

Provision of Further and Higher Education and Training (FET & HET)

- Scarce skills
- Skills within the FET and HET
- NQF training bands
- Anticipating and responding to specific needs in society, through state and private sector participation in lifelong learning

HRD Strategy

- Intervention Programmes
- Ongoing Reporting
- Quality Interaction
- Links made and sustained via institutional arrangements

3. Demand for skills from employers

- Articulated demand
- Generated by needs of public and private sectors
- Needs include social developments opportunities and small business development

1. Solid Basic Foundation of General Education

- Early Childhood Development
- General education at school (compulsory)
- Adult education and training

Source: Department of Labour (2001:11)

It is clear from Figure 1 above that the HRD performs a strategic role in ensuring that the necessary linkages among each of its component parts are maintained. A strategy of this nature requires the co-operation and strategic engagement between government departments, employers and organised labour.

Because of this strategy, an increased focus is apparent on the responsibility of the Department of Higher Education and Training towards the development and management of education and training policies on the one hand and skills development on the other. One of the key success indicators of the NHRDS is improvement in the Human Development Index (HDI) for the country. The HDI measures the life expectancy, literacy, educational attainment, and GDP per capita. It is used as a standard assessment of

human development by the United Nations Development Program and is also used to divide countries into "developing" and "developed" categories (NSDH, 2009: 65).

The 2009 HDI rating for South Africa is 0.683, which gives the country a rank of 129th out of 182 countries in the world (UNDP, 2009), a quantum leap from being ranked 103 in 2001 at the time of the launch of the NHRDS I. Table 1below provides the data comparing South Africa and other countries.

Table 1: South Africa's Human Development Index

HDI value	Life expectancy at birth (years)	Adult literacy rate (% ages 15 and above)	Combined gross enrolment ratio (%)	GDP per capita (PPP US$)
1. Norway (0.971)	1. Japan (82.7)	1. Georgia (100.0)	1. Australia (114.2)	1. Liechtenstein (85,382)
127. Tajikistan (0.688)	156. Malawi (52.4)	78. Saint Vincent and the Grenadines (88.1)	75. Saint Lucia (77.2)	76. Lebanon (10,109)
128. Namibia (0.686)	157. Uganda (51.9)	79. Dominica (88.0)	76. Mauritius (76.9)	77. Saint Lucia (9,786)
129. South Africa (0.683)	**158. South Africa (51.5)**	**80. South Africa (88.0)**	**77. South Africa (76.8)**	**78. South Africa (9,757)**
130. Morocco (0.654)	159. Cameroon (50.9)	81. Namibia (88.0)	78. Georgia (76.7)	79. Brazil (9,567)
131. Sao Tome and Principe (0.651)	160. Niger (50.8)	82. Sao Tome and Principe (87.9)	79. Egypt (76.4)	80. Macedonia (the Former Yugoslav Rep. of) (9,096)
182. Niger (0.340)	176. Afghanistan (43.6)	151. Mali (26.2)	177. Djibouti (25.5)	181. Congo (Democratic Republic of the) (298)

Source: UNDP (2009). *Human Development Report*. New York, USA

National Human Resource Development Strategy II (2009 – 2013)

This skills development problem in South Africa triggered a revisiting of an earlier initiative (NHRDS I) to establish a Human Resources Development (HRD) umbrella framework to embrace both education and training and to bring improved alignment between them. The first such initiative as reported earlier had taken place in 2001 but it failed to achieve articulation between education and training. Therefore, on the back of the Joint Initiative for Priority Skills Acquisition (JIPSA) initiative, in 2008, a new NHRDS process has began (DoE, 2008).

This revised NHRDS takes over and formalise many of the initiatives and structures fostered under the JIPSA, which ended in March 2009. This process culminated in the publication of a second draft HRD strategy at the end of 2008 to which public comments were requested over the December holiday period – an urgency clearly prompted by the impending April 2009 election (Bird & Heitmann, 2009: 7). The 2008 draft HRD Strategy begins by drawing on international lessons from the United Nations – quoting from the 1989 General Assembly resolution 44/213:

'… human resources development is a broad concept … requiring integrated and concerted strategies, policies, plans and programmes to ensure the development of the full potential of human beings … so that they may, individually and collectively, be capable of improving their standard of living (United Nationals Programme in Public Administration and Finance, 1995: 5, cited by DoE, 2008: 8).

It then proceeds further to cite at length the overview of the evolution of perspectives on HRD within the United Nations General Assembly from the same source. By so doing, it clearly seeks authority as well as guidance for its proposed strategy. It also cites the UNDP's Human Development Index (HDI) as widely used to compare the level of human development between countries: "This index provides a useful measure of progress toward achieving greater levels of development within a country" (DoE, 2008: 18). It then proceeds to analyse the detailed decomposition of South Africa's 2005 HDI using the UNDP (2007) and UNESCO (2007) data – although given the composition of the HDI they did not then proceed

to align proposed interventions with these measures – a matter which the international community may consider addressing by developing an HRD specific index, with skills development overtly referenced.

This draft HRD strategy goes on to identify a twenty-year strategic framework, with associated indicators of improvement and a five-year Medium Term Strategic Framework (MTSF) with eight commitments each associated with a set of targets for monitoring and evaluation purposes. Whilst these targets reach towards improved levels of articulation, they do not build inter-dependency between the labour market and institutional mandates, as the following target illustrates:

Commitment Two**:** We will increase the supply of appropriately skilled people to meet the demands of our current and emerging economic and social development priorities.

Strategic Priority 2.1: To ensure that skills development planning is credible, integrated, coordinated and responsive to social and economic demands.

a) To ensure that enrolment planning for Further Education and Training (FET) / Higher Education and Training (HET) is guided by a coordinated master scarce skills list …
- Lead responsibility: Department of Education.

b) To ensure that planning for Sector Education and Training Authority (SETA) skills development is based on a coordinated master scarce skills list …
- Lead responsibility – Department of Labour. (Government Gazette No 31646, 28 November 2008: 37).

According to Bird and Heitmann (2009: 8) this parallelism is evident under many of the indicators. Therefore, whilst leaning in the right direction, the draft strategy still falls short of driving an 'integrated, coordinated and responsive' system to education and training challenges facing South Africa. However, with the transfer of the Skills Development Unit from the Department of Labour to the newly established Department of Higher Education and Training, this challenge of parallelism could be easily addressed going into the future.

NATIONAL SKILLS DEVELOPMENT STRATEGY

The Skills Development Act (RSA, 1998a) makes provision for the drafting of a National Skills Development Strategy (NSDS), which assess overall progress in meeting the objectives of the legislation. The NSDS is supposed to provide a broad national framework within which skills development is to take place – cutting across SETAs and other institutional structures such as the NSF (Grawitzky, 2007: 0). It speaks directly to training related aspects of the NHRDS and has more specific targets and principles than the NHRDS.

The NSDS is a broad, stakeholder driven expression of national principles, priorities, objectives and success indicators to guide skills development. The NSDS guide the strategic planning of the Department of Higher Education and Training, the National Skills Fund, the SETAs and related agencies. It is formulated in five year plans: the first ran from 2001-2005 (NSDS Phase 1), the second ran from 2005-2010 (NSDS Phase 2). The NSDS is developed through a consultation process organised by the National Skills Authority (NSA), a body that is set up to advice the Minister of Higher Education and Training through representatives from business, labour, government, civil society and skills development specialists.
The principles of the NSDS Phase 2 are as follows:

- Support economic growth for employment creation and poverty eradication.

- Promote productive citizenship for all by aligning skills development with national strategies for growth and development.
- Accelerate equity in the country (Broad Based Black Economic Empowerment and Employment Equity).
- Support, monitor and evaluate the delivery and quality assurance systems necessary for the implementation of the NSDS.
- Advance the culture of excellence in skills development and lifelong learning (DoL, 2005: 2).

The Need for the NSDS

The NSDS is formulated to address the following aspects:

- Overcome the structural rigidities and inequalities inherited from the apartheid era.
- Ensure South Africa's competitiveness in the global economy.
- Transform the labour force from a low skills base to one that is committed to high quality lifelong learning.
- Ensure that the labour market is better equipped to deal with the consequences of poverty and disease in the workforce.
- Improve the employability of the country's labour force by implementing a skills development strategy in partnership with employers, workers and communities.

Discussions on a third NSDS are currently underway, but its alignment to the NHRDS II (2009 – 2013) under the new departmental architecture has yet to be settled (Bird & Heitmann, 2009: 11). The final version of the NHRDS II had not been announced at the time that this paper was prepared, and it is possible that these concerns may be addressed when it is presented.

THE NATIONAL QUALIFICATIONS FRAMEWORK

The NQF Act (RSA, 2008b) is the latest addition in the education and training policy formulation process in South Africa. The NQF is the system that is developed to standardise, within certain limits, the entire education and training system right from Grade 1 to PhD level. The NQF has evolved significantly since the repealed SAQA Act 58 of 1995, the most recent changes being made through the NQF Act. The Reconstruction and Development Programme of 1994 and the White Paper on Education and Training of 1995 both emphasized the need to develop a NQF (NSDH, 2009: 68). The NQF Act provides for the NQF; provides for the responsibilities of the Minister of Higher Education and Training; provides for the South African Qualifications Authority; and amongst others, provides for Quality Councils.

The revised NQF consists of the following important features:

- A 10 level NQF.
- Unit standards-based qualifications and whole qualifications are equally valid.
- Standards Advisory Panels replace the 12 National Standard Bodies for the purposes of standard setting (to streamline the NQF).
- A smaller SAQA Board
- Three Quality Councils (Umalusi, CHE, QCTO)

The NQF is now organised into three distinct sub-frameworks:

- The General and Further Education and Training Qualifications Framework (GFETQF) – falling under the Department of Basic Education.
- The Higher Education Qualifications Framework (HEQF) – falling under the Department of Higher Education and Training.
- The Occupational Qualifications Framework (OQF) - falling under the Department of Higher Education and Training.

Each sub-framework has its own quality assurance body and is required to collaborate and co-ordinate with the other frameworks to maintain the principles of the NQF. The NQF should be seen as a representation of an integrated learning framework.

SUGGESTIONS AND RECOMMENDATIONS

This paper provides the following suggestions and recommendations, that:

- Even though the government has recently taken the lead by providing political leadership and moving education and training out of the prolonged stalemate with regard to policy fundamentals and political leadership, regular monitoring and evaluation should be carried out to determine the impact of formulated policies across all sectors of the economy. This would ensure that the correct sets of skills are developed, and that policies are not a hindrance to this process. The review and monitoring exercise would ensure that policies are constantly updated based on empirical evidence and genuine views of stakeholder operating at rock face.

- The operational efficiency and effectiveness of various structures put in place to co-ordinate and manage education and skills development initiatives should be monitored constantly. Since some of the structures are tasked with co-ordination of various education and skills development activities, it is always important to ensure regular engagement of all stakeholders and role-players as change is the only thing constant. Therefore, government and its social partners, business and labour, need to show strategic engagement and greater levels of commitment to a shared vision of economic growth and socio-economic development if these structures are to have any chance of success going into the future. Effort must be dispensed across the board to ensure that the existing structures are monitored, supported and fine-tuned so that they begin to work effectively for South Africa.

CONCLUSION

This paper presented a series of challenges and opportunities that led to education and training policy reforms in South Africa over the past 15 years. It is clear in the content of this paper that change was an absolute necessity to drive the transformation agenda that the country had set itself to achieve. The fact that education and training are placed high on South Africa's agenda signals a positive step in the right direction for the country to achieve its developmental mandate. This ambition cannot be achieved overwhelmingly if the right policies and structures are not conceived and effectively implemented. It is critical therefore that a strong focus be placed on regular monitoring and evaluation to determine the effectiveness and impact of such policies and structures in order to successfully drive skills development and transformation.

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LARGE SYSTEMS THEORY AND CRISIS PRECURSORS

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ABSTRACT

We present and discuss some useful remarks follow the similarity of equations in Quantity Theory of Money MV=PY and in classical Large Systems theory, thermodynamics, PV=RT.

INTRODUCTION

In this paper we visualize a generalization of our result coming from the studying of the Efficiency at the global financial markets [1-5]. Investigating our constant we stated a relation with both Boltzmann entropy and the Maxwell distribution and proved the multidisciplinary nature of the result. Recently, we underlined that the limit value of E is *between the inverse* exponent $1/e \approx 0.367880$ and the well-known Golden Mean in the form of $\varphi = 1 - (\sqrt{5} - 1)/2 \approx 0.381966$. It was shown that the Efficiency calculated over the medians

$$\mu = N - \frac{1}{\beta} \ln \frac{e^{\beta N} + 1}{2}$$

tends to

$$\lim_{N \to \infty} \frac{N}{N+1} \frac{\sum_{k=0...N} \frac{1}{2p_0 + k}}{N/p_0} = \frac{p_0}{N+1} \ln \frac{2p_0 + N}{2p_0} =$$

$$= \frac{p_0}{N+1} \ln\left(1 + \frac{N}{2p_0}\right) \sim \frac{p_0}{N+1}\left(2 \frac{N/2p_0}{N/2p_0 + 2}\right) = \frac{1}{2 + o(N/p)}$$

for unimodal, and to

$$\frac{\dfrac{2p_0 + 3(k+1)}{2p_0 + k} - 1}{2(k+1)\Big/ p_0} = \frac{2k+3}{2p_0 + k} \frac{p_0}{2k+2} \xrightarrow[\substack{k=N/2 \\ N\to\infty}]{} \frac{1}{2 + o(N/p)}$$

for uniform volume distributions.
The result is not limited itself with the financial data series processed while the research.
We meet it if analyze the EQs data series of the USGS NEIC database from 1972 up to now.

We illustrate our result with the Large System's Theory tools:

A set of the fundamental equations
Thermodynamical parameters of 1/e, E, φ
Boltzmann Entropy and the Self-Organized Criticity

We define and discuss our crisis precursors for nonlinear system in question such as peak irregularity in the nil-frequency domain of the spectrum for the parameter in question (see Figures 1 thru 4)

Figure 1: Results
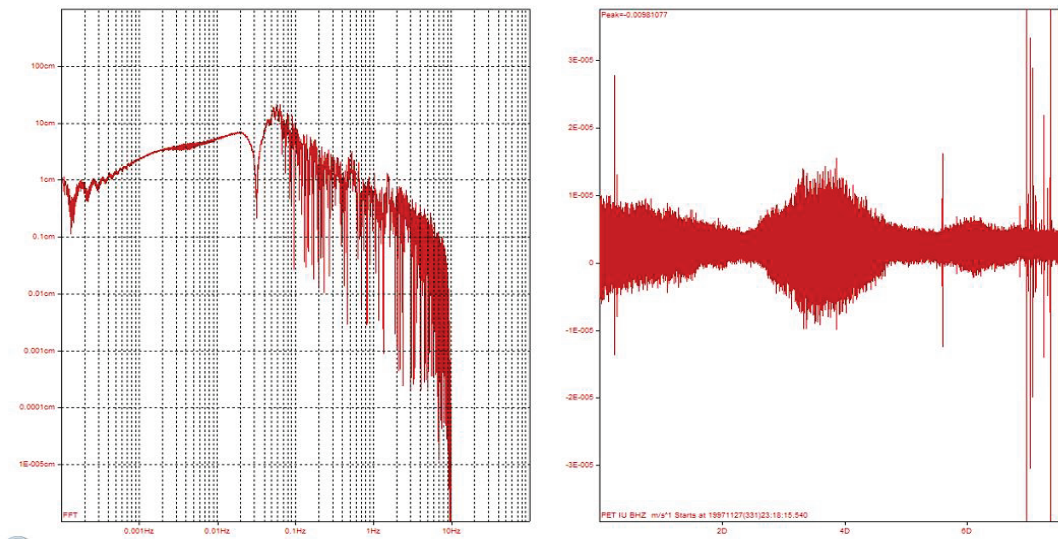
statistical gaps to be fulfilled and the time to realize it

Figures 2: Results
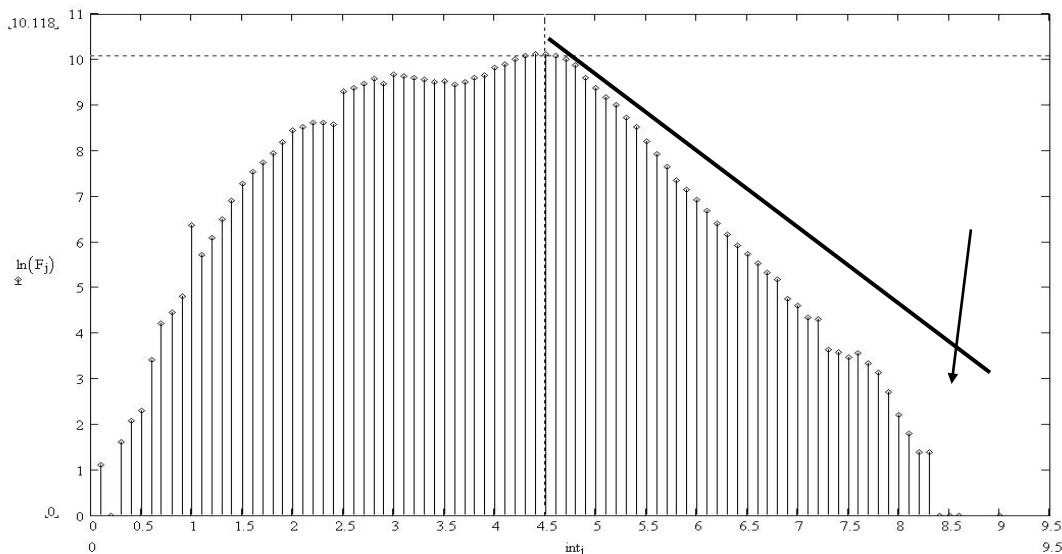
We illustrate how the turbulence of the Large Systems is organized by means of the data-mining results driven over 60-GB data series of Global markets and estimate the total data volume could be enough for suitable forecasts. For example, at figures below the clasterization of the market Efficiency shown in terms of "local market seismicity". It is shown that the parameter of M ("Market Magnitude") could be extremely well approximated (R^2 about 1) and the reverse market point could be checked with additional limit condition discussed in the paper. Some creative ideas of the IT based approaches to control and prevent the crisis are discussed.

Figure 3: Results
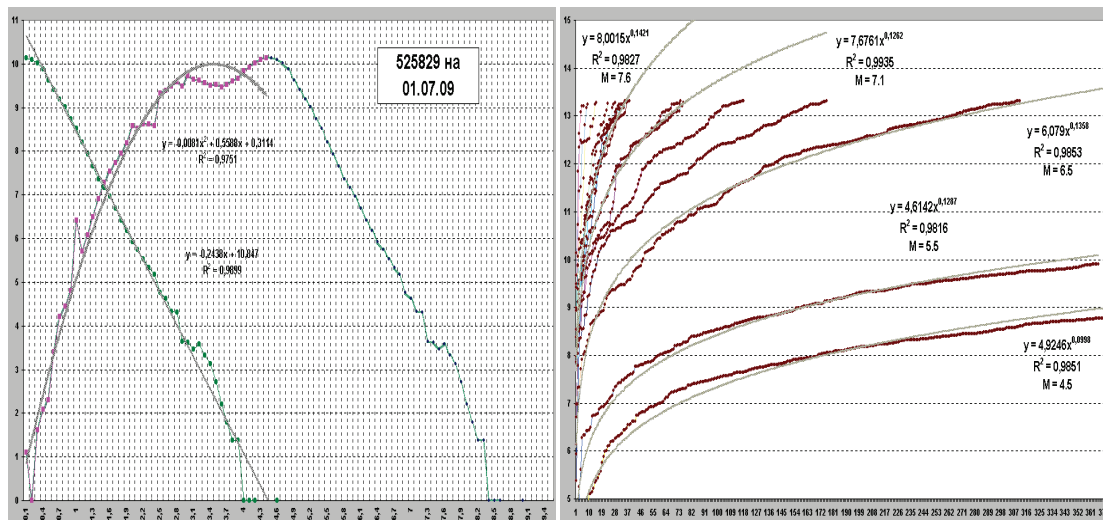
Figure 4: Results

BIOGRAPHY

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INFORMATION ANALYSIS AND TARGET SIMULATION

Vladimir Prelov, Russian Academy of Sciences, Mechanical Engineering

ABSTRACT

In this paper we continue to discuss some problems and opportunities to calculate the local price targets for high liquid assets at global exchanges in the spirit of our recent results [1-5].

INTRODUCTION

In this paper we continue to discuss some problems and opportunities to calculate the local price targets for high liquid assets at global exchanges in the spirit of our recent results [1-5]. Studying the transactions Efficiency introduced in [1-3] (Appendix 1) for the global financial markets and the role of the Large Systems thermodynamics we focused our efforts at the Volume distributions over all ranges in question. Total tick data processing and information analysis allow us to state the new pivotal tool to forecast the numerical targets of the volatile markets.

RESULTS

Problem#1: In the paper we follow [1-3] and continue to discuss the proved result that we can estimate E as an integral over the unit 3-D cube /price-range-specification.

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

DataMining with the Russian blue chips shows that we have some troubles with recalculating the targets due to the huge amount of information (~20 Gb) in process, and, moreover, we can apply this approach only for the long-term analysis to fulfil the Boltzmann's condition [6] N>T/V-p at the real financial market transactions flows. We discuss some methods to reduce the processing time and some results are shown in the paper. We prove the way and present the tool to obtain the target estimation if that condition is out of order.

Problem#2: As for the short-term analysis, we recommended to apply an other interdisciplinary method [7]. It was shown that to find the Efficiency (under the direct trading rules) we have to estimate it as

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

We discuss the basic problem for this method – to obtain the close form for the integral in question. It is one of the fundamental mathematical problems not solved by the moment. Nevertheless, some tricks to get the goal we discuss and present in the paper. For example, we exploit the Whitney formula for moments of Mann-Whitney statistic

$$\lim_{q\to 1}\frac{d}{dq}\left\{\prod_{j=1}^{a}\frac{1-q^{b+j}}{1-q^j}\right\}=\frac{a}{2}\binom{a+b}{a}$$

$$\max_{0 \le j \le ab} \rho(a,b,j) = \rho(a,b,[ab/2]) \sim \binom{a+b}{a} \sqrt{\frac{6}{\pi ab(a+b+1)}}$$

And Takacs result of 1986 for probability generating function of the Mann-Whitney statistic

$$P\{\theta(a,b) = j\} = \frac{\rho(a,b,j)}{\binom{a+b}{b}}$$

Problem#3: To avoid some troubles mentioned above we call again up to the Boltzmann thermodynamics. If we denote n the total daily volume turnover $\sum V_i$ and L the total daily cash turnover $\sum V_i \, p_i$, then we show the new idea to get the target S from formula

$$S = \ln \frac{2n^2}{n + L - p0 * n} \Big/ \ln \frac{n + L - p0 * n}{L - p0 * n}$$

under the assumption $V_{s+1} = 0$. The final local target has to be p=p0+S.

If we put the volume distributions V (over all trading periods in question) on each other, it is easy to get the composite target range as shown at Figure 1 below. For example, our nearby decade (10 years) rounded target points are – USD 500 for Brent Crude Oil, RUB 500 for Gazprom MICEX, 3.0000 for EURUSD, and USD 3100, first, and 4600-4800, then, for Gold spot (Fig.1) on the basis of total volume distribution (Figure 2).

Figure 1: Gold Spot targets by 2020 (some random daily, weekly and quarterly forecasts calculated are shown).
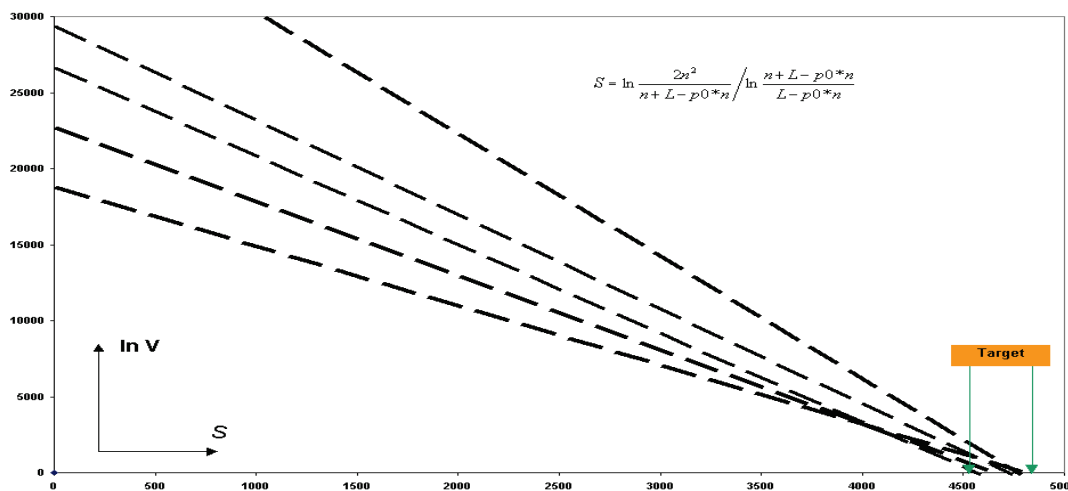
We can consider these targets computed over 60-Gb Data base of Global markets as IT-proof that USD time is over.

Problem#4: As widely mentioned, a lot of portfolio decisions at the global markets are making after the technical analysis of the charts provided by some information vendor. We disproved recently the "Elliott Waves Theory" and so-called "Support-Resistance-Lines" method. Nevertheless, we continue to discuss and explain the mainstream for the errors of the waves ideas using the details of DataMining done for the

EUR (former ECU) and some other currencies. The problem in question is the set of three extremely close to each other global constants, of different nature for self-organization, such as ~0.3679, ~0.3782 and ~0.3819, and we discuss this problem in the paper. Some examples from trading charts see at Fig.A1-A6 (Appendix 2).

Figure2: Gold Spot monthly tick and volume distributions sample.
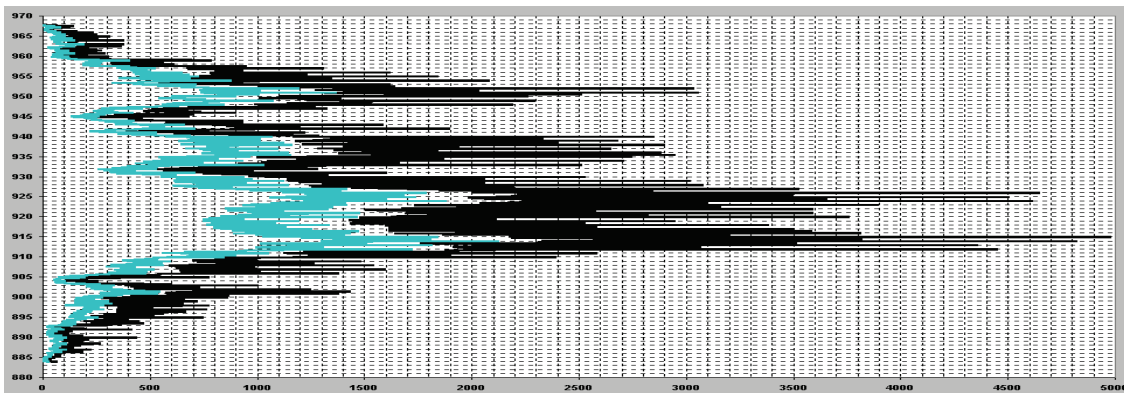
Problem#5: Finally, we discuss the result concerning our Hypothesis about the three constants mentioned above –

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

Our proposals to prevent the future financial turmoils are summarized and shown in the paper.

APPENDIX

Appendix 1: Recently it was shown by author that to find the parameter of the Efficiency we have to solve the Boltzmann's problem to minimize $\sum_i V_i \ln V_i$ under $\sum_i p_i V_i = T$, $\sum_i V_i = V$ with the result $V_i = \alpha e^{-\beta p_i}$, i=0…N, $\alpha, \beta -$ const, $\beta \in [0;1]$. To get the goal we introduced

Def.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,

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

Def.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,

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

and ruled out the THEOREM The Efficiency of the transactions at the Global Exchanges does not exceed the value of $E \approx 37,82\%$. The result does not depend on both the asset and the market in question.

Appendix 2: Universal constants and nearby targets at the Global financial markets

Figure:A1. Brent Crude Oil chart since 1988. Estimated target is 532.37 USD
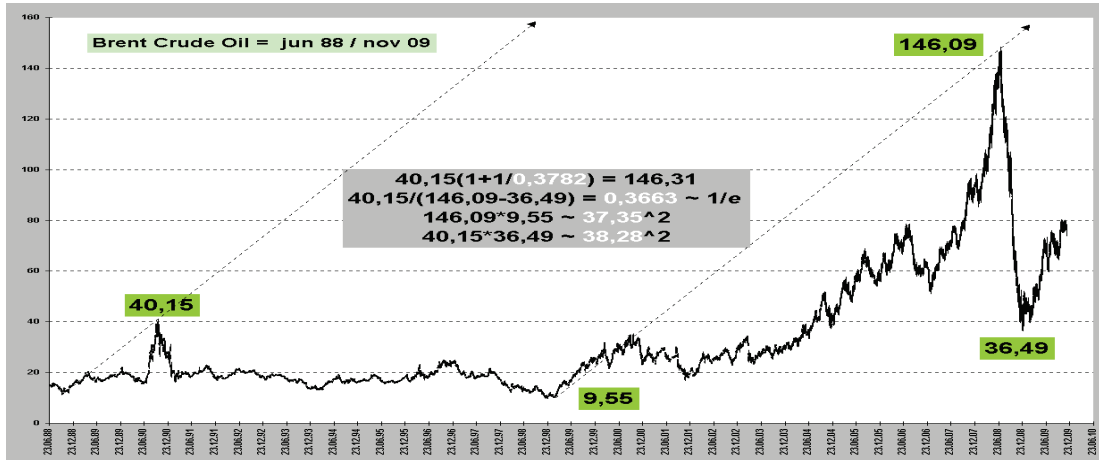
Figure:.A2. London Gold fixing since 1975. Estimated target is 3097.49 USD

Figure 3: DJIA forecasting pattern.
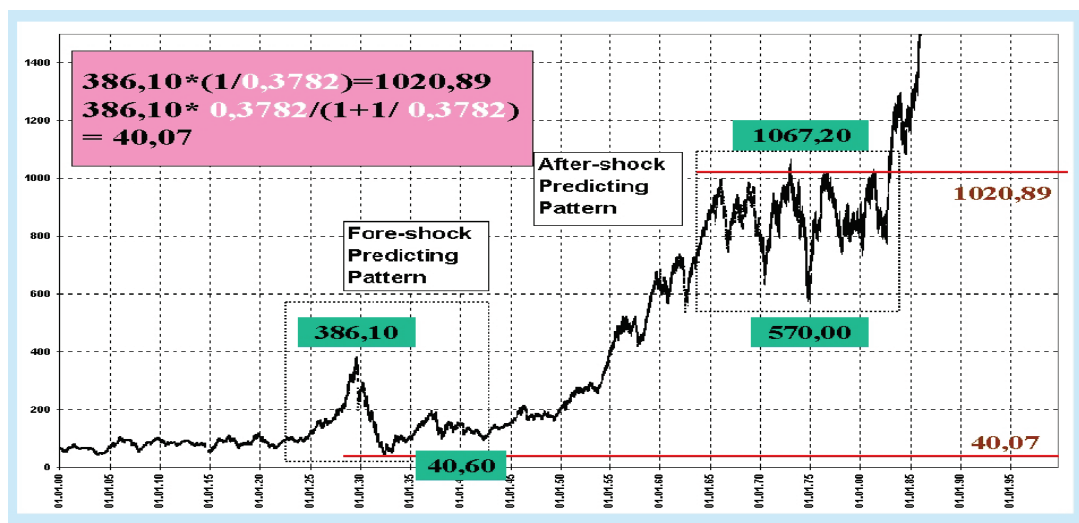
Figure .A4: RTSI as the Russian analogue of DJIA forecasting pattern (Fig.A3). Estimated trading goals are 1500-250-10000 USD.
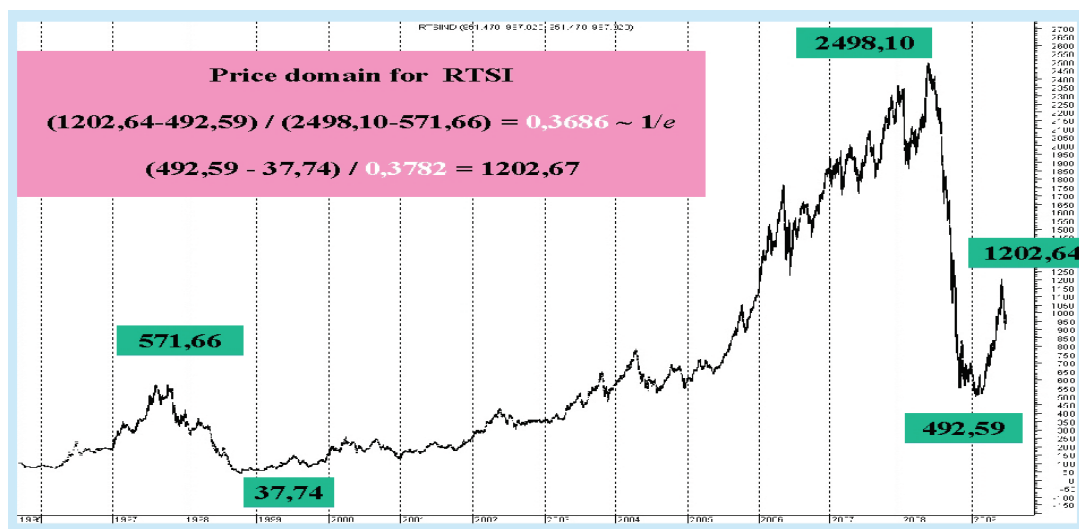
Figure.A5: Russian Ruble thermodynamics.
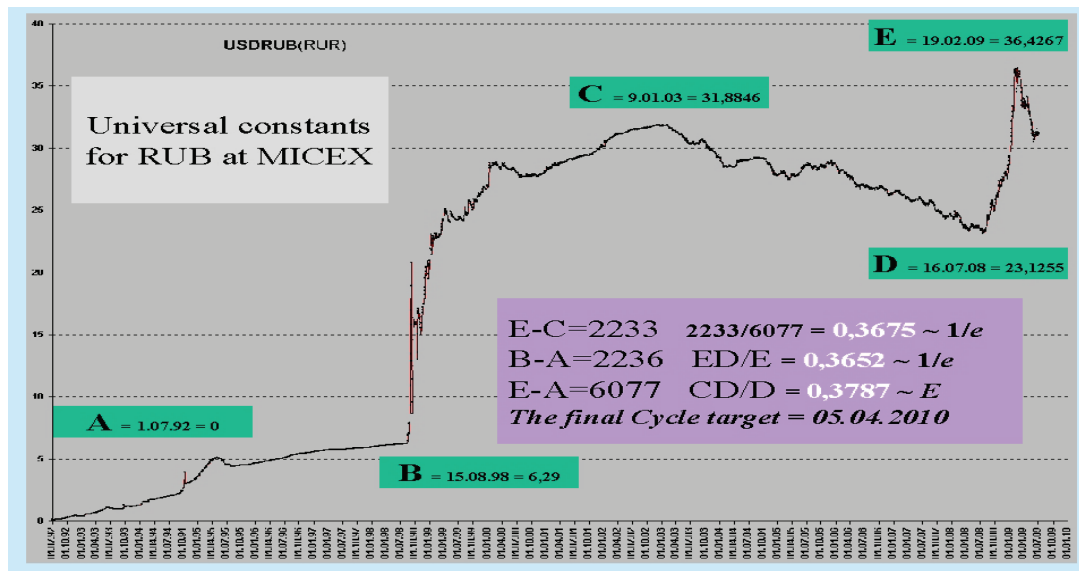
Figure A6: Russian Ruble and Japanese Yen reverse time goals.

BIOGRAPHY

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STOCK INDEX AND EXCHANGE RATE INTERACTIONS IN THAILAND

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ABSTRACT

This study examines the interactions between stock index and exchange rate in Thailand during the 9-year period before and the 9-year period after the 1997 financial crisis. The Granger causality and the Johansen cointegration tests are used on the monthly data of stock index, exchange rate, money supply, and foreign reserves in order to test for short-run and long-run relationship, respectively. Before crisis, uni-directional causality from stock index to exchange rate is found. However, after crisis, bi-directional causality between stock index and exchange rate is reported. Additionally, both before and after crisis, cointegration is indicated for both bivariate and multivariate cases. The findings suggest governments to implement appropriate exchange rate policies as well as to design effective trading rules, especially after crisis. Whether the significant impact of exchange rate on stock index after crisis derives from the increasing number of hedging transactions and the hedging volume needs further research.

JEL: F3; G1; N2

KEYWORDS: Stock index, exchange rate, emerging markets

INTRODUCTION

Because of the high levels of growing trade and financial liberalization, domestic economies' exposure to exchange rate risk is of particular interest. Additionally, as indicated by Bodnar and Gentry (1993), exchange rate volatility can substantially affect firms' values through the alteration in competition, input prices, and values of foreign currency-denominated assets. Moreover, after the financial crisis, many firms employ hedging tools such as foreign currency futures, foreign currency options, and foreign currency swap to lessen their foreign exchange exposure as exhibited by an increase in the hedging transactions as well as an increase in the hedging volume.

Obviously, domestic firms with foreign operations are directly affected. However, firms with no foreign operations may be indirectly affected. Thus, changes in the exchange rates may affect firms' stock prices and the stock market. On the other hand, changes in stock prices may influence the exchange rate through adjustments in firms' portfolio (Bahmani-Oskooee and Sohrabian, 1992) or capital outflows (Qiao, 1996).

Abdalla and Murinde (1997) also indicate the necessity of comprehending the interactions between stock index and exchange rates, especially, for countries in the emerging markets because these countries try to develop their financial markets and use more flexible exchange rates, simultaneously. As a result, it is essential for governments to understand these interactions so that they can implement appropriate exchange rate policies and design effective trading rules.

Therefore, the objectives of this study are to extend existing studies on the stock index-exchange rate causal relationship by examining the issue for another emerging market, Thailand, and to investigate the interaction between stock index and exchange rate before and after the 1997 financial crisis.

LITERATURE REVIEW

The impact of exchange rate changes on stock prices is examined by many studies. However, the findings are inconclusive. Positive effects of exchange rate changes on the stock market are documented in Aggrawal (1981), whereas negative effects are reported in Soenen and Hennigar (1988). Moreover, the insignificant impact of exchange rate changes on the stock market is found in Solnik (1984).

In addition, Bahmani-Oskooee and Sohrabian (1992) use the monthly data from July 1973 to December 1988 and investigate the interactions between the Standard and Poor's Composite Index and the effective exchange rate of dollar. According to the cointegration and Granger tests, they find bi-directional causality between stock price index and exchange rate; however, they find no long-run relationship between these two variables. Moreover, Qiao (1996) uses daily data for the cases of Japan, Hong Kong and Singapore. He finds bi-directional causality in Japan, uni-directional causality from the exchange rate to stock returns in Hong Kong, and no causality in Singapore.

Furthermore, uni-directional causality from exchange rates to stock prices is documented in Abdalla and Murinde (1997) for the cases of India, Korea, and Pakistan. Nonetheless, for the Philippines, the stock price causes the exchange rate. They also suggest governments of those countries with uni-directional causality from exchange rates to stock prices to be aware of implementing exchange rate policies.

In more recent studies, Ibrahim (2000) examines the interactions between stock prices and exchange rates in Malaysia. In bivariate models, no long-run relationship between the exchange rate measures and stock prices is found. However, the evidence of cointegration is detected when M2 money supply and reserves are applied in the models.

Additionally, Granger, Huang, and Yang (2000) use the data during the crisis and determine the Granger relations between stock prices and exchange rates. They find that exchange rates cause stock prices in South Korea, while stock prices cause exchange rates in the Philippines. Even though they find strong feedback relations in Hong Kong, Malaysia, Singapore, Thailand, and Taiwan, they fail to find any pattern of relations in Indonesia and Japan.

Recently, Caporale, Pittis, and Spagnolo (2002) study the casual relationship between stock prices and exchange rates in Japan, South Korea, Indonesia and Thailand. During the pre-crisis period, stock prices negatively cause exchange rates in Japan and South Korea, and stock prices positively cause exchange rates in Indonesia and Thailand. However, after the 1997 crisis, bi-directional causality is found.

In addition, Smyth and Nandha (2003) use daily data from 1995 to 2001 and examine the relationship between exchange rates and stock prices in Bangladesh, India, Pakistan, and Sri Lanka. They find no long-run relationship between these two variables. Nonetheless, they find uni-directional causality from exchange rates to stock prices in India and Sri Lanka.

Furthermore, Hatemi-J and Roca (2005) examine the relationship between exchange rates and stock prices in Malaysia, Indonesia, Philippines and Thailand before and during the 1997 Asian Crisis. They employ the bootstrap causality tests and find that exchange rates and stock prices are significantly related in the non-crisis period but not during the crisis period.

DATA AND METHODOLOGY

There are three hypotheses in this study. First, there is a relationship between stock index and exchange rate before crisis. Second, there is a relationship between stock index and exchange rate after crisis. Lastly, after crisis, the relationship between stock index and exchange rate is stronger.

This study investigates the interactions between stock index and exchange rate in Thailand during the 9-year period before crisis (1988-1996) and the 9-year period after crisis (1998-2006). The monthly data of stock index are collected from the Stock Exchange of Thailand. The monthly data of exchange rate (Baht/US$), money supply (M2), and foreign reserves are gathered from Bank of Thailand.

There are four main approaches in this study. First, unit root tests are employed to examine the stationary properties of the data series. Second, Vector Autoregression (VAR) is used to indicate which period the data are transferred. Next, the Granger causality tests are applied to identify the short-run dynamics of stock index and exchange rate. Lastly, cointegration tests are executed to capture the long-run co-movements or equilibrium relationship between stock index and exchange rate.

EMPIRICAL RESULTS

Before the Crisis Period (1988-1996)

The Augmented Dickey-Fuller (ADF) tests and the Phillips-Perron (PP) tests in Table 1 indicate that all four series (i.e., SET, FX, M2 and RES) are stationary after making the first log difference. Part (a) of Table 1 shows that at the log levels only RES is statistically significant at the five percent level in the ADF tests without trend and at the one percent level in the PP tests without trend. As represented in Part (b) of Table 1, the null hypothesis of a unit root is rejected at the one percent level in every test. Therefore, the first log difference series are proved to be stationary.

In order to specify the appropriate order of Vector Autoregression (VAR), Akaike Information Criterion (AIC) is applied to the first log differences of SET, FX, M2 and RES. According to Table 2, the first order of Vector Autoregression (VAR(1)) is selected because it has the smallest AIC. The equations with respect to VAR(1) are also presented in Table 2. With respect to equation 1, none of the coefficients is statistically significant, meaning that a one-period lag of each of the series (i.e., FX, M2, SET and RES) insignificantly affects SET. The result of insignificant impact of exchange rate on the stock market is also found in Solnik (1984) and Qiao (1996) (for the case of Singapore).

Table 1: Unit Root Tests before Crisis

Series	ADF Tests		PP Tests	
	No Trend	Trend	No Trend	Trend
(a) Log-Levels				
SET	-2.5203	-1.6798	-2.5091	-2.1468
FX	-2.8630	-3.1720	-2.4136	-2.7204
M2	-2.3762	-0.4680	-2.1197	-0.6916
RES	-4.8646**	-1.3833	-5.6269*	-1.3687
(b) First Log-Differences				
SET	-8.5934*	-8.7391*	-8.4853*	-8.6471*
FX	-7.0434*	-7.0104*	-6.6149*	-6.5744*
M2	-5.3880*	-9.4744*	-9.2356*	-9.5215*
RES	-8.2530*	-8.4598*	-8.2926*	-9.5542*

*Part (a) of this table shows unit root tests of stock index (SET), exchange rate (FX), money supply (M2,) and foreign reserves (RES) at the log levels before crisis (1988-1996). Part (b) represents unit root tests of the first log differences of stock index (SET), exchange rate (FX), money supply (M2,) and foreign reserves (RES) before crisis (1988-1996). * and ** indicate statistical significance at the one percent and five percent levels, respectively.*

In equation 2, a one-period lag of FX significantly affects FX at the one percent level. Moreover, a one-period lag of M2 and a one-period lag of SET significantly affect FX at the five percent level. The positively significant impact of stock index on exchange rate is also illustrated in Caporale, Pittis, and Spagnolo (2002) (for the cases of Indonesia and Thailand). Referring to equation 3, a one-period lag of FX significantly affects M2 at the five percent level. Finally, as shown in equation 4, none of the coefficients of a one-period lag of each of the series (i.e., FX, M2, SET, and RES) significantly affects RES.

Table 2: The Vector Autoregression (VAR) Order before Crisis

VAR Order	Akaike Information Criteria (AIC)
1	**-27.97463**
2	-27.69172
3	-27.32806
4	-26.93830
5	-26.58786

This table shows Akaike Information Criterion (AIC) for choosing the VAR order before crisis (1988-1996). The equations with respect to VAR(1) are as follows.

$$SET_t = 0.0005 + 0.3937FX_{t-1} + 0.6909M2_{t-1} + 0.1664SET_{t-1} - 0.2451RES_{t-1} \qquad (1)$$
$$[0.0724] \quad [0.1790] \quad [0.6904] \quad [1.5667] \quad [-0.5957]$$
$$FX_t = -0.0005 + 0.3676FX_{t-1} + 0.0922M2_{t-1} + 0.0095SET_{t-1} - 0.0046RES_{t-1} \qquad (2)$$
$$[-1.6180] \quad [3.6769*] \quad [2.0275**] \quad [1.9708**] \quad [-0.2437]$$
$$M2_t = 0.0055 - 0.4159FX_{t-1} + 0.0319M2_{t-1} - 0.0117SET_{t-1} + 0.0601RES_{t-1} \qquad (3)$$
$$[6.8967*] \quad [-1.7300**] \quad [0.2920] \quad [-1.0055] \quad [1.3368]$$
$$RES_t = 0.0059 + 0.0155FX_{t-1} + 0.2226M2_{t-1} + 0.0013SET_{t-1} + 0.1695RES_{t-1} \qquad (4)$$
$$[3.1470*] \quad [0.0275] \quad [0.8664] \quad [0.0473] \quad [1.6049]$$

(* and ** indicate statistical significance at the one percent and five percent levels, respectively.)

Table 3: The Granger Causality Tests before Crisis

Null Hypothesis	F-Statistic
FX dnc SET	0.2812
SET dnc FX	4.3239**
RES dnc SET	0.4680
SET dnc RES	0.3197
M2 dnc SET	0.7091
SET dnc M2	1.6181
RES dnc FX	1.2987
FX dnc RES	0.1812
M2 dnc FX	3.9794**
FX dnc M2	4.7059**
M2 dnc RES	1.0180
RES dnc M2	0.9808

This table shows the Granger causality results from all possible pairwises of all four series (i.e., SET, FX, M2, and RES) before crisis (1988-1996). * and ** indicate statistical significance at the one percent and five percent levels, respectively.

Furthermore, the Granger's concept of causality is executed in order to check the short-run direction of the effect found in VAR(1). Referring to the pairwise Granger Causality tests in Table 3, the null hypothesis that "SET does not Granger Cause FX" is rejected at the five percent level, illustrating that SET causes FX. The result of uni-directional causality from stock index to exchange rate is in line with Abdalla and Murinde (1997) (for the case of the Philippines), Granger, Huang, and Yang (2000), and Caporale, Pittis, and Spagnolo (2002) (for the case of Thailand before crisis).

The null hypothesis that "M2 does not Granger Cause FX" and the null hypothesis that "FX does not Granger Cause M2" are also rejected at the five percent level, representing a feedback relationship between M2 and FX. However, the null hypotheses of the rest of the pairwises are not rejected. Therefore, for short-run relationship during a period before crisis (1988-1996), there is uni-directional causality from stock index to exchange rate, and there is bi-directional causality between money supply and exchange rate.

To test for cointegration, the Johansen test is employed. The Johansen test is based on the maximum likelihood estimation of the VAR model, and the trace and maximal eigenvalue statistics are computed to test for the presence of r cointegrating vectors. The trace statistic tests the null hypothesis that there are at most r cointegrating vectors against the alternative of r or more cointegrating vectors, while the maximal eigenvalue statistic tests for r cointegrating vectors against the alternative of r+1 cointegrating vectors.

Table 4: Cointegration Tests before Crisis

Part (a) Bivariate Cases			Johansen Test			
Hypothesized No.	Lag = 4		Lag = 8		Lag = 12	
of CE(s)	Trace	Max-Eigen	Trace	Max-Eigen	Trace	Max-Eigen
None	60.5198*	31.4250*	25.3714*	21.8197*	12.4180	11.4685
At most 1	29.0948*	29.0948	3.5517	3.5517	0.9495	0.9495

Part (b) Multivariate Cases			Johansen Test			
Hypothesized No.	Lag = 4		Lag = 8		Lag = 12	
of CE(s)	Trace	Max-Eigen	Trace	Max-Eigen	Trace	Max-Eigen
None	86.6688*	31.4645**	57.0129*	31.6205*	36.2159	17.0055
At most 1	55.2043*	29.2553*	25.3924	17.8719	19.2104	13.3171
At most 2	25.9490*	20.5383*	7.5205	6.6355	5.8933	5.8877
At most 3	5.4107**	5.4107**	0.8850	0.8850	0.0056	0.0056

*Part (a) Bivariate Cases shows cointegration results from the series of SET and FX before crisis (1988-1996) at lags 4, 8, and 12. * indicates statistical significance at the one percent level.*
*Part (b) Multivariate Cases shows cointegration results from the series of SET, FX, M2, and RES before crisis (1988-1996) at lags 4, 8, and 12. * and ** indicate statistical significance at the one percent and five percent levels, respectively.*

Part (a) of Table 4 shows the cointegration results for bivariate cases between SET and FX. At lag 4, the trace and maximal eigenvalue statistics indicate 2 cointegrating equations at both five percent and one percent levels. At lag 8, the trace and maximal eigenvalue statistics indicate 1 cointegrating equation at both five percent and one percent levels. At lag 12, the trace and maximal eigenvalue statistics indicate no cointegration at both five percent and one percent levels.

Part (b) of Table 4 presents the cointegration results for multivariate cases among SET, FX, M2, and RES. At lag 4, the trace and maximal eigenvalue statistics indicate 4 cointegrating equations at the five percent level. The trace statistic indicates 3 cointegrating equations at the one percent level; however, the maximal eigenvalue statistic indicates no cointegration at the one percent level. At lag 8, the trace statistic indicates 1 cointegrating equation at both five percent and one percent levels. The maximal eigenvalue statistic indicates 1 cointegrating equation at the five percent level and no cointegration at the one percent level. At lag 12, the trace and maximal eigenvalue statistics indicate no cointegration at both five percent and one percent levels.

In sum, during the period before crisis (1988-1996), both trace and maximal eigenvalue statistics indicate cointegration (long-run relationship) in both bivariate and multivariate cases. The result of long-run relationship between stock index and exchange rate (a bivariate case) is contrast to the one in Bahmani-Oskooee and Sohrabian (1992), Ibrahim (2000) and Smyth and Nandha (2003). Nevertheless, the result of long-run relationship among stock index, exchange rate, money supply, and foreign reserves (a multivariate case) is the same as the one in Ibrahim (2000). The presence of cointegration suggests that there must be at least one direction of causation between stock index and exchange rate as well as among stock index, exchange rate, money supply, and foreign reserves.

After The Crisis Period (1998-2006)

The Augmented Dickey-Fuller (ADF) tests and the Phillips-Perron (PP) tests in Table 5 exhibit that all four series (i.e., SET, FX, M2, and RES) are stationary after making the first log difference. Part (a) of

Table 5 demonstrates that at the log levels only FX is significant at the five percent level in the PP tests without trend and with trend. As shown in Part (b) of Table 5, the null hypothesis of a unit root is rejected at the one percent level in every test. Therefore, the first log difference series are proved to be stationary.

Table 5: Unit Root Tests after Crisis

Series	ADF Tests		PP Tests	
	No Trend	Trend	No Trend	Trend
(a) Log-Levels				
SET	-1.1227	-2.8398	-1.2594	-2.8805
FX	-2.3129	-2.3464	-3.9639**	-3.9018**
M2	-0.6043	-2.0133	-2.0414	-3.1712
RES	1.2756	-0.8675	1.7591	-0.6581
(b) First Log-Differences				
SET	-9.6045*	-9.6478*	-9.6693*	-9.7097*
FX	-7.9581*	-7.8342*	-8.4867*	-8.5781*
M2	-8.1673*	-8.0899*	-8.3450*	-8.2855*
RES	-9.3456*	-9.4484*	-9.3104*	-9.4975*

Part (a) of this table shows unit root tests of stock index (SET), exchange rate (FX), money supply (M2), and foreign reserves (RES) at the log levels after crisis (1998-2006). Part (b) represents unit root tests of the first log differences of stock index (SET), exchange rate (FX), money supply (M2), and foreign reserves (RES) after crisis (1998-2006). * and ** indicate statistical significance at the one percent and five percent levels, respectively.

Table 6: The Vector Autoregression (VAR) Order after Crisis

VAR Order	Akaike Information Criteria (AIC)
1	-25.15241
2	-25.20794
3	**-25.21631**
4	-24.89260
5	-24.66216

This table shows Akaike Information Criterion (AIC) for choosing the VAR order after crisis (1998-2006).
The equations with respect to VAR(3) are as follows.

SET_t = -0.0001 + 0.3614FX_{t-1} - 0.6908FX_{t-2} + 3.2476FX_{t-3} + 0.1237$M2_{t-1}$-0.1078$M2_{t-2}$
    [-0.0093]   [0.2954]   [-0.6166]   [3.2502*]   [0.1308]   [-0.1159]
+ 1.9990$M2_{t-3}$ + 0.7228RES_{t-1} - 1.2255RES_{t-2} + 0.4718RES_{t-3} + 0.0358SET_{t-1}
   [2.1635**]   [1.6196]   [-2.6348*]   [1.0545]   [0.3194]
+ 0.0886SET_{t-2} + 0.0021SET_{t-3} (5)
   [0.7930]   [0.0202]
FX_t = 0.0012 + 0.0531FX_{t-1} + 0.0664FX_{t-2} - 0.5826FX_{t-3} - 0.0316$M2_{t-1}$ - 0.1420$M2_{t-2}$ -
   [1.2370]   [0.2383]   [0.3254]   [-3.1996*]   [-0.1830]   [-0.8375]
0.4894$M2_{t-3}$ - 0.3034RES_{t-1} + 0.2631RES_{t-2} - 0.0552RES_{t-3} - 0.0645SET_{t-1} +
   [-2.9066*]   [-3.7303*]   [3.10403*]   [-0.6771]   [-3.1626*]
0.0063SET_{t-2} + 0.0412SET_{t-3} (6)
   [0.3118]   [2.1834**]
$M2_t$ = 0.0006 - 0.1663FX_{t-1} - 0.1003FX_{t-2} + 0.8805FX_{t-3} - 0.0669$M2_{t-1}$+0.1139$M2_{t-2}$ +
   [0.4751]   [-0.5902]   [-0.3888]   [3.8268*]   [-0.3070]   [0.5317]
0.7634$M2_{t-3}$ + 0.2574RES_{t-1} - 0.2412RES_{t-2} + 0.0211RES_{t-3} + 0.0608SET_{t-1} -
   [3.5880*]   [2.5047*]   [-2.2515**]   [0.2051]   [2.3579*]
0.0200SET_{t-2} - 0.0436SET_{t-3} (7)
   [-0.7781]   [-1.8323**]
RES_t = 0.0034 - 0.0329FX_{t-1} + 0.0068FX_{t-2} + 0.4372FX_{t-3} + 0.2362$M2_{t-1}$-0.0759$M2_{t-2}$
   [2.6679*] [-0.1153]   [0.0259]   [1.8737**]   [1.0690]   [-0.3495]
+ 0.0535$M2_{t-3}$ + 0.0285RES_{t-1} - 0.1696RES_{t-2} + 0.1788RES_{t-3} - 0.0101SET_{t-1} +
   [0.2480]   [0.2736]   [-1.5614]   [1.7113**]   [-0.3856]
0.0002SET_{t-2} + 0.0276SET_{t-3} (8)
   [0.0075]   [1.1440]

(* and ** indicate statistical significance at the one percent and five percent levels, respectively.)

In order to specify the appropriate order of Vector Autoregression (VAR), Akaike Information Criterion (AIC) is applied to the first log differences of SET, FX, M2, and RES. According to Table 6, the third

order of Vector Autoregression (VAR(3)) is selected because it has the smallest AIC. The equations with respect to VAR(3) are also presented in Table 6. Referring to equation 5, the coefficients of a three-period lag of FX and a two-period lag of RES are statistical significant at the one percent level. The coefficient of a three-period lag of M2 is statistical significant at the five percent level. Thus, a three-period lag of FX, a two-period lag of RES, and a three-period lag of M2 significantly affect SET. The positive effect of exchange rate on stock index is also presented in Aggrawal (1981).

In equation 6, a three-period lag of FX, a three-period lag of M2, a one-period lag of RES, a two-period lag of RES, and a one-period lag of SET significantly affect FX at the one percent level. Moreover, a three-period lag of SET significantly affects FX at the five percent level. The significant impact of stock index on exchange rate is also detected in Qiao (1996) (for the case of Hong Kong), Abdalla and Murinde (1997) (for the cases of India, Korea and Pakistan), Granger, Huang, and Yang (2000) (for the case of South Korea), and Smyth and Nandha (2003) (for the cases of India and Sri Lanka). Regarding equation 7, a three-period lag of FX, a three-period lag of M2, a one-period lag of RES, and a one-period lag of SET significantly affect M2 at the one percent level. Additionally, a two-period lag of RES and a three-period lag of SET significantly affect M2 at the five percent level. Lastly, in equation 8, a three-period lag of FX and a three-period lag of RES significantly affect RES at the five percent level.

Table 7: The Granger Causality Tests after Crisis

Null Hypothesis	F-Statistic
FX dnc SET	2.3932***
SET dnc FX	5.1690*
RES dnc SET	5.6347*
SET dnc RES	2.2692
M2 dnc SET	1.6966
SET dnc M2	3.2336**
RES dnc FX	14.5641*
FX dnc RES	3.0621
M2 dnc FX	1.1202
FX dnc M2	0.4467
M2 dnc RES	3.6887**
RES dnc M2	6.6410*

*This table shows the Granger causality results from all possible pairwises of all four series (i.e., SET, FX, M2, and RES) after crisis (1998-2006). *, ** and *** indicate statistical significance at the one percent, five percent and ten percent levels, respectively.*

Furthermore, the Granger's concept of causality is executed in order to check the short-run direction of the effect found in VAR(3). According to the pairwise Granger Causality tests in Table 7, the null hypotheses that "SET does not Granger Cause FX," "RES does not Granger Cause SET," "RES does not Granger Cause FX," and "RES does not Granger Cause M2" are rejected at the one percent level, illustrating that SET causes FX, and RES causes SET, FX and M2, respectively.

Moreover, the null hypothesis that "FX does not Granger Cause SET" is rejected at the ten percent level. Hence, there is a bi-directional causality between stock index and exchange rate. This result is in agreement with Bahmani-Oskooee and Sohrabian (1992), Qiao (1996) (for the case of Japan), Granger, Huang, and Yang (2000) (for the cases of Hong Kong, Malaysia, Singapore, Thailand and Taiwan), and Caporale, Pittis, and Spagnolo (2002) (after crisis). In addition, the null hypotheses that "SET does not Granger Cause M2" and "M2 does not Granger Cause RES" are rejected at the five percent level, representing that SET causes M2, and M2 causes RES. As reported, there is a feedback relationship between M2 and RES. Nonetheless, the null hypotheses of the rest of the pairwises are not rejected.

Therefore, for short-run relationship during a period after crisis (1998-2006), there is bi-directional causality between stock index and exchange rate as well as bi-directional causality between money supply

and foreign reserves. There is also uni-directional causality from foreign reserves to stock index, stock index to money supply, and foreign reserves to exchange rate.

Table 8: Cointegration Tests after Crisis

Part (a) Bivariate Cases			**Johansen Test**			
Hypothesized No. of	Lag = 4		Lag = 8		Lag = 12	
CE(s)	Trace	Max-Eigen	Trace	Max-Eigen	Trace	Max-Eigen
None	33.6979*	21.6617*	32.3984*	18.8063*	23.6656*	18.0245**
At most 1	12.0363*	12.0363*	13.5921*	13.5921*	5.6412**	5.6412**

Part (b) Multivariate Cases			**Johansen Test**			
Hypothesized No.	Lag = 4		Lag = 8		Lag = 12	
of CE(s)	Trace	Max-Eigen	Trace	Max-Eigen	Trace	Max-Eigen
None	73.4196*	24.0085	76.9375*	32.7219*	77.5133*	41.0646*
At most 1	49.4111*	21.2601**	44.2156*	23.8174**	36.4487*	23.8032**
At most 2	28.1510*	17.3435**	20.3982*	12.9692	12.6455	6.9130
At most 3	10.8075*	10.8075*	7.4289*	7.4289*	5.7324**	5.7324**

Part (a) Bivariate Cases
This table shows cointegration results from the series of SET and FX after crisis (1998-2006) at lags 4, 8, and 12. * and ** indicate statistical significance at the one percent and five percent levels, respectively.
Part (b) Multivariate Cases
This table shows cointegration results from the series of SET, FX, M2, and RES after crisis (1998-2006) at lags 4, 8, and 12. * and ** indicate statistical significance at the one percent and five percent levels, respectively.

To test for cointegration, the Johansen test is employed, and the trace and maximal eigenvalue statistics are computed to test for the presence of r cointegrating vectors. Part (a) of Table 8 shows the cointegration results for bivariate cases between SET and FX. At lags 4 and 8, the trace and maximal eigenvalue statistics indicate 2 cointegrating equations at both five percent and one percent levels. At lag 12, the trace and maximal eigenvalue statistics indicate 2 cointegrating equations at the five percent level. As also illustrated at lag 12, the trace statistic indicates 1 cointegrating equation at the one percent level, whereas the eigenvalue statistic indicates no cointegration at the one percent level.

Part (b) of Table 8 presents the cointegration results for multivariate cases among SET, FX, M2, and RES. At lag 4, the trace statistic indicates 4 cointegrating equations at both five percent and one-percent levels, but the maximal eigenvalue statistic indicates no cointegration at both five percent and one percent levels. At lag 8, the trace statistic indicates 4 cointegrating equation at both five percent and one percent levels. The maximal eigenvalue statistic indicates 2 cointegrating equations at the five percent level and 1 cointegrating equation at the one percent level. At lag 12, the trace and maximal eigenvalue statistics indicate 2 cointegrating equations at the five percent level, and only maximal eigenvalue statistic indicates 1 cointegrating equation at the one percent level.

In sum, during the period after crisis (1998-2006), both trace and maximal eigenvalue statistics indicate cointegration (long-run relationship) in both bivariate and multivariate cases. The finding of long-run relationship between stock index and exchange rate (a bivariate case) is contrast to the one in Bahmani-Oskooee and Sohrabian (1992), Ibrahim (2000), and Smyth and Nandha (2003). Nevertheless, the result of long-run relationship among stock index exchange rate, money supply, and foreign reserves (a multivariate case) is the same as the one in Ibrahim (2000). The presence of cointegration suggests that there must be at least one direction of causation between SET and FX as well as among SET, FX, M2, and RES.

CONCLUSION

The results of this study are in agreement with the asset market approach determination of exchange rates (Giovannini and Jorion, 1987; Chiang, 1991; Pavlova and Rigobon, 2003). During the 9-year period

before and the 9-year period after the 1997 financial crisis, the interrelations between exchange rate in foreign exchange market and stock index in stock market are reported.

With respect to short-run relationship, there is only uni-directional causality running from stock index to exchange rate before crisis (Abdalla and Murinde, 1997; Granger, Huang, and Yang, 2000; Caporale, Pittis, and Spagnolo, 2002). There is bi-directional causality between stock index and exchange rate after crisis (Bahman-Oskooee and Sohrabian, 1992; Qiao, 1996; Granger, Huang, and Yang, 2000; Caporale, Pittis, and Spagnolo, 2002).

Referring to long-run relationship, there is cointegration between stock index and exchange rate (a bivariate case) as well as cointegration among stock index, exchange rate, money supply, and foreign reserves (a multivariate case) both before and after crisis. Accordingly, governments should not only execute suitable exchange rate policies, but also issue effective trading rules, especially after crisis.

This study contributes to the existing literature by examining in depth the stock index-exchange rate relationship in Thailand before and after the 1997 financial crisis. According to unit root tests, the series of stock index (SET), exchange rate (FX), money supply (M2), and foreign reserves (RES) become stationary after making the first log difference. VAR with the first lag length shows relationship among stock index, exchange rate, money supply, and foreign reserves before crisis; however, VAR with the third lag length indicates relationship among stock index, exchange rate, money supply, and foreign reserves after crisis.

For short-run relationship, there is uni-directional causality from stock index to exchange rate before crisis. Nevertheless, there is bi-directional causality between stock index and exchange rate after crisis. For long-run relationship, cointegration is detected in bivariate and multivariate cases, both before and after crisis. Therefore, government should be cautious in implementing exchange rate policies, especially after crisis. Future research should examine whether, after crisis, an increase in the number of hedging transactions and an increase in the hedging volume act as a moderator causing the interaction from exchange rate to stock index.

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IS LIQUIDITY REALLY A PRICED RISK FACTOR?

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ABSTRACT

Is liquidity a priced risk factor, or is it jointly determined with returns by other risk factors? Using a large sample of U.S. stocks from 1970 through 2006, we demonstrate that stock returns and stock liquidity are jointly determined. Then, using a unique sample of U.S. firms with two classes of traded stock between 1980 and 2004, we find that the unconditional mean returns of stocks that differ in their illiquidity are not significantly different. We also find that their exposures to either aggregate liquidity or innovations in aggregate liquidity are not significant determinants of their conditional returns. Consequently, our evidence is consistent with the arguments in Huang and Wang (2007), Johnson (2006, 2008), and Novy-Marx (2006) that security prices/returns and different liquidity measures are jointly determined. Furthermore, our evidence suggests that at best, extant studies that use different liquidity measures as priced risk factors have produced biased and inconsistent estimates of the degree to which different liquidity measures are priced risk factors.

JEL: G12

KEYWORDS: stock returns, liquidity, idiosyncratic risk

INTRODUCTION

Is the liquidity of a security and/or its sensitivity to aggregate liquidity shocks an exogenous determinant of its required returns as implied by regressing some measure or measures of such variables on security returns? Or, alternatively, is liquidity jointly determined with security returns by many of the same factors that explain these returns? There are theoretical arguments for each of these positions.

Some argue that liquidity is a priced risk factor. Within this group of proponents, liquidity is perceived to influence required returns in three different ways. First, there are those who argue that less liquid securities should yield higher expected returns (e.g., Amihud and Mendelson (1986)). Next, some maintain that securities that are more sensitive to aggregate liquidity shocks should promise higher returns (e.g., Pastor and Stambaugh (2003)). Finally, there are those who claim that securities that are either less liquid or more sensitive to aggregate liquidity shocks should yield higher expected returns (e.g., Acharya and Pedersen (2005)).

In contrast, others maintain that liquidity is not a priced risk factor, but rather jointly determined by the same factors that determine security returns. Johnson (2006) considers how market liquidity might be related to underlying sources of uncertainty and suggests that even if liquidity is not a priced risk factor, it may appear to be due to omitted factors. Using simulations, Johnson shows that even when sensitivity to aggregate liquidity shocks is not a priced risk factor; it will appear to be so because of the correlation of aggregate liquidity shocks with priced risk factors. Furthermore, the estimates one derives are consistent with the estimates reported in different studies (e.g., Pastor and Stambaugh (2003)).

Similarly, Novy-Marx (2006) argues that since measures of illiquidity are driven by the price elasticity of demand, illiquidity will proxy for any unobserved risk factor. Like Johnson, Novy-Marx demonstrates through simulations that even when the liquidity of a security is not a priced risk factor it will appear to be

so if priced risk factors are excluded from the analysis. Further, the magnitudes of the estimates are consistent with empirical studies using standard illiquidity measures (e.g., Amihud (2002)).

Focusing on a different aspect, Huang and Wang (2007) develop a model in which investors face idiosyncratic shocks and participation costs, but where required returns are determined outside the model. They show within this framework that the demand for liquidity is endogenously driven by idiosyncratic shocks that force investors to re-balance their portfolios. While these idiosyncratic shocks affect prices: causing return distributions to be negatively skewed and fat-tailed, they do not determine required returns. While Johnson (2008) takes a different approach from Huang and Wang, his modeling of the random arrival and exit of traders also leads to demand shocks determining changes in liquidity.

To date, there has been no study that has taken these endogeneity arguments seriously and empirically examined their implications despite the fact that both Johnson (2006) and Novy-Marx (2006) demonstrate through simulations that one should observe the magnitude of coefficient estimates on different liquidity measures that one does observe in security return or excess return regressions even when the different measures of liquidity are not priced risk factors.

Similarly, we know of no study that purports to find evidence that some measure of liquidity is priced that also tests whether its evidence is subject to endogeneity bias. There are a plethora of empirical studies that regress some measure of liquidity on a set of explanatory variables and find that liquidity is influenced by some firm characteristic (like advertising expenditures, institutional ownership, governance, or firm size). These studies demonstrate that the liquidity of a stock is correlated with various firm features. However, such correlations are subject to the criticism that studies that claim to find evidence that liquidity is priced have failed to adequately control for other priced risk factors with which liquidity is potentially correlated and so have generated biased and inconsistent estimates of the degree to which liquidity is a priced risk factor.

Thus, this study focuses on testing the above arguments that security prices/returns and various measures of liquidity are jointly determined. To do this, we begin by using a large sample of U.S. firms whose shares of common stock traded between 1970 and 2006 to test whether different liquidity measures, both at the individual and aggregate levels, are endogenous variables in regressions on excess returns.

Given this evidence, we then employ the research design approach recommended by Clarke (2005) for the type of endogeneity implied by these models to refine our analysis. Specifically, we examine the returns and liquidity of two classes of traded common stock issued by the same U.S. corporations from 1980 through 2004. Our study design is analogous to twin studies in biology that attempt to tease out the effects of "nature versus nurture." This design allows us to control for omitted risk factors that are correlated with issuer characteristics.

We find evidence for the following conclusions. First, different measures of liquidity, either at the individual security level or at the aggregate level, are jointly determined with security returns. Second, although the liquidity or illiquidity of our sample of two classes of dual class stocks is significantly different, the mean (median) returns of the two daily return distributions are not significantly different. Third, the differences in illiquidity and differences in unconditional variances are significantly correlated. Fourth, the factor loadings on Amihud's lagged aggregate illiquidity measure, Amihud's aggregate illiquidity innovation measure, and Pastor and Stambaugh's liquidity innovation measure are statistically insignificant. Fifth, as predicted by models arguing that liquidity is endogenously determined, we find that the differences in illiquidity and differences in *contemporaneous* idiosyncratic shocks are highly correlated.

Altogether, our results are consistent with arguments that the liquidity of a security and/or its sensitivity to aggregate liquidity shocks are jointly determined with security prices/returns. At a minimum, our evidence suggests that all prior research that has regressed some liquidity measure or measures on security returns without accounting for the endogeneity of the relationship has produced biased and inconsistent estimates of their coefficients. Moreover, our evidence suggests that this bias is away from zero since we provide evidence that the liquidity of a security or its sensitivity to aggregate liquidity shocks are not priced risk factors.

PRIOR EVIDENCE ON THE PRICING OF LIQUIDITY

We will not discuss the empirical literature on the pricing of liquidity in detail as Amihud, Mendelson, and Pedersen (2005) provide a good summary of this literature. Instead, we will point out important reasons why prior studies have not been adequate to show that liquidity is a priced risk factor.

Many studies that purport to find that liquidity, in some form, is a priced risk factor regress some measure of liquidity or illiquidity, either at the security level or the aggregate level, on security returns or security excess returns (security returns less a proxy for the risk free rate of return). All such studies, profiled in Amihud, Mendelson, and Pedersen's review, suffer from the critical error of ignoring the possibility that returns and liquidity are jointly determined by the same risk factors. None of the reported studies either test for this condition or address it in their estimation. Consequently, these studies may produce biased and inconsistent estimates of the coefficients on their liquidity measures.

Put differently, all these studies assume that they have included all the priced risk factors. As Johnson (2006) and Novy-Marx (2006) point out, the exclusion of any priced risk factor will always result in measures of liquidity appearing to be priced even when they are not. Given the lack of consensus in the asset pricing literature on what are priced risk factors, this assumption is a problem for any study that purports to demonstrate that some measure of liquidity is priced.

Alternatively, there are studies that purport to find evidence that liquidity is priced by examining the relative prices of two similar securities, one of which is more "liquid." Examples include all the research on restricted stock discussed in Amihud, Mendelson, and Pedersen's review. The essential problem with this work, as discussed below in more detail, is their failure to recognize that the prices of these two types of securities may differ because of different expected cash flows rather than because of differences in required returns. Since all of these factors influence expectations about future cash flows associated with owning either the restricted or the unrestricted stock, they can account for the average discount without assuming that liquidity is priced. Furthermore, by its nature, restricted stock influences the timing of expected cash flows and, thereby, its price.

Regardless of whether or not one identifies such additional factors, the key point is that there is no logical reason why differences in "liquidities" are not associated with differences in expected cash flows rather than with differences in required returns. The mere fact that one might observe the price of a less "liquid" asset to be lower than a similar but more "liquid" asset does not establish that its required returns are different. Many measures of liquidity or illiquidity are price impact measures and so might just as logically be related to an investor's expected cash flows as they are to required returns.

SAMPLE AND SAMPLE DATA

We begin by attempting to identify all U.S. public corporations with two classes of stock that traded during the time period 1980 through 2004. We identify three potential sources of sample firms: 15 firms with dual class stock at the beginning of 1980, 370 firms that went public with dual class stock, and 178 firms that recapitalized from single to dual class stock during our time period. We then eliminate

potential sample firms when both classes of their common stock do not trade concurrently or when there is no CRSP data available. Our remaining sample of 112 firms becomes the focus of this study.

For each of these firms, we collect the following from CRSP: price, closing bid/ask spread, and trading volume data for each trading day over a one-year period. We establish that the one-year period is free of change in control contests to avoid the contamination that such contests would present to our analyses. For the three respective groups, the data are primarily from 1980, or during the one-year period following their going public, or over the one-year period after their conversion to dual class stock. Note that by construction, each pair of stocks share the same exposure to industry and macroeconomic influences on their daily security returns.

SUMMARY AND CONCLUSIONS

We begin by using a large sample of U.S. stocks from 1970 through 2006 to test whether a measure of a stock's liquidity (Amihud's (2002) illiquidity measure) and a measure of a stock's sensitivity to aggregate liquidity shocks (Pastor and Stambaugh's (2003) liquidity innovation measure) are endogenous variables in security return regressions. We find evidence that both measures are endogenous variables in stock return regressions and so prior evidence on their coefficients are biased and inconsistent.

To address this bias, we then follow a research design approach, which Hanushek and Jackson (1977), Clarke (2005), and others point out as the most effective way to address the bias under consideration. Specifically, we focus on the return, liquidity, and risk of two classes of traded common stock issued by the same U.S. corporations over the time period, 1980 through 2004. We focus on these securities because they share the same firm characteristics, and so our study is analogous to the use of twin studies in biology to study "nature versus nurture" arguments.

Based on these samples, we derive the following conclusions. First, security returns and their liquidity are jointly determined. Second, while the liquidity (or illiquidity) and unconditional variances of daily stock returns of the two types of shares are significantly different, the mean returns of the two daily return distributions are not significantly different. Third, we find that these differences in illiquidity and differences in unconditional variances are significantly correlated. Fourth, we discover that the factor loadings on Amihud's lagged aggregate illiquidity measure, Amihud's aggregate illiquidity innovation measure, and Pastor and Stambaugh liquidity innovation measure are unable to explain excess returns. Fifth, we find that the idiosyncratic shocks experienced by the two classes of dual class stocks are significantly different. And finally, we find that the differences in illiquidity and the differences in *contemporaneous* idiosyncratic shocks are highly correlated.

One might question our dual class evidence by arguing that it is based on a smaller sample that is typical in empirical asset pricing studies and so our estimators lacked the power to reject the null hypothesis that the coefficients on the different liquidity measures were significantly different from zero. We think that this argument is invalid for two reasons. Based on Monte Carlo studies and statistical theory, our sample size is large enough to have sufficient power to reject the null hypothesis. Second, such a lack of power argument should also apply to the Fama-French factors, which we do find to be significantly different from zero. In fact, one could argue that the above research design provides the strongest evidence to date that the significance of the Fama-French factors are not driven by excluded priced risk factors.

Altogether, our results are consistent with the arguments in Huang and Wang (2007), Johnson (2006, 2008), Novy-Marx (2006), and others that security prices/returns and different measures of liquidity are jointly determined in security return regressions. At a minimum, our evidence implies that all prior security return regressions on different liquidity measures have produced biased and inconsistent estimates of the degree to which they are priced risk factors unless the researchers have accounted for the

endogeneity of their liquidity measures. Furthermore, our evidence implies that the bias in these regressions toward finding these coefficients to be significantly different from zero when they may not be. Nevertheless, as Novy-Marx (2006) points out, our evidence also implies that different measures of liquidity are likely to be good proxies for excluded risk factors. Consequently, it makes sense that studies like Eckbo and Norli (2005) or Butler and Wan (2009) find that liquidity measures help "explain" different stock return "anomalies."

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ASSESSING THE COST-BENEFIT OF POLICE OFFICER STAFFING: DO CITIES WITH HIGHER POLICE OFFICER TO CITIZEN RATIOS HAVE LESS CRIME?

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ABSTRACT

In the United States, cities use the ratio of "x" police officers per 10,000 citizens to show the strength of staffing. This ratio varies considerably throughout cities in the United States. Some cities have ratios as low as 10 officers per 10,000 citizens; others have ratios of 40-50 officers per 10,000 citizens. A very small number of cities have ratios exceeding 100 officers per 10,000 citizens. This paper examines a sample of U.S. cities to see if higher staffing ratios results in smaller crime rates for these sampled cities. Do cities get better protection and less crime by employing more officers? In other words, is there a cost-benefit to hiring officers in the higher ratio range of 40-50 officers per 10,000 citizens versus the lower range of 10-25 officers per 10,000 citizens?

KEYWORDS: Police staffing, cost-benefit, police-citizen ratios

INTRODUCTION

Police and sheriffs departments have always sought to improve the efficiency by which officers are deployed within their city or county. As managers of their organizations, they must be accountable to their city and county governments to ensure the most efficient police services are provided to their citizens. As has been witness through this current severe recession of 2008-2009, cities and counties in the U.S. have experienced declining general funds as a result of home value declines which has in turn reduced property taxes—the main source of police funding.   Police managers must know the optimal sworn staffing levels for their cities and be prepared to justify this authorized sworn staffing level. In addition, police managers must also be prepared to request additional officers as population increases.

A commonly held belief among law enforcement officials, law enforcement pundits, and citizens of the U.S. is that more police officers on the streets or investigating crimes results in less crime and a safer communities. Intuitively, this belief is logical; however, there is no solid data to support this claim. One method to partially and indirectly support this claim is to examine the police officer to citizen ratios of a sample of U.S. cities and compare the crime rates of high ratio cities to low ratio cities. If high police-officer-to-citizen-ratio cities have lower crime rates than low police-officer-to citizen-ratio cities, then there is some support for this belief.

LITERATURE REVIEW

Logic suggests that there certainly must be a relationship between the number of police officers employed by a city and the crime rate in that city and that the relationship is an inverse one: more police officers equals a lower crime rate. This belief is supported logically by the general deterrence theory as espoused two and one-half centuries ago by Cesare Beccaria and Jeremy Bentham in what is now known as the Classical theory of criminology. It is also supported by the concept of incapacitation, i.e., more police officers making more arrests results in more convictions and prison time and thus fewer criminals on the streets to continue to ply their criminal trade. However, a significant number of studies have failed to show a negative relationship between the size of a police force and crime (see Kelling et al, 1974; Blumstein et al, 1978; Cameron, 1988; Bayley, 1994; Benson et al, 1994; Gottfredson & Hirschi, 1990; Sherman, 1992; and Sparrow et al, 1990). Explanations for this position are as follows: (1) Most police

work is not devoted to crime reduction, (2) Only large increases in police levels can produce enough police presence on the streets to actually deter crime, and (3) The most common police strategies are poor crime-prevention strategies.

Conversely, the 1994 Omnibus Crime Bill infused cites and counties with 100,000 new police officers serving in the capacity of community policing over about a 10 year period. This is also a period during which the U.S. experienced significant reductions in both property and violent crime.

Correa (2004) examines the concept of the total cost of damages due to crime plus the cost of police protection in a community. He suggests that the minimization of harm determines the optimal size of a police force. Correa also reviews the existing methods of determining the optimal size of police departments. The Commission on Accreditation for Law Enforcement Agencies (CALEA) proposes a formula using the number of complaints or incidents reported to a department and the population being served. Other researchers (see Hirsch, 1977 and Bahl et al, 1980) recommend similar methods.
Using UCR data on property and violent crime, Correa (2004) converts crime to a monetary cost and compares this with expenditures for police protection. He found,
"A preliminary analysis of the data from all [50] states showed a weak positive correlation between expenditures on police protection and cost of crime." (p. 222).

Levitt (1988, 1997) has conducted extensive research in the area of police staffing and crime rates. His results generally contradict those of other researchers, for example Blumstein et al, 1978 and Cameron, 1988, that there is no reliable statistical data to support the contention that increases in police officer staffing levels results in a decrease in a city's crime rate. Levitt contends that,

> If the size of the police force systematically affects the
> willingness of victims to report crime or a police department's
> propensity officially to record victim crime reports, then UCR data
> will understate the true effectiveness of police in reducing crime(1988, p. 62).

Levitt identifies what he refers to as reporting bias. He asserts that, "[if] reporting bias (…) is present, reported crime rates may increase with the size of the police force, even if the true victimization rate is falling"(p. 63). He concludes by stating that his data suggest some reporting bias exists, even though the evidence is not overwhelming. He estimates that each additional officer hired leads to the reporting of roughly 5 Index crimes that otherwise would have gone unreported (p. 64).
In a subsequent article, Levitt (1997) looks at the timing of mayoral and gubernatorial elections as a causal effect of policing on crime rates. Not surprisingly, Levitt found increases in the size of police forces are shown to be disproportionately concentrated in mayoral and gubernatorial election years. He found that the mean percentage change in sworn police officers for the 59 cities in the sample was 2.1 percent in gubernatorial election years, 2.0 percent in mayoral election years, and 0.0 percent in nonelection years (p. 2). In addition to looking at election cycles, Levitt also uses UCR data of the 59 cities to compare with the increased staffing levels derived from the election years. He found that increases in police are shown to substantially reduce violent crime, but have a smaller impact on property crime (p.1).

Marvell and Moody (1996) also examined the relationship between police and crime. They used the Granger test, which accounts for lags between police staffing levels and crime rates to avoid the problem of simultaneity. Because there is significant lag between the time a police officer is hired, trained, and assigned to patrol and any possible reduction in crime, the Granger test seems to be the best method of determining this correlation. Using the data from the 59 cities, Marvel and Moody were able to determine that, for each additional officer at the city level, there are approximately 24 fewer crimes: .02 homicides, .1 rapes, 1.8 robberies, 5.3 burglaries, 12.5 larcenies, and 4.5 auto thefts (p.632). Marvel and Moody caution that the estimates are averages across the cities and states, and the figures might be higher or

lower in individual localities due to, for example, differences in policing practices and differences in other criminal justice features with which the police interact.

Marvel and Moody estimate "that the per-officer savings to victims of UCR index crime are roughly $100,000 per additional officer, which are approximately twice the nationwide costs per officer (see Lindgren, 1992, as cited in Marvel and Moody). This figure may be spurious, however, because the crime-reducing impact of adding police requires more than just police expenditures. The impact may largely be due to the deterrent and incapacitative effects of additional arrests and more incarceration" (p. 633).

Marvel and Moody conclude their article by emphasizing that higher police staffing at the city level reduces most types of crimes and the impact is often substantial.

There is also anecdotal evidence that there is a correlation between police officer staffing and city crime rates. In May, 2008, Mayor Frank Jackson of Cleveland, Ohio proposed a re-districting plan for the police department that eliminated the city's Third District and increased the number of officers moving back into patrol duty. "According to Jackson, because of the changes, the city will be able to increase the number of police officers on the street from 914 to 944 as well as the number of patrol cars from 199 to 210" (Walker, 2008, p.2).

Coe and Wiesel (2001) studied police budgeting in 490 cities in 1998. They found that "only 31 percent of agencies with large budget increases had an increase in crime. Surprisingly, 42 percent of successful [police budget] agencies had a decrease in crime" (p. 5). Other studies have also addressed the issue of policing, economies of scale, and cost-efficiency (See Gennaro & Kunselman, 2000; Southwick, 2005, and Jordan, 1992).

In conclusion, based on the extant literature, the most accurate conclusion that can be made with regard to police officer staffing levels and crime rates is there is some degree of support for the commonly held belief that increased police staffing levels for cities can have at least a delayed effect on reducing the city's overall crime rate.

DATA AND METHODOLOGY

My study examines the relationship between high and low police officer-to-citizen ratios in selected cities and the resultant crime rates of those cities. In doing so, I want to determine if cities with high ratios have proportionately lower crime rates than cities with lower ratios. Another research question addressed is whether there appears to be a cost-efficiency point of diminishing returns for police staffing: Is there an ideal staffing ratio for most cities?

The data for my study were taken from two sources: The Bureau of Justice Statistics' Law Enforcement Management and Administrative Statistics (LEMAS) and the Federal Bureau of Investigation's Uniform Crime Reports (UCR). The LEMAS survey is conducted every 4 to 5 years versus the UCR which is compiled and published every year. The last LEMAS survey was conducted in 2003 and the previous survey was conducted in 1999. The most recent LEMAS survey was conducted in 2008, but the data have not yet been published. Therefore, the two years of comparison I have used in this study are 1999 and 2003.

My study compares data from 29 cities. These 29 cities are separated in 9 cities with a population of 900,000 or greater, 10 with populations between 150,000 and 899,999, and 10 cities with populations less than 150,000. The 9 cities with populations of greater than 900,000 are divided into 4 with police officer to citizen ratios of at least 40 per 10,000 and 5 with police officer to citizen ratios equal to or less than 27 per 10,000. The 10 cities with populations between 150,000 and 899,999 are divided into 5 with at least

40 per 10,000 and 5 with less than 20 per 10,000. The same scheme is applied with the less than 150,000 population cities. Comparisons are made for 1999 versus 2003.

EMPIRICAL RESULTS

Below are Tables 1-6 which display the data for the three population categories and for the two years, 1999 and 2003. Table 1 displays the data for the greater than 900,000 population cities for 1999.

Table 1—Police Officer to Citizen Ratios and Cost-Efficiency for Selected Cities, 1999

CITIES WITH POPULATION >900,000 (1999)				
Cities with Officer to Citizen Ratios = or > 40 per 10,000				
City	**Population**	**Officers/10,000**	***Crime Rate(per 100,000 population)**	****Cost-Efficiency Factor**
NYPD	7,429, 263	53	4031	76
Chicago PD	2,821,032	49	8107	165.44
Philadelphia PD	1,435,382	47	7291	155.12
Detroit	975,020	40	10,416	260.4
Cities with Officer to Citizen Ratios = or < 27 per 10,000				
City	**Population**	**Officers/10,000**	***Crime Rate(per 100,000 population)**	****Cost-Efficiency Factor**
Phoenix PD	1,225,881	22	7720	350.9
Las Vegas	922,450	19	5184	272.84
San Jose PD	875,840	16	2944	183.9
San Diego PD	1,238,549	17	4003	235.4
Dallas PD	1,091,386	27	9615	356.11

Crime Rate equals the total of all Part 1 Crimes (Violent and Property Crime) per the UCR, 1999.
***Cost Efficiency Factor equals the Crime Rate divided by the officers per 10,000 population.*

As expected, the four cities with high police officer to citizen ratios had lower (better) cost-efficiency overall versus the 5 cities with lower police officer to citizen ratios. However, closer analysis reveals that San Jose PD, with a 183.9 factor was actually lower than Detroit PD with a 260.4 factor. In fact, San Jose PD was very close to Philadelphia PD's 155.12 and Chicago PD's 165.44. Detroit PD has 2.35 times as many officers per 10,000; Philadelphia PD has 2.76 times as many; and Chicago has 2.88 times as many. The conclusion to be drawn from this table is numbers of police officers per 10,000 population alone does not insure low crime rates.

For medium sized cities, the data shows that the cities with ratios of 40+ per 10,000 have greater success in their cost-efficiency versus the less than 20 per 10,000 cities. However, Ft. Collins PD exceeds St. Louis PD by only 19.3% of cost-efficiency but St. Louis PD has 34 more officers per 10,000 population, a 283.3% increase. Once again, the data indicate that overall the less than 20 per 10,000 cities generally have better cost-efficiency with their officers than do the 40+ cities.

Table 2—Cities with Population between 100,000-899,999, 1999

CITIES WITH POPULATION 100,000 -899,999 (1999)				
Cities with Officer to Population Ratio of = or >40 per 10,000				
City	**Population**	**Officers/10,000**	***Crime Rate per 100,000**	****Cost-Efficiency Factor**
Springfield, Ma.	148,820	42	8030	191.2
Boston	557,812	40	6288	157.2
St. Louis	340,836	46	13,988	304.3
Washington, D.C.	519,000	63	8061	127.9
Newark, N.J.	268,348	53	7881	148.7
Cities with Officer to Population Ratio of = or < 20 per 10,000				
City	**Population**	**Officers/10,000**	***Crime Rate per 100,000**	****Cost-Efficiency Factor**
Anchorage	257,762	13	5024	386.4
Oakland, Ca	371,234	17	8370	492.3
Fresno, Ca	403,966	17	7137	419.8
Ft. Collins, Co	111,241	12	4359	363.2
Indianapolis	759,066	14	5322	380.14

Crime Rate equals the total of all Part 1 Crimes (Violent and Property Crime) per the UCR, 1999.
***Cost Efficiency Factor equals the Crime Rate divided by the officers per 10,000 population.*

Table 3—Cities with Population Less Than 100,000, 1999

CITIES WITH POPULATION OF <100,000 (1999)				
Cities with Officer to Citizen Ratio = or > 40 per 10,000				
City	**Population**	**Officers per 10,000**	***Crime Rate per 100,000**	****Cost Efficiency Factor**
Beverly Hills	32,875	42	4283	101.9
Coral Gables	41,393	41	8230	200.7
Myrtle Beach	25,612	62	19,049	307.2
Atlantic City	38,196	102	22,321	218.8
Charleston, S.C.	88,173	48	7801	162.5
Cities with Officer to Citizen Ratio = or < 20 per 10,000				
City	**Population**	**Officers per 10,000**	***Crime Rate per 100,000**	****Cost Efficiency Factor**
Richmond, Ca	94,839	20	7506	375.3
Davenport, Ia	97,078	16	7817	488.5
Lawrence, Ma	69,737	18	5869	326.0
Alameda, Ca	79,848	14	3673	262.3
Killeen, Tx	81,882	18	6118	339.9

Crime Rate equals the total of all Part 1 Crimes (Violent and Property Crime) per the UCR, 1999.
***Cost Efficiency Factor equals the Crime Rate divided by the officers per 10,000 population.*

For cities with less than 100,000 population, the data are similar to that in the cities with 900,000+ population. Alameda PD, with a cost-efficiency factor of 262.3, is out-performing Myrtle Beach PD with a cost-efficiency factor of 307.2. This is being accomplished with 34 fewer police officers per 10,000. A scan of the data reveals that the less than 20 officers per 10,000 cities are generally out-performing the 40+ cities. What does 4 years do for the results? To make this comparison, I used the same cities with their 2003 data.

Table 4—Cities with Population Greater than 900,000 (2003)

CITIES WITH POPULATION > 900,000 (2003)				
Cities with Officer to Citizen Ratio = or > 40 Officers per 10,000 Population				
City	**Population**	**Officers per 10,000 Population**	***Crime Rate per 100,000 Population**	****Cost-Efficiency Factor**
NYPD	8,098,066	45	2916	65
Chicago PD	2,898,374	47	6290	134
Philadelphia PD	1,495,903	46	5553	121
Detroit PD	927,766	42	9003	214
Cities with Officer to Citizen Ratio = or < 25 Officers per 10,000 Population				
City	**Population**	**Officers per 10,000 Population**	***Crime Rate per 100,000 Population**	****Cost-Efficiency Factor**
Phoenix PD	1,403,228	20	7664	383
Las Vegas PD	1,189,388	17	5609	330
San Jose PD	909,890	15	2652	177
San Diego PD	1,272,746	16	4223	264
Dallas PD	1,20,302	24	9328	389

Crime Rate equals the total of all Part 1 Crimes (Violent and Property Crime) per the UCR, 1999.
**Cost Efficiency Factor equals the Crime Rate divided by the officers per 10,000 population.*

Table 4 indicates that San Jose PD is still out-performing Detroit PD by a similar margin, and it is still relatively close to both Philadelphia and Chicago PDs. Also noteworthy is NYPD's officer ratio fell from 53 to 45, presumably due to population increase but no additional sworn police officers. Nevertheless, their cost-efficiency factor also dropped significantly from a very low 76 to an incredibly low 65—a 14.4% decrease. Therefore, NYPD policed a larger city with the same or fewer officers and achieved a lower cost-efficiency.

Table 5 indicates that officer ratios dropped in several of the cities, but rose in others. This could be the result of population growth, officer reductions, or both. Oakland PD stands out because a 2 officer increase in its ratio resulted in a significant cost-efficiency improvement (25.8%). Springfield PD experienced a significant reduction in its officer ratio -11, but saw a resultant decrease of 63% in its cost-efficiency ratio. Conversely, Newark PD incurred a -6 officer ratio reduction, but enjoyed a 14.7% increase in its cost-efficiency factor.

Table 6 reveals that, except for Beverly Hills PD, most of the departments experienced reductions in their officer ratios. Charleston PD was the most significant-- falling from 48 to 35 (-13), but its cost-efficiency factor decreased only slightly (-4%).   Among the cities with less than 20 officers per 10,000, Richmond, California PD suffered a -3 officer ratio reduction and a significant reduction in its officer-efficiency factor (-22.5%).

Table 5—Cities with population of 150,000-899,999 (2003)

CITIES WITH POPULATION 150,000-899,999 (2003)				
Cities with Officer to Citizen Ratio = or > 30 Officers per 10,000 Population				
City	**Population**	**Officers per 10,000 Population**	***Crime Rate per 100,000 Population**	****Cost Efficiency Factor**
Springfield, Ma. PD	152,048	31	9564	308.5
Boston PD	589,795	36	5943	165
St. Louis PD	340,256	45	13,705	304.5
Newark PD	278,551	47	5957	126.7
Washington, DC PD	563,384	64	7175	112.1
Cities with Officer to Citizen Ratio = or < 20 Officers per 10,000 Population				
City	**Population**	**Officers per 10,000 Population**	***Crime Rate per 100,000 Population**	****Cost Efficiency Factor**
Anchorage	270, 951	12	4962	413.5
Oakland PD	398,844	19	6939	365.2
Fresno PD	451,455	16	6824	426.5
Ft. Collins, Co PD	125,740	12	4713	392.7
Indianapolis PD	783,438	15	6556	437

Crime Rate equals the total of all Part 1 Crimes (Violent and Property Crime) per the UCR, 1999.
**Cost Efficiency Factor equals the Crime Rate divided by the officers per 10,000 population.

Table 6—Cities with Population of Less Than 100,000 (2003)

CITIES WITH POPULATION < 150,000 (2003)				
Cities with an Officer to Citizen Ratio = or > 35 Officers per 10,000 Population				
City	**Population**	**Officers per 10,000 Population**	***Crime Rate per 100,000 Population**	****Cost-Efficiency Ratio**
Beverly Hills PD	34,941	40	3668	91.7
Coral Gables PD	42,539	38	6454	170.0
Myrtle Beach PD	24,691	71	21,979	309.5
Atlantic City PD	40,385	100	13,501	135.0
Charleston PD	101,024	35	5915	169.0
Cities with an Officer to Citizen Ratio = or < 20 Officers per 10,000 Population				
City	**Population**	**Officers per 10,000 Population**	***Crime Rate per 100,000 Population**	****Cost-Efficiency Ratio**
Richmond, Ca. PD	102,327	17	7818	460.0
Davenport PD	97,512	16	8317	519.7
Lawrence, Ma PD	72,492	20	4076	203.8
Alameda, Ca PD	71,805	14	4154	296.7
Killeen, Tx PD	96,159	16	6769	423.0

Crime Rate equals the total of all Part 1 Crimes (Violent and Property Crime) per the UCR, 1999.
**Cost Efficiency Factor equals the Crime Rate divided by the officers per 10,000 population.

CONCLUSION

First, I want to emphasize that the conclusions and recommendations from this study are more preliminary findings and suggestions than conclusions and recommendations. My study is a bellwether that needs additional research on a larger scale. A non-random sample of 29 cities does not satisfy the statistical requirements to rise to the level of seminal findings.

Nevertheless, my study does indicate that large police officer to citizen ratios do not necessarily translate into more efficient policing. Police officers are expensive—generally policing is the largest slice of any city's general fund. Having a sufficient number of police officers is important, but it is similar to Little Red Riding Hood's experience—not too hot and not too cold, but just right! The same is true for police officer staffing levels; they cannot be too small nor can they be too large rather somewhere in the middle. My research reveals that staffing ratios below 20 spreads officers too thin and results in higher cost-efficiency factors. On the other hand, ratios above 40 appear to be greater than needed and may result in some degree of inefficiency. Ratios in excess of 50+ are truly suspect. Therefore, it would seem that staffing ratios in the 30s would result in the most cost-efficient use of police resources.

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BIOGRAPHY

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THE EFFECTS OF RIGHTS ISSUE ANNOUNCEMENT ON STOCK PRICE BEHAVIOR IN MALAYSIA STOCK EXCHANGE (BURSA MALAYSIA)

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ABSTRACT

This paper first examines the effects of rights issue announcement by Malaysian listed companies from the period of 1ˢᵗ April 1999 to 31ˢᵗ March 2007 on the stock price behavior. In an event study using risk-adjusted returns model to calculate abnormal returns, a statistically significant positive average abnormal return immediately after the announcement day is documented. This finding provides no support for the signaling models of Miller and Rock (1985) and Ross (1977), asymmetric information model by Myers and Majluf (1984), information hypothesis by Scholes (1972), the price pressure hypothesis (PPH) and the perfect substitution hypothesis (PSH). Sweeteners to rights issues are also found to further induce the market reaction. There is evidence for information leakage and insider trading activity since significant positive abnormal returns are found before the official announcement. Secondly, the results for Wilcoxon signed ranks tests and paired samples t-tests show that the cumulative excess returns are significantly different among the three different sub-periods in three categories of announcements. Thirdly, a cross-sectional regression analysis is conducted between the five factors of relative issue size, relative issue price, market capitalization, beta coefficient, company's growth rate, and the cumulative excess returns. The findings reveal that only the relative issue size provides a statistically significant explanation of the movement in cumulative excess returns for the first category of rights issue announcement. The positive relationship between the relative issue size and the cumulative excess returns does not support Miller and Rock's (1985) signaling model and the prediction of the PPH.

JEL: G1; N2

KEYWORDS: Rights issues, stock price behavior, abnormal returns, Malaysia Stock Exchange

THE IMPACT OF STOCK SPAMS ON VOLATILITY

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ABSTRACT

This paper is dedicated to study the impact of stock spams through the analysis of the variations of volatility. We use the methodology of event studies on a sample of hundred ten firms quoted on emerging market, namely the penny stock market.The results show positive and significant changes in volatility during 12 days of the event window; a widening of the variation [lowest price - highest price] was noticed following the consignment of messages by the spammers. The sending of stock spams affected the behaviour of investors, indicating thus that the spamming activity is a lucrative business.

KEYWORDS: stock spam; event studies; volatility; penny stock; emerging market

JEL: G14, D84, C12

INTRODUCTION

Spam is not only a means used to send massively unsolicited advertising messages. Hackers, now, use this practice to influence stock prices and push up the values of certain securities. The spammer launches a campaign to promote the stocks of a society by sending e-mails massively: he purchases stocks of a society for which the price is low, sends spams to artificially increase the stock value and then resells them with profit. The stock spam targets securities whose share price is relatively low; the targeted society generally is not conscious of the abusive use of its mark or its social denomination in the spams for speculative purpose.

Stock spams are increasing on Internet. So, it's interesting to wonder whether this phenomenon affect really the volatility of prices. To do this, we are going to use the event studies methodology. It is a method which allows analysing the reactions of market to a given event. Since Fama et al. (1969), event studies have become a reference method in finance. Today, this methodology is fluently applied to test the informational impact of different events, notably the announcements of alliances or mergers and acquisitions (Hubler and Meschi, 2000; Guards, 2003; Woolridge and Snow, 1990), announcements of annual earnings (Mignon and Lardic, 2003), stock repurchases (Mai and Tchemeni, 2000), etc. In this work, the event is stock spams. To our knowledge, only four studies are available on this topic: Bohme and Holz (2006), Frieder and Zitterain (2007), Hanke and Hauser (2008) and Bouraoui (2009, 2010). Bohme and Holz (2006), Frieder and Zitterain (2007) and Bouraoui (2009, 2010) were interested in studying the impact on volumes and returns. Whereas, in the study of Hanke and Hauser (2008), the authors highlight the impact on volatility, but by using a panel regression.

Our main contribution in this paper is threefold. Firstly, we study the impact on volatility while using the event studies methodology. Secondly, we take into account the assumptions associated with the implementation of the method of event studies which are not always verified empirically, such as normality, independence and homogeneity of variances between securities, and stability of variance over time. Thirdly, we employ an updated database which contains firms recently targeted by the campaigns of spam in order to know if spammers always succeed in affecting the behaviour of investors. The impact of the occurrence of new information on the price of financial assets has already been the subject of considerable attention for more than forty years. However, the effect of financial informations on the second moment of the conditional distribution of returns (volatility) is very little approached.

The purpose of this paper is to provide an answer to the following question: does stock spam have a significant effect on volatility? If so, does it increase the volatility or decreases it? To this end, this article unfolds as follows. Section II examines the origin as well as the working of stock spams. In section III, we present the methodology of event studies. In the fourth section, we set our data. Empirical results are reported and discussed in section V. Finally, section VI concludes.

STOCK SPAMS

Since the existence of Word Wide Web, resources are democratized and the flow of information circulating on the networks has been increasing. However, the content of information didn't always evolve in the right sense and various people understood quickly how to use these resources abusively.
The spams, called as spamming or mail-rubbish, are used to designate the non-solicited electronic mails having an advertising character. This expression comes from a Monty Python's sketch (name of troop of English comedies) in which the word spam (contraction of "spice ham", English brand of sausage) is repeated constantly in order to incite the listeners to become consumers. The first goal of spam is to make advertisement at low cost by massive dispatches of electronic messages. Frieder and Zittrain (2007) note that this curse represents more than 65% of e-mail traffic.

The National Commission of Computer science and Freedom of France performed a study in which it tried to classify spams according to two different classifications: the first one according to the target: it found that 85 % of spams aim at individuals, while 15 % only are intended for firms. The second classification is according to the language in which spams are written: 84.8% of spams are written in English against only 8% in Asian and 7% in French origin. The proportion of spams in other languages is negligible. Later, spams written in English were classified according to several themes; and it proved that messages advertising stock exchange and financial products occupy the second place with a percentage of 40% behind messages with pornographic character or proposing formulas of meeting that reach 42%. In the same context, Sophos, a specialist in protection of corporations against spams, established a classification of twelve main issuing countries of spams between July 2006 and October 2006. The table 1 reveals the important place occupied by USA with a percentage of 21.6%, practically twice of China which follows with only 13.4%. The complete list of the twelve countries is the following:

The spread of wrong information about stock exchange is an efficient means to act on the value of securities for dishonest aims of speculation, and with the development of Internet, it becomes simple and easy to reach a big number of investors.

Stock spams are based on a simple principle; the spammer starts by buying gradually a big number of stocks. Then, he sends false information about the share prices by mail in order to encourage potential investors on a bad way. Unfortunately, investors believe in such information and buy securities with significant amounts. As a result, brutal increases in share prices take place. Finally, the dishonest speculator, the originator of all these activities, sells stocks at higher prices. The following figure illustrates an example of a stock spam encouraging investors to buy securities of Diamond Film, a company specializing in environmental protection in Canada.

Table 1: The main Issuing countries of Spasm

Rank	Country	Percentage	
1	USA		21.6 %
2	China (& Hong Kong)		13.4 %
3	France		6.3 %
3	South Korea		6.3 %
5	Spain		5.8 %
6	Poland		4.8 %
7	Brazil		4.7 %
8	Italy		4.3 %
9	Germany		3.0 %
10	Taiwan		2.0 %
11	Israël		1.8 %
12	Japan		1.7 %
	Other countries		24.3 %

Source : Sophos (http://www.sophos.fr/pressoffice/news/articles/2006/11/dirtydozq306.html)

Figure 1: Example of Stock Spam

Source (http://www.infos-du-net.com/image/Spam-image,0101-5735-712----jpg-.html#)

Bohme and Holz (2006) studied the impact of stock spams on financial market between November 2004 and February 2006. On the basis of 7606 messages, 111 stocks have been targeted. They used a multiple regression model and found that the volume on a stock exchange security mentioned in a spam increased 215.2% on average. This number falls to 154.1% when the message is transmitted before the opening hours of the market. The impact on returns was also studied; by implementing the methodology of event studies, they note that prices climb of +1.7% the first day of the campaign. Frieder and Zittrain (2007) led the same type of survey for the period of January 2004 until July 2005; they showed that a spammer makes in two days a medium benefit of 4.9 % of the share value, while the investor sees his investment, in two days, falling of 8 %. They also noted an increase of volumes and positive returns of the stocks touched by spams. Similarly, Hanke and Hauser (2008) were also interested in studying the effect of stock spams on return, volatility and turnover. They constituted a sample of 235 firms that were the subject of spam during 2005. Besides the presence of significant and positive impact on all the three variables during the first day of the event, the authors emphasize two results. Firstly, they show that lack of liquidity has a strong link with the presence of impact; more the stock is illiquid, more the impact observed is important. Secondly, they find that repeated spamming on successive days generates an additional demand on behalf of investors for targeted securities. Finally, Bouraoui (2009, 2010) studied the reaction of volumes and returns further the sending of stock spams. The author finds positive and significant variations of volumes throughout the event window, while returns reacted positively the first day and negatively the following days. This leads us to conclude that spams can affect and mark the presence of an abnormal activity on market. In order to study the impact on volatility, we implement the event studies methodology.

METHODOLOGY OF EVENT STUDIES

Event studies enable to measure the informative relevance of an event, notably the analysis of the behaviour of share prices at the arrival of information. They are based on the idea according to which financial markets react immediately to new information susceptible to affect the future profitability of the society (Hubler and Meschi, 2000). Empirically, an event study consists in determining an abnormal volatility at the date of announcement of the event. This abnormal volatility is interpreted as the measurement of the impact of the event on share prices. Mackinlay (1997) identifies seven stages for the implementation of this methodology.

Stage 1: Definition of the Event

The first stage of an event study consists in defining the event and identifying the period during which this event will be studied, called « event window » or « period of test ». In this paper, as mentioned in the introduction, the event is stock spams. Regarding the event window, and unlike others papers which take a period of test centred around the date of event (Hubler and Meschi, 2000), we choose a period of test of length 15 days which starts at the date of sending spam and spreads until the fourteenth day. Indeed, the stock spam is an advertising message which brings a private and little known information. So, we cannot fear flight of information of the type of those that can precede the official announcement of merger and acquisitions or earnings. Bohme and Holz (2006) led the same type of reasoning on an event study by returns; they chose an event window which begins at the date of announcement and extends until the fourth day.

Stage 2: Selection Criterion

Once the event is defined, it is necessary to determine a selection criterion, *i.e.* a criterion on which the event study will be based. The majority of works on this topic have used either the volumes or the returns. In this paper, we chose volatility as criterion.

The volatility of a stock exchange security indicates in which amplitude the price of this security can vary, to the rise as to the fall, relative to its average price, over a period of time. The volatility of assets is all the stronger as the market prices are unstable. This is in particular observed following an event concerning the security in question. However, assuming that volatility is constant over time amounts to suppose that the event specific to the firm does not affect the risk of its security. Volatility must be estimated because it is not directly observable. For that, several methods can be used whose principal ones are:

Squared return (Harris, 1987 ; Dravid, 1987) :
$$VT_{it} = R_{it}^2 \qquad (1)$$
Absolute value of return (Crouch, 1970; Teiletche and Lespagnol, 2005) :
$$VT_{it} = |R_{it}| \qquad (2)$$
The difference between the highest price and the lowest price (Parkinson, 1980; Alizadeh et al., 2002) :
$$VT_{it} = Ln(\frac{H_{it}}{B_{it}}) = Ln(H_{it}) - Ln(B_{it}) \qquad (3)$$

Where H_{it} and B_{it} are respectively the highest and the lowest prices of security i on date t.

The first two measurements are rather adapted for high frequency data (intra-day data), which is not the case for our study (We have daily data. These will be presented in the section IV). In addition, Parkinson (1980) and Alizadeh et al. (2002) show that the use of the highest and the lowest prices of the same day, in comparison with the first two measurements, gives a better estimation of the true volatility. For these reasons, we adopt the third method to measure volatility.

Normal volatility – Abnormal Volatility

To assess the impact of an event, it is necessary to calculate an abnormal volatility or an excess of volatility due to the event. The abnormal volatility is the difference between the observed volatility and the normal or theoretical volatility. The last one is the volatility that we would normally have observed in the absence of event; it must be modelled over a period preceding the period of test called "the estimation window".

Estimation Window

The estimation window precedes the event window. It is much longer than the period of test; generally it has a length equal at least three times the length of event window in order to have enough number of observations for estimation. In our survey, we choose 146 observations (It is the maximum number of observations that we retained following the unavailability of historical stock quotes for some securities) preceding the date of event. We must in particular ensure that the two windows do not overlap to prevent that the impact of the event is not found in the estimator and to avoid, thus, that the study is skewed.
The estimation window *(L₁)* and the event window *(L₂)* can be schematized as follows (Figure 2):

Figure 2: Estimation Window and Event Window
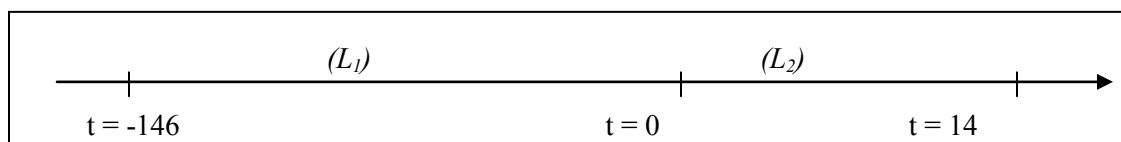
Stage 5: Test of Hypothesis

After having identified the estimation window, the abnormal volatility can be calculated. At this stage, we set up a test of hypothesis, *i.e.* a null hypothesis H_0 against an alternate hypothesis H_1, in order to see if stock spams have an effect or not on volatility.

Stage 6: Empirical results

It is the stage of analysis of abnormal volatilities by implementing the appropriate statistical tests.

Stage 7: Interpretations and conclusions

At this stage, we conclude if stock spams affected or not the volatility of targeted securities.

If the event studies methodology has the advantage of being validated and tested on various works, it supposes, however, some statistical properties which, unfortunately, are not always checked empirically. Theoretically, the method supposes that:

- The data are distributed according to a normal law.
- The volatilities of securities are independent and identically distributed (*iid*).
- The variance is constant over time.

In this paper, we consider each of these three hypotheses in applying the methodology on our data.

DATA

The data used to lead our empirical study are extracted from the website <*http://www.spamnation.info/stocks/*>. This website lists all firms targeted by stock spams since 1999. But, to have the history of daily volumes for each stock, we used the *Datastream* database. In the beginning, we constituted a sample of 180 firms. However, the unavailability of historical prices for some companies, considering the majority of them have just been created, led us to remove them from the sample. Moreover, other securities had missing quotations on several days. These securities were also excluded from the sample. Finally, we kept only 110 firms. These firms fulfill the following criteria:

- They were targeted by spams after January 2006 in order to obtain the largest possible number of data for the estimation window.
- The availability of at least 100 historical prices starting from the date of sending the first spam.
- The number of missing quotations should not exceed 10.

The sample thus formed contains firms which were targeted by stock spams during the period from February 2006 to October 2008. For each firm, we have 161 daily volatility measurements (event window (15) + estimation window (146)). These firms belong to varied sectors of activity; so we find companies specialized in multimedia, energy, biology, international distribution, telecommunications… Also, they are not all American; they come from different countries (Canada, China…). Nevertheless, the common point between these companies is that they are known under the name of penny stocks companies.

The penny stock term designates the stocks whose share price is extremely low. Generally, the share price is below 5 dollars, and firms which are targeted are very small and not commonly known. Another common point between these firms is that their securities are traded in emerging OTC markets, notably the Over-The-Counter Bulletin Board (OTCBB) and the Pink Sheets, which are less controlled than the main stock exchanges. These markets do not have a physical place as the NYSE or the AMEX; they are

only represented by a computer network that displays in real time the share prices. Firms quoted on these markets are speculative and highly illiquid; it is the reason for which they are targeted by advertising campaigns. The abnormal volatility of stock i on day t is given by:

$$AVT_{i,t} = VT_{i,t} - KT_{i,t} \qquad (4)$$

Where,
$AVT_{it:}$ the abnormal volatility of stock i on day t.
$VT_{it:}$ the real or observed volatility of stock i on day t.
$KT_{it:}$ the theoretical volatility of stock i on day t.

To estimate the theoretical volatility, we use the stock's average volatility over the estimation window (

$$KT_{i,t} = \frac{1}{146} \sum_{t=1}^{146} VT_{i,t}$$). The choice of this method is justified by its simplicity of implementation.

Moreover, Mai and Tchemeni (1996), in a simulation study, underline that the use of the historical average of a variable gives better specified and more appropriate results than the use of the market model or the standardized model. With this method, the calculation of abnormal volatility obeys the following expression:

$$AVT_{i,t} = VT_{i,t} - \frac{1}{146} \sum_{t=1}^{146} VT_{i,t} \qquad ; t = 0,....,14 \qquad (5)$$

In order to appraise the informative content of the stock spam in terms of volatility, we test the null hypothesis H_0 against the alternative hypothesis H_1 at the 5% level:

$$H_0: \text{Absence of abnormal volatilities}$$
$$H_1: \text{Presence of abnormal volatilities}$$

We consider the following variables:

- $MAVT_t$: The mean abnormal volatility of all stocks for every date of the event window:

$$MAVT_t = \frac{1}{110} \sum_{i=1}^{110} AVT_{i,t} \qquad (6)$$

- $\sigma_t(MAVT)$: standard deviation of mean abnormal volatilities. It is calculated for every date of the event window:

$$\sigma_t(MAVT) = \frac{\sqrt{\frac{1}{110-1} \sum_{i=1}^{110} (AVT_{i,t} - MAVT_t)^2}}{\sqrt{110}} \qquad (7)$$

- θ_t: cross-sectional Student test; it is given by :

$$\theta_t = \frac{MAVT_t}{\sigma_t(MAVT)} \sim T_{N-1} \qquad (8)$$

RESULTS

Cross-Sectional Student Test

In order to justify the use of this test, we have tested the heteroscedasticity of the series of volatilities. Our results (Results are not reported here. Nevertheless, they are available by the author upon request) show that 60 securities among 110 are heteroscedastic, *i.e.* their variances vary over time. To have unbiased

results, it is necessary to take into account this fact. So, we implement the cross-sectional Student test which enables to calculate a variance for each date of the event window. In order to apprehend better the impact of spams, we represent graphically the evolution of the mean abnormal volatilities during the period of test.

According to table 2, we note that the sending of stock exchange spams generated an increase in the volatility of securities on the entire event window. This increase is significant over the first three days of the event and from t = 5 to t = 13. Furthermore, we record the biggest abnormal variation of volatility (+8.79 %) in t = 0. The evolution of the mean abnormal volatilities (fig. 3) shows clearly this impact on the first day, then its progressive reduction until the fifth day where we note the weakest rise of volatility (+0.8%). Nevertheless, this last increase is not significant, and given that the mean abnormal volatility of the previous day (4th day) is also not significant, it lets us think that the impact has lasted only during the first three days. However, we realize from the 6th day the appearance again of a significant impact which continued until the date t = 13. But, this impact on the second interval of the event window [t=5; t=13] is less important than the one observed on the interval [t=0; t=2]; the increase in volatility over the second period varies between +3.77% (14th day) and +4.67% (6th day).

It should be noted that this increase in volatility is associated with a rise of volumes on the one hand, and a rise of returns followed by a fall, on the other hand (In previous papers respectively relating to the impact of stock spams on volumes and on returns, we have obtained positive and significant variations in volume over the entire period of test. However, returns were affected positively the first day of the event and negatively the following days). Indeed, volumes and volatilities have evolved in the same sense. Increased movements of transaction (purchases and/or sales) on securities targeted by stock spams have led to a widening of the range [lowest price - highest price]. These results corroborate the works of Crouch (1970), Harris (1987) and Jain and Joh (1988) who showed a positive relationship between volume and volatility.

On the other hand, the increase in volatility is put in parallel with as well an increase as a reduction of returns. This can be interpreted as follows: If the increase of volatility is accompanied by an increase in returns: the answer of investors to the messages of spammers by purchasing massively securities raises the prices. Consequently, the difference between the highest and the lowest price of the day emphasizes an important variation. In this case, the widening of the range is rather from the side of the highest price. This seems to corroborate the work of Gallant et al. (1992) and Hanke and Hauser (2008) who show a positive relationship between return and volatility.

If the increase of volatility is accompanied by a decrease in returns: investors, having a very modest budget, cannot invest in shares quoted on known stock exchange as the NYSE or the NASDAQ. When they receive the message from the spammer, they believe in the information contained there in the hope of becoming rich and making fortunes. Hence, they respond positively to the request of the spammer by buying securities with large quantities. However, when they realize the next days that prices did not climb as that was promised in messages, they try to get rid of securities by selling them at low prices. The movement of sale with significant quantities leads to an increase in the fluctuation in prices. The widening of the difference between the highest and the lowest price, in this case, is generated by a reduction in the lowest price. These results are consistent with those of Pindyck (1984) who attributes the decline in return of the NYSE market index during the period 1965-1981 to an increase in volatility. Similarly, French et al. (1987) find that the volatility of S&P is negatively related to return.

The consignment of stock spams has generated positive and significant mean abnormal volatilities over 12 days. So, we reject the null hypothesis H_0. The appearance of new information, which is in our case the messages of spam, increased uncertainty about the penny stock securities. This uncertainty resulted in a rise of the volatility of share prices following the increase in the movement of transaction.

The first two limits of the event studies methodology are rather associated with the implementation of the Student test described according to equation (1). This parametric test assumes that the data are distributed according to a normal law, on the one hand, and they are independent and identically distributed *(iid)*, on the other hand. However, these two assumptions are not checked on our data (Results are not reported here. Nevertheless, they are available by the author upon request), which is a general characteristic of financial series. So, the use of this first test can not reflect the real effect of stock spams on volatility. In order to improve and to give more robustness to our results, we apply now a second statistical test which enables to cure these limits.

Cowan Rank Test

This second test is used in order to lift completely the hypothesis not checked by the cross-sectional Student test. It is a nonparametric test for which it is not necessary to specify the conditions that the sample has to fill. Nonparametric tests such as the sign test, the generalized sign test or the Wilcoxon signed rank test were already largely used (Berry et al., 1990; Giaccotto and Sfiridis, 1996; Campart and Pfister, 2008). However, the test of Cowan (1992), to our knowledge, has never been applied.
The statistic of the test is given by the following formula:

$$Z_{Cowan} = \sqrt{L_2} \frac{\overline{K_D} - E(K)}{\sqrt{\frac{1}{L} \sum_{t=1}^{L} \left(\overline{K_t} - E(K) \right)^2}} \sim N(0,1) \tag{9}$$

Where,

L_2: length of the event window.

$\overline{K_D}$: average rank of all stocks on date D ; $D \in [0, 14]$

$E(K)$: expected average rank : $E(K) = \dfrac{L+1}{2}$

L: length of the period of analysis (= estimation window *(L1)* + event window *(L2)*).

$\overline{K_t}$: average rank of all stocks on date t ; $t \in [-146, 14]$

Table 2: Mean Abnormal Volatilities (%) and Statistics of Student

Date	$MAVT_t$ (%)	θ_t
0	+8.79	2.980**
1	+8.31	3.764***
2	+5.55	3.012**
3	+1.84	1.249
4	+0.8	0.603
5	+4.67	2.213*
6	+5.28	2.454*
7	+3.92	1.994*
8	+5.73	3.124**
9	+4.01	2.555*
10	+5.79	2.857**
11	+3.94	2.612**
12	+3.43	2.226*
13	+3.77	2.240*
14	+3.01	1.693

* significant at 5%   ** significant at 1%   *** significant at 0,1%

Figure 3: Evolution of Mean Abnormal Volatilities During the Event Window
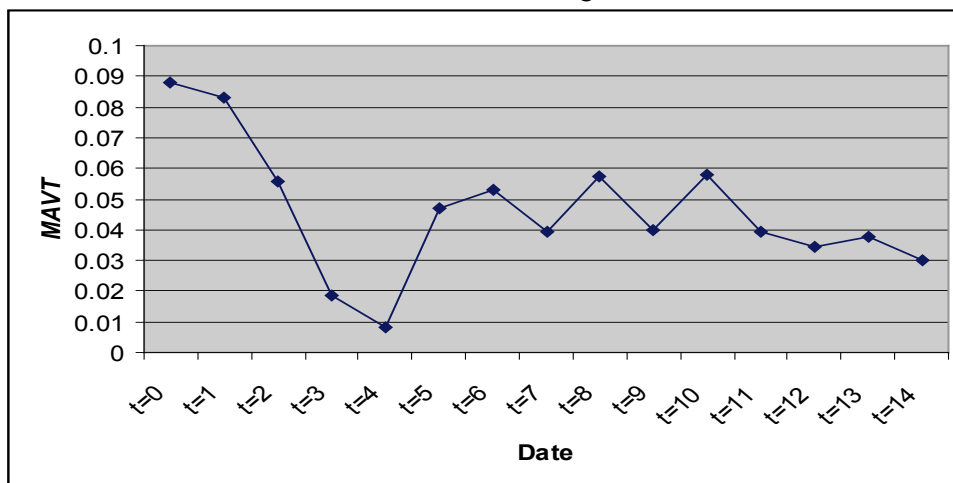
Under the null hypothesis of no abnormal volatilities, the test of Cowan allows to compare the average ranks of each date of the event window with the expected average rank calculated over the complete period of study. To implement it, we have to firstly transform, for each firm, the series of abnormal volatility into their respective ranks. These ranks are defined in ascending order: rank 1 and 161 correspond respectively to the lowest and the highest abnormal volatility in the series.
The results of this test are reported in table 3.

We realize that results are not sensitive to the used statistical test. As we have found previously in the cross-sectional Student test, volatility, here, is also positively and significantly affected during 12 days of the period test (from t = 0 to t = 2 and from t = 5 to t = 13). The most important variation is observed during the first day of the event (100.1) where all securities are assigned by high ranks above the average rank. This reaction consists in a positive response from investors who believed in the information contained in spams. The next two days (t =1 and t =2) show a fall in volatility expressed by a reduction in the value of the average rank. This demonstrates that the effect starts to disappear gradually, especially when this degradation finishes by non significant average ranks; such is the case of days 4 and 5. However, dice the sixth day (t =5), we observe that the increase in volatility comes back to become significant; the average rank of volatilities during this day (6th day) exceeds the expected average rank and amounts to 87.7. This significant impact was continued until the 13th day.

Buyers and sellers of penny stock's securities, by their movements of transaction, contribute to increase volatility. However, the rise of volatility during the second period from t = 5 to t = 13 is less pronounced than the effect observed during the first three days. This can be explained by the fact that change in volatility during the first days is generated by a widening of the gap [lowest price - highest price] from only one side (the side of the highest price) insofar as the investors respond to spams by massive purchases of stocks, which increases the share prices. While in the second period (from t =5 to t =13), the widening of the range is rather done on both sides because the investors who were purchasers during the first period are very quickly transformed into sellers when they realize that the information to which they have responded is a swindle.

Finally, the use of the cross-sectional Student test as well as the Cowan rank test gives us the same result: stock spams have a positive and significant impact on the volatility of penny stock's securities. This finding leads us to record that the business of spamming is flourishing and continues to make money for spammers. Indeed, with the use of data more recent compared to those of the works of Bohme and Holz (2006), Frieder and Zittrain (2007) and Hanke and Hauser (2008), we expected that investors have

realized that these campaigns of stock spams are scams, and therefore, no impact will be observed on volatilities. However, we find that investors still continue to believe in such information in the hope to become rich.

CONCLUSION

This paper has focused on the impact of stock spams on the volatility of penny stock's securities. For this purpose, we constituted a sample of 110 companies which were targeted by spams between February 2006 and October 2008. After we calculated the mean abnormal volatilities over the event window of 15 days by using the event studies methodology, we set up two statistical tests: a parametric test (cross-sectional Student test) and a nonparametric test (Cowan rank test).

The results of both tests show that stock spams affect positively and significantly the volatility of prices: a widening of the variation [lowest price - highest price] was noticed following the consignment of messages by the spammers. This seems to corroborate the works of Koski (1998) and Hanke and Hauser (2008) who also found an increase in volatility following respectively the announcement of stock splits and stock spams. We can conclude that the spamming activity is a very lucrative business which continues to affect the behaviour of investors who still believe in wrong information in the hope to accomplish profits. However, if significant increases in volatility are observable, the effect cannot be generalized to all securities in the sample. So, it would be interesting to detail the results by studying the impact on each security. Moreover, the number of spams received per day during the duration of the advertising campaign varies from one security to another. Thus, we record for some stocks 3 or 4 messages received throughout the period of the campaign, whereas we note for other stocks hundreds of messages received during only one day. In this context, it would be also very convenient to study the extent of the impact according to the number of messages received by security.

Table 3 : Cowan Rank Test

Date	$\overline{K_D}$	Z_{Cowan}
0	100.1	5.587***
1	99.8	5.518***
2	95.4	4.215***
3	83.7	0.813
4	85.5	1.321
5	87.7	1.962*
6	92.9	3.481***
7	89.7	2.550*
8	90.9	2.906**
9	90.8	2.880**
10	91.4	3.047**
11	92.1	3.249**
12	90.4	2.755**
13	90.5	2.802**
14	87.3	1.858

* significant at 5%   ** significant at 1%   *** significant at 0,1%

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THE GLOBAL FINANCIAL CRUNCH: IMPACT, RESPONSES AND REMEDIES FOR AFRICAN ECONOMIES

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ABSTRACT

The global financial crisis presents significant challenges for African economies. While the long-term growth prospects for the African countries appear to be generally favourable, recent developments in the global financial markets are likely to have some impact on the near-term growth prospects. Among recent developments are the widely held expectations of a global recession that has affected largely Africa's trading and investment partners. There is some degree of growing uncertainty as to how long Africa can maintain a strong pace of economic growth in the face of sluggish demand in the major developed markets emanating from the rapidly evolving global financial crisis. This is amply reflected in the statement made by Robert B. Zoellick, President of the World Bank that "The stark reality is that developing countries must prepare for a drop in trade, capital flows, remittances, domestic investment, as well as a slowdown in growth". This paper would seek to look at the likely impact of the global economic crunch on developing economies and remedies to be designed for developing economies of Africa.

IMPACT OF SMALL BUSINESS ADMINISTRATION LENDING ON STATE-LEVEL ECONOMIC PERFORMANCE: A PANEL DATA ANALYSIS

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ABSTRACT

Based on the few studies in their 2009 literature review, Craig, Jackson, and Thomson find that the economic impact of SBA loans on regional economic performance is positive, albeit small This study analyzes the relationships between economic performance and SBA lending using a panel of state-level data for the 1986-2008 period. It focuses primarily on the SBA 504 guaranteed lending program because this program's objective is to provide long-term financing to small firms.   Through its Certified Development Companies working with local banks, the SBA is able to provide long-term, fixed rate loans so that businesses can acquire physical assets such as land and buildings and help generate jobs. Thus, the main purpose of this paper is to analyze and measure the impact of SBA 504 loans on various indicators of small business activity such as employment rate and per capita income, while also controlling for other determinants of state economic growth. A preliminary test showed that SBA lending is not endogenous at the state-level. As a result, moderated regression analysis was applied to the state-level panel data set whereby the dependent variable is regressed sequentially on certain control variables, independent variables, and then an interaction term. A version of Craig's model was estimated using three different dependent variables – income growth, small firm growth, and employee growth. The control variables of location quotient and NBER showed that local industrial composition and national business cycles are important determinants of state economic performance. The estimated coefficients for SBA lending are found to be small, insignificant, and having the unexpected negative signs with respect to its relationship with income. On the other hand, SBA loans have a positive and significant impact on the growth of small businesses and by consequence, the number of workers employed in small firms. The bank deposit variable has a positive and significant relation only with employee growth, albeit a very small effect. Finally, this study finds that SBA lending is not biased in favor of lower income areas.

JEL: R11; O16

KEYWORDS: Small business lending, endogeneity, panel data

INTRODUCTION

One of the major ways by which the U.S. federal government has tackled the current credit crunch especially for small businesses is to raise the loan guaranteed amounts (up to $255 million this year) and to lower fees on Small Business Administration loans. Still, some big banks have not been keen on participating in the program due to perceived burdens in the paper work and application process (Wall Street Journal, June 20-21, 2009). The objectives of this study are to examine the lending patterns of the SBA in the 50 states over the 1986-2008 period and to evaluate the relationship between the supply of SBA small business credit and local economic performance in these states. In particular, it emphasizes the role of the Small Business Administration's (SBA) Certified Development Company 504 Program loans in promoting long-term local economic growth. The economic impact of the SBA 504 program and its related operating units, the Certified Development Companies (CDCs), is especially significant in light of recent adverse developments in the financial markets. In November 2007, the U.S. Congress called into question the effectiveness of the SBA as a lending agency to small business firms. Congress wanted to know the effect of SBA-guaranteed loans on the revenues, jobs, and investments of the companies

receiving these loans (CNNMoney.com, November 2, 2007). In response, a 2008 economic impact study was commissioned by the National Association of Development Companies, the trade association of CDCs, and conducted by the Applied Development Economics, Inc. (ADE). After a survey of CDCs and evaluation of over 800 SBA 504 program loans issued during the 2003-2005 period, the study concluded that:

> "…the 504 loan program very clearly provides a cost effective means of generating new business activity of the national economy. In addition, the corresponding increase in tax revenues for the federal government is many times greater than the funding required to administer the program." (ADE, p. 2)

This study analyzes the relationships between state economic growth and the SBA 504 loan program using a cross-section of state data for 1986-2008. Through its Certified Development Companies working with local banks, the SBA 504 program is designed to provide long-term financing for businesses to acquire fixed assets and to stimulate local economic growth via job creation, business expansion, and tax revenue generation. Thus, the main purpose of this paper is to analyze and measure the impact of SBA 504 loans on various indicators of small business activity such as per capita income and employment, while also controlling for other determinants of state economic growth.

At the national level, the flow of SBA 504 lending increased from approximately $528 million in 1987 to over $609 million in 2007, representing an average annual growth rate of about 15%. The values for 1986 and 2008 begin in September (footnote).

Table 1: Value of SBA 504 Loans (in 2005 $)

Year	SBA Loan
1986	305331204
1987	527723735
1988	434153878
1989	520279961
1990	632320605
1991	667302487
1992	863978937
1993	1193213208
1994	1674630173
1995	2015752784
1996	2769568152
1997	1873509414
1998	2193683623
1999	2315125287
2000	2041602056
2001	2672142962
2002	2903906723
2003	3471942698
2004	4346307706
2005	5600611120
2006	5613108805
2007	6093056312
2008	3531215398

The national pattern shows a general rise in the real value of SBA 504 loans from 1987 till 1996, followed by a decline in 1997 to 2000. Starting in 2001, lending dramatically increased up to 2007. The top ten states with the largest amounts of loans received during the 1986-08 period are:

California $13 trillion or 24% of total SBA 504 loans
Florida $2.9 trillion or 5.4%
Texas $2.8 trillion or 5.1%
New York $2.2 trillion or 4%
Illinois $2 trillion or 3.73%
Minnesota $2 trillion or 3.7%
Ohio $1.7 trillion or 3.1%
Colorado $1.6 trillion or 2.96%
Utah $1.6 trillion or 2.92%
Georgia$1.5 trillion or 2.85%

The smallest amounts went to:

Delaware $65.8 million or 0.12% of total SBA 504 loans
West Virginia $89 million or 0.16%
Alabama $102 million or 0.19%
Vermont $109 million or 0.20%
Wyoming $156 million or 0.29%
Montana $178 million or 0.33%
South Dakota $197.5 million or 0.36%
Hawaii $205 million or 0.38%
Rhode Island $206 million or 0.38%
Maine $231 million or 0.43%
Nebraska $256.6 million or 0.47$

These state-level differences are obviously due to various regional factors such as population, industrial diversity, and economic growth. In an early study, Doctors and Wokutch (1979) analyzed the geographical patterns of SBA lending activity in nine metropolitan areas. They compared and contrasted SBA total loans per capita, per number of small businesses, and per number of small business employees for 1968-76. Doctors and Wokutch found that much of SBA lending was focused or concentrated in areas with the largest number of small firms. They felt that this was counterintuitive and contrary to the SBA's purpose of providing credit to regions with the most need. Table 2 presents state-level data for SBA 504 lending per 1,000 small firms (defined as firms with less than 500 employees) and for SBA lending per 10,000 employees in small firms for the 1988-2006 period. In general, "small" states in terms of absolute numbers of small businesses as well as employees in these small businesses received higher amounts of SBA 504 lending (for example, Utah, Nevada, New Hampshire, Idaho, and South Dakota) compared to the U.S. average. However, "large" states such as California, Minnesota, Wisconsin, and Missouri also ranked high in terms of these ratios. Thus, this current study attempts to determine the factors which influence the geographical distribution of SBA credit.

Table 2. Real SBA Lending Per Firm and Per Employee, 1988-06

State	Average Loan Value per 1,000 Small Firms (in 2005 $)	Average Loan Value per 10,000 Employees (in 2005 $)
Alabama	489693	481001.4
Alaska	250228.3	305532.9
Arizona	584864.8	579165.3
Arkansas	255685.5	274170.6
California	827682.4	825387.4
Colorado	611840.8	728377.8
Connecticut	206903	205436
Delaware	157813.5	173380.2
Florida	312934.8	394736.9

State	Average Loan Value per 1,000 Small Firms (in 2005 $)	Average Loan Value per 10,000 Employees (in 2005 $)
Georgia	402093.2	424358.5
Hawaii	352654.3	334178.6
Idaho	864411.3	1047312
Illinois	340871.7	329759.8
Indiana	382038.4	345019.3
Iowa	396542.8	392443
Kansas	292316	295335.5
Kentucky	186216.9	177175.1
Louisiana	194050.6	182617.3
Maine	284454.4	328586.7
Maryland	275282	269360.2
Massachusetts	358259.3	343732.8
Michigan	252663.6	240988.2
Minnesota	780910.9	740275.3
Mississippi	251880.1	262255.6
Missouri	458141.6	463037.9
Montana	281939.4	377684.5
Nebraska	277952.5	289521.8
Nevada	1246120	1238825
New Hampshire	1132809	1196075
New Jersey	98955.77	110463.9
New Mexico	452471.3	482081.5
New York	220677.9	248522.9
North Carolina	300384.9	307581.1
North Dakota	772904.9	808965.7
Ohio	349967.6	312734.5
Oklahoma	271209.2	291120.1
Oregon	351801.8	388404.1
Pennsylvania	145987.3	136392
Rhode Island	367428.2	386410.6
South Carolina	213724.9	220876.4
South Dakota	403259.5	440220.9
Tennessee	224265.4	212849.6
Texas	296092.4	292415.9
Utah	1578049	1638631
Vermont	234553.1	272747.9
Virginia	382393.7	384224.5
Washington	412970.8	458103.3
West Virginia	128603.5	140035.6
Wisconsin	512670.5	459045.1
Wyoming	454943.9	596461.9
Total US	417651.4	436680.4

The rest of the paper is organized as follows. The next section provides a review of the past studies followed by a description of the model, statistical method, and data used in the study. The results section discusses the findings of applying panel regression on the data. The final section provides the general conclusions of the study.

LITERATURE REVIEW

In their recent 2009 study and in 2007, Craig, Jackson, and Thomson surveyed the few studies (mostly theirs) which empirically test the impact of SBA guaranteed lending on economic performance; they generally find a positive, albeit small, impact of SBA financing and that the SBA lending-growth relationship is more significant in low-income markets. In another survey of the literature, Watkins (2007) underscored the fact that SBA lending accounts for less than 10 per cent of all lending in a given local economy. He also recommended that future studies consider the long-run nature of the SBA-growth relationship and employ other performance measures such as job creation/growth, small business failure rates, and local tax revenues as dependent variables.

Craig *et al.* (2006) analyzed data for all SBA 7(a) and 504 loans from 1991-2002 for MSA and non-MSA counties in the U.S. In their basic OLS fixed effects model, the employment rate is regressed on per capita income, Herfindahl index (to measure banking market concentration), a dummy variable for MSA county, total bank deposits per capita (a measure of financial development), total SBA loans per capita, and an interaction term equal to the product of bank deposits and SBA loans. The interaction term is Craig *et al.*'s focus in that a negative estimated slope parameter for this variable would mean that the impact of SBA lending is less at higher levels of bank deposits, or alternatively, SBA credit has more impact in low income counties. In their analysis, Craig, *et al.* disregarded the important issue of endogeneity or simultaneity of bank deposits. They argued that they are primarily interested in the effect of the interaction term of deposits and SBA lending on employment. Craig *et al.* found a negative and statistically significant coefficient for the interaction term thus indicating that "…at higher levels of financial market development, per capita SBA lending has a lower impact on employment than it does at lower levels of financial market development." (p. 23) They concluded that SBA lending serves a "social welfare function" by providing needed small business credit and reducing shortcomings in the credit market especially in low income areas. Craig *et al.* admit that they do not know if SBA financing leads to positive growth as a result of "completing" the banking market or whether it is substituting for other sources of small business credit. Also, they can not test whether SBA loans actually increase the amount of small business lending in the market.

In their earlier 2004 study, Craig *et al.* used per capita income as the measure of economic performance. Their main explanatory variable of interest is SBA loans scaled by total deposits. Control variables include market structure variables (Herfindahl index and rural-urban dummy), local (employment rate) and national economic conditions (a dummy variable for national economy in recession), and types of SBA lending (share of 7(a) loans, share of loans going to manufacturing firms). The model was tested for levels and rates of change. In the levels regression, the SBA loan to deposit variable is positive but insignificant. However, using growth rates, Craig *et al.* found that SBA lending significantly and positively affect income growth but only after two lags.

A 2003 study by PM Keypoint LLC for the SBA Office of Advocacy examined the impact of SBA loan programs on local business activity during periods of economic contraction or tight money. In contrast to Craig *et al.*, this analysis used state-level annual data for 1991-2000 and measured the effects of bank capital, SBA lending, loan delinquency rates, and local and national economic conditions (primarily interest rates) on small business activity. The dependent variable is represented by three factors: number of business firms, employment, and payroll. The study found that SBA guaranteed loans were positively related to business activity especially during periods of tight money and slow economic growth, thereby acting as a stabilizer.

This paper extends the above previous studies with some differences. First, it applies an economic model and method developed by Driscoll (2004) who uses state panel data to test whether bank loan supply influences state-level per capita income.   Second, it addresses the econometric issue of endogeneity or simultaneity (which the earlier studies did not take into account), also following Driscoll. Third, it re-examines Craig, Jackson, and Thomson's finding that the link between SBA guaranteed lending and economic growth is stronger in low-income areas. Finally, it tests the relationship between SBA credit and other economic growth indicators, specifically the growth of small business firms and employment change in small businesses.

DATA AND METHODOLOGY

The model estimated here follows from earlier studies by CJT. It differs primarily in the following ways: (1) the model is applied only to SBA 504 loans received in the 50 states in 1986-2008; (2) it corrects for the endogeneity problem since SBA lending may be responding to local economic growth or

performance. The method used here is derived from Driscoll (2004) who employs a two-step procedure: (1) in the first stage, he estimates a state panel regression of bank loans (commercial and industrial) on output and money demand shocks, and; (2) in the second stage, he regresses output on the supply of bank loans. According to Driscoll, using money demand shocks as instrumental variables in this two-stage least squares (2SLS) technique answers the question: "Do changes in bank deposits affect the quantity of loans?" If these instruments are found to be statistically significant, then this evidence indicates the presence of a lending channel whereby firms (especially small firms) are dependent on their local bank lending sources. Driscoll estimates shocks to money demand using the standard money supply-money demand equilibrium condition. Money supply is measured by real per capita bank deposits in the state. Real money supply is then regressed on real per capita state income and on the interest rate (defined as the ratio of interest expense to total deposits); the estimated residuals represent the money demand shocks.

The current study applies Driscoll's procedure but differs in the following ways. First, although Driscoll's intention was to determine the impact of loans on small business firms, he uses total commercial and industrial bank loans; on the other hand, this study employs SBA loans targeted specifically for "small businesses." Second, this study uses a larger and more recent pooled cross-section (50 states) and time-series (1986-2008) data set. Third, it estimates an expanded economic growth model following Craig *et al* (2004). Finally, instead of using 2SLS method, the Hausman two-step test of endogeneity is performed.

The generalized model of state per capita personal income takes the following form:

$$PI = b_1 + b_2SBA + b_3DEP + b_4(SBA*DEP) + b_5NBER + b_6LQ + b_7SBA7a + e \qquad (1)$$

where PI is state-level per capita income, SBA is per capita SBA 504 loans, DEP is bank deposits per capita, SBA*DEP is an interaction term, NBER is a dummy variable equal to one if the year is a recession year, LQ is the location quotient for manufacturing, SBA7a is the share of total SBA lending that is 7a loans (the most basic and commonly used SBA loan type; for more information, see www.sba.gov), and *e* is the error term.

The interaction term (SBA*DEP) is the variable of interest here. The effect of SBA lending on economic growth depends on the value of DEP. Craig and others find that the coefficient b_4 is negative indicating that SBA credit is biased in favor of lower income areas (where bank deposits are a proxy for the financial depth of an area). NBER, LQ, and SBA7 are considered control variables reflecting local and national economic conditions. The dummy variable, NBER, reflects the impact of the national business cycle. The manufacturing location quotient, LQ, is a ratio of the share of manufacturing employment in state employment to the share of overall manufacturing in U.S. employment; thus, a ratio greater than one indicates that a state's manufacturing sector accounts for a larger share of state employment as compared to that of the nation. LQ plus the share of 7(a) loans in the state's total SBA loans represent the local environment.

To test and correct for simultaneity with respect to the SBA variable, the Hausman two-step procedure is followed (see Pindyck and Rubinfeld, 1991, p. 303-305). In the first step, SBA is regressed on the money demand shocks and the other independent variables in the economic growth model (1). In the second step, the estimated residuals from the first step regression are then added as another explanatory variable in equation (1).   If the estimated coefficient of the residual variable is significant, then the model has taken the simultaneity issue into account and is therefore the correct and robust model.

Annual loan data for 1986-2008 were kindly provided by the SBA. State personal income data were gathered from the Bureau of Economic Analysis while total deposits and interest expense were from the FDIC. Employment data used to calculate the location quotients were from the Bureau of Labor Statistics. Preliminary testing of the variables for unit roots indicated that SBA loans, income, and bank deposits are stationary in first-differences; thus, the estimated regressions included two lags, based on the Schwarz criterion test.

EMPIRICAL RESULTS

The results of applying the Driscoll method on the state-level panel data indicated the absence of any simultaneity bias. Thus, the economic growth model is estimated using panel least squares and using the following stepwise procedure: (1) the control variables, NBER, LQ, and SBA7a, are entered first (these control variables represent both national and local economic conditions); (2) the main independent variables of SBA 504 credit and bank deposits are entered to join the control variables; (3) in the full model, the interaction term, SBA*DEP, is entered to join the independent and control variables.

The results of applying this procedure appear in Table 3. Model 1 shows that the NBER recession dummy and the location quotient are negatively and significantly related to state-level income growth. State incomes tend to fall during recession years and are more vulnerable when the state economy is restively more dependent on a manufacturing base. Lagged income growth (two periods back) is also significant but the share of SBA7(a) loans is not a factor. In Model 2, inclusion of the main independent variables, SBA and DEP, as well as lagged effects reveal that SBA and DEP have the unexpected negative effect on output/income. This confirms earlier findings by Driscoll and Craig *et al* of very small and often negative effects of loans. The important finding in Model 3 is that the estimated parameter for the interaction term is infinitesimal and statistically insignificant, albeit with a negative sign.

Equation (1) is also estimated for two other dependent variables, growth of small firms and growth of employees in small businesses, to evaluate the effectiveness of SBA guaranteed lending activity. Given available data, the time period considered here is 1988-2006. Table 4 shows the results with small firm growth as the dependent variable. The control variables, LQ and NBER, as well as the lagged small firm growth rate are consistently significant and have the expected signs. After controlling for these variables, the findings reveal that SBA lending activity directly and significantly influences the growth of small firms in the states. On the other hand, the coefficients for financial assets and the interaction term are very negligible and insignificant. Similar results are found in Table 5including the important finding that deposit growth has a significant and positive relationship with the growth of employees in small businesses.

Table 3: Dependent Variable is Growth Rate of Per Capita Income

Predictor	Model 1 **Control Variables**	Model 2 **Control and Independent Variables**	Model 3 **Full Model**
Constant	0.02	0.02	0.025
	(5.68)***	(6.29)***	(6.38)***
Lagged Income (-1)	0.05	0.03	0.03
	(1.71)	(0.93)	(0.90)
Lagged Income (-2)	0.14	0.14	0.14
	(4.81)***	(4.67)***	(4.63)***
NBER	-0.02	-0.02	-0.02
	(-9.83)***	(-9.65)***	(-9.67)***
LQ	-0.004	-0.004	-0.004
	(-1.95)**	(-2.29)**	(-2.28)**
SBA7a	-0.0002	-0.0003	-0.0007
	(-0.05)	(-0.08)	(-0.18)
Growth of SBA		-0.003	-0.003
		(-2.22)**	(-2.23)**
Lagged SBA (-1)		-0.009	-0.009
		(-5.72)***	(-5.71)***
Lagged SBA (-2)		-0.0003	-0.0003
		(-0.22)	(-0.21)
Growth of Deposits		0.00006	0.00006
		(1.29)	(1.31)
Lagged Deposits(-1)		-0.0001	-0.0001
		(-1.96)**	(-1.96)**
Lagged Deposits(-2)		0.00006	0.00006
		(1.07)	(1.08)
SBA*DEP			-0.0000
			(-1.07)
Adjusted R^2	0.10	0.13	0.14
F-statistic	22.35***	14.02***	12.95***
No. of observations	1000	971	971

*** and *** indicate significance at the 5 and 1 percent level respectively.*

Table 4: Dependent Variable is Growth in Small Firms

Predictor	Model 1 Control Variables	Model 2 Control and Independent Variables	Model 3 Full Model
Constant	0.01 (3.85)***	0.01 (3.17)***	0.01 (3.20)***
Lagged Firms (-1)	0.69 (21.62)***	0.67 (20.61)***	0.67 (20.60)***
Lagged Firms (-2)	-0.04 (-1.27)	-0.01 (-0.38)	-0.01 (-0.39)
NBER	-0.01 (-10.74)***	-0.01 (-10.55)***	-0.01 (-10.55)***
LQ	-0.004 (-4.20)***	-0.004 (-3.76)***	-0.004 (-3.75)***
SBA7a	0.001 (0.58)	0.002 (0.77)	0.002 (0.73)
Growth of SBA		0.005 (5.61)***	0.005 (5.62)***
Lagged SBA (-1)		0.002 (2.19)**	0.002 (2.19)**
Lagged SBA (-2)		0.001 (1.39)	0.001 (1.40)
Growth of Deposits		0.00001 (0.57)	0.00001 (0.58)
Lagged Deposits(-1)		0.00001 (0.17)	0.00001 (0.17)
Lagged Deposits(-2)		-0.00004 (-1.47)	-0.00004 (-1.46)
SBA*DEP			-0.00000 (-0.46)
Adjusted R^2	0.58	0.60	0.60
F-statistic	223.73***	108.35***	99.24***
No. of observations	800	779	779

*** and *** indicate significance at the 5 and 1 percent level respectively.*

Table 5: Dependent Variable is Growth in Employees in Small Firms

Predictor	Model 1 Control Variables	Model 2 Control and Independent Variables	Model 3 Full Model
Constant	0.02 (5.16)***	0.02 (4.71)***	0.02 (4.76)***
Lagged Employees (-1)	0.37 (11.68)***	0.37 (11.52)***	0.37 (11.48)***
Lagged Employees (-2)	0.01 (0.32)	0.01 (0.25)	0.01 (0.24)
NBER	-0.03 (-13.54)***	-0.03 (-12.86)***	-0.03 (-12.86)***
LQ	-0.006 (-3.50)***	-0.006 (-3.03)***	-0.006 (-3.03)***
SBA7a	-0.003 (-0.72)	-0.003 (-0.76)	-0.003 (0.82)
Growth of SBA		-0.0004 (-0.26)	-0.0004 (-0.24)
Lagged SBA (-1)		0.0006 (0.35)	0.0006 (0.37)
Lagged SBA (-2)		0.003 (2.36)**	0.003 (2.37)**
Growth of Deposits		0.00008 (1.90)*	0.00008 (1.91)*
Lagged Deposits(-1)		-0.0001 (-1.78)*	-0.0001 (-1.76)*
Lagged Deposits(-2)		0.00004 (0.76)	0.00004 (0.77)
SBA*DEP			-0.000000 (-0.68)
Adjusted R^2	0.30	0.29	0.29
F-statistic	68.20	30.50***	27.98***
No. of observations	800	779	779

*, ** and *** indicate significance at the 10, 5, and 1 percent level respectively.*

CONCLUSION

In their studies, Craig and others concluded that SBA lending matters especially for low-income areas. This paper added to the literature by applying Craig's approach to a panel data of U.S. states for the 1986-2008 period. A preliminary test was to determine if a two-way causality exists between SBA credit and income growth. The Hausman simultaneity test showed that SBA lending is not endogenous at the state-level. As a result, moderated regression analysis was applied to the state-level panel data set whereby the dependent variable is regressed sequentially on certain control variables, independent variables, and then an interaction term. A version of Craig's model was estimated using three different dependent variables – income growth, small firm growth, and employee growth.

Overall, the control variables of location quotient and NBER showed that local industrial composition and national business cycles are important determinants of state economic performance. The estimated coefficients for SBA lending were found to be small, insignificant, and having the unexpected negative signs with respect to its relationship with income. This confirms earlier studies and may also be a statistical consequence of the fact that SBA lending accounts for a very small part (less than 10%) of total lending in the economy. On the other hand, SBA loans have a positive and significant impact on the growth of small businesses and by consequence, the number of workers employed in small firms. The bank deposit had a positive and significant relation only with employee growth, albeit a very small effect. Finally, the parameter for the interaction term between SBA and DEP is also insignificant and very small in all regressions although it generally had a negative sign. This insignificant result is contrary to Craig's findings. Thus, this study finds that SBA lending is not biased in favor of lower income areas.

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THE VALUE OF OLYMPIC SPONSORSHIP: GOLD, SILVER, OR BRONZE?

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ABSTRACT

Motivated by the growing interest in finding opportunities to have their product advertised on a global stage, a select number of firms have turned to Olympic Sponsorship. The motivation is not only to have your product recognized by more consumers, but, to contribute to firm financial success as a result of this global exposure. Previous sponsorship research has revealed that there is a generally positive relationship between firm participation in sponsorships and financial returns. However, there are several categories of sponsorship where the relationship is unclear, with the results of several studies on the financial effects of Olympic Sponsorship being mixed. To clarify the issue, this paper examined whether firm participation as Olympic TOP Sponsors resulted in firm financial success. Utilizing techniques from the field of finance, the study revealed that participation in the Olympic TOP Program results in almost universal negative abnormal returns to the sponsoring firm over individual days surrounding the announcement date and various event windows. The results suggest that not all sponsorships are created equal and that investments in the Olympic TOP Program are penalized by investors. Directions for future research and managerial implications are discussed.

INTRODUCTION

Sponsorship has increasing become a focal point for promotion in corporate and brand communications marketing strategies. This is evidenced by the fact that the pace of sponsorship-linked marketing expenditures has consistently outstripped that of traditional advertising and was $43 billion worldwide in 2008 (IEG 2009). Further support is found in the fact that overall advertising expenditures declined 4.1% (http://www.tns-mi.com/news/05042009.htm) in 2008 while spending on sponsorship increased 3.9% (IEG 2009). This reflects the sentiment that despite overall declining advertising expenditures, sponsorship is considered such an important medium that spending continues to grow, and many firms continue to utilize sponsorship as a preferred marketing medium.

The growth of sponsorship is also readily apparent in the development of supporting infrastructure and policies surrounding corporate involvement in sponsorship activities (Cornwell 2008). Sponsors now regularly employ outside agencies to assist them in areas such as proposal management, measurement, and hospitality. A recent study of Fortune 500 companies websites found one-third of these firms have made their sponsorship policy available on the Internet (Cunningham et al. 2009). Moreover, for many firms, the transformation of marketing communications through the use of major sponsorship programs has mandated key changes in a variety of aspects of traditional advertising and promotions, including content, media choice and placement, and the overall pattern of marketing spending (Cornwell et al. 2005). Thus, corporate sponsorship investments represent decidedly strategic managerial decisions that typically exert great influence upon many aspects of the firm's broader marketing communications strategy.

The dramatic growth of this medium has drawn increased interest from academic researchers and a considerable literature base has developed in recent years. Within the context of the marketing-finance interface, a number of studies have assessed the impact of various categories of sponsorship announcements upon changes in shareholder wealth. Overall, marketing studies have tended to confirm that investors generally hold a favorable view of these marketing investments. The evidence relating to specific types of sponsorship announcements, however, remains less than clear. For instance, Cornwell et

al. (2005) are unable to identify a significant positive abnormal return for firms announcing official sponsorship status for five major U.S. sport leagues, leading them to support their hypotheses using longer event windows. Whereas, Miyazaki and Morgan (2000) interpret their results as suggesting a positive financial effect for U.S. listed firms announcing sponsorship for the 1996 Atlanta Olympics, Frame and Farrell (1997) reach the opposite conclusion in their study of sponsors of the very same event. In conflict with Clark et al. (2002) study of stadia naming rights announcements, Leeds et al. (2007) concluded the purchase of naming rights had little significant impact on the short-term or long-term value of the companies that bought them.

Olympic sponsorships are considered by some to be the most valuable for firms to invest. Seen by many as the premier sports competition, this quadrennial event remains one of the most lucrative sport properties, garnering a very sizable global television audience. Despite criticisms of over-commercialism and repeated political controversies associated with the games, the Olympics remain positively perceived amongst consumers and corporate executives are drawn by the opportunity to enhance global recognition and increase revenue (Turner 1994). Survey research has shown that consumers view an Olympic sponsor as the best firm in its industry, indicating such sponsorships have image enhancing value for firms. On the other hand, Meenaghan (1996) noted expectations of increased exposure may be inflated due to rivals' ambush marketing efforts. Despite consumer assertions that they are more likely to patronize Olympic sponsor brands, studies have consistently revealed awareness is comparatively low (e.g., Adweek 1994; Knight 1995). Thus, the question of whether Olympic sponsorship is an economically sound marketing strategy remains a point of contention.

Two marketing studies reached opposing conclusions in examining shareholder wealth effects associated with sponsorship of the 1996 Atlanta Olympics (Farrell and Frame 1997; Miyazaki and Morgan 2001). Based on the lack of a significant negative returns associated with the cumulative event windows they examined combined with the presence of a significant positive result for the (-4, 0) event window, Miyazaki and Morgan (2001) concluded the acquisition of Olympic sponsorships are seen by the market as producing neutral discounted cash flows at worst, and positive discounted cash flows at best. Applying a similar research design, Farrell and Frame (1997) find negative abnormal returns ($\alpha < .10$) two days following the announcement and positive returns four days prior. Given this result, these authors analyzed cumulative abnormal returns associated with 11-day (-5, +5) and 3-day (0, +2) event windows that included those dates. Based upon finding a significant negative return for the three-day window and a null result for the 11-day window, Farrell and Frame's (1997) conclusion is that such investments are viewed as poor investments, consistent with an agency-cost explanation of corporate practices. This study hopes to add to the literature addressing the value of the most elite of Olympic sponsorships, the Olympic TOP sponsorship.

LITERATURE REVIEW

Sponsorship is a decidedly strategic activity (Amis and Slack 1999; Kohl and Otker 1988), and is represented by the fact that sponsorship involves the allocation of scarce resources, primarily in the form of a financial or in-kind investment on the part of the firm and involves an exchange process (Cornwell and Maignan 1998). Further, since official sponsorships are limited in number, and cannot be easily duplicated, they can be viewed as a unique resource (Morgan and Hunt 1995) which can be utilized by the firm. Because official sponsorship are limited in number, acquisition and utilization of such a resource can be viewed as giving the sponsoring firm a competitive advantage over rivals (Wernerfelt 1984).

Several theoretical bases, such as the resource-based view of the firm (Barney 1986), resource-advantage theory (Hunt and Morgan 1994), and institutional theory (Handelman and Arnold 1999) have the potential to link investor response to sports sponsorship. Since official sports sponsorships are limited in their

availability, they can be viewed as scarce resources, and the acquisition of this resource has the potential to contribute to the firm's financial health as a result of the market rewarding this investment.

DATA AND METHODOLOGY

Announcements of The Olympic Partner Program (TOP) were identified using information gathered directly from the U.S. Olympic Committee, Lexis-Nexis database, corporate websites, and other online sources. The TOP program was designed to designate and reward the most elite group of official Olympic sponsors and received exclusive rights to claim that they are the official product of the Olympics as well as to receive special placement at Olympic venues. No title or event sponsorships were included in the sample. As recommended by Brown and Warner (1985), all sources were scrutinized to ensure the date of the very first communication was identified. The stock data analyzed in the study were obtained from the University of Chicago's Center for Research in Security Prices (CRSP) data tapes.

The Scholes-Williams standardized cross-sectional market model (Cowan Research 2000; Scholes and Williams 1977) was utilized to test for changes in stock prices associated with the sponsorship announcement and was estimated over event days $t = -275$ to -26. The Scholes-Williams approach eliminates the problems associated with nonsynchronous trading that sometimes occurs in event-based studies with firms of widely varying market values. A 51-day event window beginning 25 trading days prior to and ending 25 trading days following each announcement was analyzed for evidence of stock price changes. The CRSP value-weighted index of all stocks was employed as the stock market proxy. All statistical calculations were performed using the EVENTUS program developed by Cowan Research, LLC.

EMPIRICAL RESULTS

Table 1 presents a summary of the mean abnormal returns for individual days and their associated test statistics for TOP sponsorship announcements while Table 2 presents a summary of various event windows. In addition, nonparametric tests reflecting the fraction of firms registering positive abnormal returns is provided.

Table 1 presents a summary of the mean abnormal returns and their associated test statistics for the interval from $t = -5$ to $+5$ for the overall sample of TOP sponsorship announcements. Also reported in Table 1 is the number of events in the sample registering positive and negative abnormal return changes and their associated test statistic for this fraction for each event day. Using the assumption of a no-sponsorship announcement wealth effect, the returns for each firm should approximate zero, whereas the fraction of firms registering abnormal increases should approximate the random chance probability of .5.

Significant abnormal returns were found for five days, with four being significantly negative and only one registering a positive abnormal return for individual days examined between $t = -5$ to $+5$. This result suggests that investors and the market may not view investments in Olympic TOP sponsorships positively. In fact, the day following the announcement of Olympic TOP sponsorships, 29 of the 40 firms examined registered negative abnormal returns and the mean abnormal return for the day was -0.67%.

TABLE 1: Mean Abnormal Return Levels and the Number of Firms Registering Positive/Negative Abnormal Returns for TOP Sponsorship Announcements

Event Day	Mean Abnormal Return	Sample Z-Statistic	Size (n)	Abnormal Return Changes	
				Positive: Negative	Z-Statistic
-5	-0.39%	-1.259	40	20:20	0.278
-4	-0.24%	-0.776	40	15:25	-1.305*
-3	0.32%	1.044	40	20:20	0.278
-2	0.10%	0.314	40	21:19	0.595
-1	-0.33%	-1.064	40	15:25	-1.305*
0	0.32%	1.043	40	24:16	1.544*
1	-0.67%	-2.177	40	11:29	-2.571***
2	-0.20%	-0.651	40	17:23	-0.672
3	0.30%	0.962	40	22:18	0.911
4	-0.79%	-2.552	40	10:30	-2.887***
5	0.14%	0.453	40	19:21	-0.038

This table shows the mean abnormal return levels and the number of firms registering positive or negative abnormal returns for individual days surrounding the TOP announcement. ***, **, * indicate significance at the 1, 5 and 10 percent levels respectively

To further examine the effects of Olympic TOP sponsorships on firms, various windows were examined. Table 2 reports the results of tests of mean cumulative abnormal return levels over six different event windows surrounding the official sponsorship announcements. The most striking result in Table 2 is that each window examined produced negative abnormal returns, with four of the six windows registering significant abnormal returns ranging between -0.35% to -3.24%. The results suggest that when viewed from the standpoint of a longer event window, Olympic TOP sponsorships are shown in this study to be viewed in a negative light by investors.

CONCLUSION

Results indicate that firm investments in Olympic TOP sponsorships are almost universally viewed in a negative fashion. Potential reasons for this shareholder reaction are that Olympic sponsorships are expensive and infrequent. TOP participants typically pay in excess of $40 million for sponsorships during the Olympic Games, and for an event that is as infrequent as the Olympics, shareholders could view it as a poor investment of marketing funds. Results of this study signify that shareholders view investments in Olympic sponsorships as a poor investment. This shows that not all sponsorships are equal, and that a careful examination of the context of a sponsorship investment is critical.

These results also add to the growing literature examining the marketing-finance interface and provide direction to managers wishing to invest in Olympic TOP sponsorships. By examining the returns to marketing investments, the study provides guidance to those seeking investment opportunities for their desired marketing medium, in this case, Olympic sponsorship investment opportunities. Also, this study provides guidance for investors seeking to evaluate firm marketing investments. Not all sponsorships are created equal, and by examining this specific sponsorship program, this study adds to that literature base.

TABLE 2: Mean Cumulative Abnormal Return Levels and Number of Firms Registering Positive/Negative Abnormal Returns Over Select Intervals Around the Date of Announcements of TOP Sponsorship Announcements

Event Window	Size (n)	Mean Cumulative Abnormal Return	Z-Statistic	Abnormal Returns Positive: Negative	Z-Statistic
0 to +1	40	-0.35%	-0.746	14:26	-1.621*
0 to +2	40	-0.55%	-1.387*	17:23	-0.672
-1 to +1	40	-0.68%	-1.448*	15:25	-1.305*
-2 to +2	40	-0.78%	-1.377*	16:24	-0.988
-5 to +5	40	-1.44%	-2.115**	14:26	-1.621*
-10 to +10	40	-3.24%	-3.047***	9:31	-3.204***

This table shows the mean cumulative abnormal return levels and number of firms registering positive or negative abnormal returns over select intervals around the date of announcement of the TOP sponsorship. ***, **, * indicate significance at the 1, 5 and 10 percent levels respectively

The Olympics provide several different levels of investment opportunities for firms seeking to invest in sponsorships. Future research should examine those different levels to assess the value of those levels of Olympic sponsorship investment. Also, comparison of official and unofficial sponsorship investments should be examined, whether at the Olympic level, or through investments in other sponsorship opportunities.

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BIOGRAPHY

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PREDICTIVE POWER OF JOINT VENTURE REPORTING METHODS – IS THE IASB ON THE RIGHT WAY?

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ABSTRACT

The International Accounting Standards Board (IASB) as a world-wide standard setter is planning to eliminate the proportionate consolidation for joint venture investments. Consequently, the ability to choose between the proportionate consolidation and equity method will no longer exist. The study presented calls into question whether the equity method has greater relative explanatory power than the proportionate consolidation method. The analysis conducted includes the financial data for all companies in the German prime stock market indices DAX-30, MDAX, SDAX and TecDAX over the period of 2004-2008. By using the disclosures in the IFRS financial statements, pro forma equity method financial data were calculated. Based on these data, a regression model was used to identify the relative explanatory power of future profitability using the equity method in comparison with the proportionate consolidation method. The results indicate that the proportionate consolidation method provides greater predictive power of future profitability than the equity method for the basic population. The findings show that the intended elimination of the proportionate consolidation method will not improve the explanatory power for users of financial statements prepared under IFRS. However, the findings also prove that additional disclosures to calculate the proportionate consolidation data would improve explanatory power of future profitability under the equity method.

KEYWORDS: explanatory power, financial accounting, joint venture investment, valuation, regression analysis, relevance

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A ROADBLOCK TO US ADOPTION OF IFRS IS LIFO INVENTORY VALUATION

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ABSTRACT

A roadblock exists between International Financial Reporting Standards IFRS and United States Generally Accepted Accounting Standards, US GAAP in the area of acceptable methods of inventory valuation. IFRS recognizes the First In First Out Method, FIFO and the Weighted Average Method of Inventory Valuation as acceptable methods of inventory valuation. It does not recognize or allow the Last In First Out Method of Inventory Valuation, LIFO as currently used in the United States. In order for the United States to adopt IFRS Accounting Standards, the elimination of LIFO would have to occur.

Canceling LIFO would require most large US companies to pay excessive amounts of additional income tax to the Internal Revenue Service, IRS. Tax laws in the US require companies using LIFO for tax purposes must also use LIFO for reporting financial statements under the LIFO Conformity Requirement. So the use of LIFO affects all the financial statements as well as the tax laws. Thus, the IFRS requirement to drop LIFO is a huge impediment to the convergence of US GAAP with IFRS.

This paper provides an overview of some of the issues and possible solutions in determining the best way for the US to handle LIFO and meet IFRS requirements.

JEL: M41, M48

KEYWORDS: IFRS, LIFO, FIFO, Inventory Valuation, LIFO Conformity Requirement

INTRODUCTION

The process of convergence of US GAAP with IFRS Standards has made a great deal of progress. Many issues remain to be addressed including the destiny of the LIFO Inventory Valuation Method. In general, the issue of LIFO Inventory Valuation is not on the list of active or research agendas of either the Financial Accounting Standards Board (FASB) for US GAAP or the International Accounting Board (IASB) for IFRS. However, Robert Herz, the chairman at FASB states that at some point the LIFO Valuation issue will have to be resolved (Herz, 2007). A recent exposure draft of the IASB,QC19, states that:

> Although a single economic phenomenon can be faithfully represented in multiple
> ways, permitting alternative accounting methods for the same economic phenomenon
> can diminish comparability and, therefore, may be undesirable" (IASB, 2008).

FASB has also stated that it would disapprove creating a US variant of an IFRS rule (Denham, 2007). From an economic standpoint the IASB for IFRS and the FASB for US GAAP are both in agreement on the requirement for only one set of accounting rules in financial reporting.

HISTORY

As early as 1919 the Treasury Department permitted taxpayers to use only First In First Out, FIFO and

Average Cost methods of inventory. The LIFO method of inventory was obtained from the Base Stock method of inventory accounting which originated in England in the middle of the nineteenth century. The Base Stock Method was also referred to as the Normal Stock Method (Peloubet 2000).

The Base Stock Method was developed from the concept that some businesses had to keep a constant level of inventory in order for the firm to operate normally. The Base Stock Method controlled sharp movements of inventory profits and losses. As items were sold, the cost was taken from the last items added to the inventory. The items were not removed from the Base Stock Inventory, which was left intact. During periods of rising prices profits were reduced and when a decline in prices occurred losses were reduced.

The LIFO Method is similar to the Base Stock Method. The cost removed when items are sold is the most recent addition. The cost of remaining inventory is the beginning inventory and additional items that follow. Thus, the cost of goods sold come in at current market prices and reduces profits accordingly (Cotter, 1935).

As early as 1903 the American Smelting and Refining Company was the first company to use the Base Stock Method in the United States. By 1921, 10% of United States Corporations were noted as using a cost record of earnings by using these inventory methods (Author Unknown, 1935).

The IRS required inventories to be valued at cost or lower of cost or market. Firms using LIFO or Base Stock Methods for inventories had to keep two sets of records, one for financial reports for stockholders and the other set maintaining tax reporting (Cotter, 1935).

In a case before the Supreme Court involving the IRS v. Kansas City Structural Steel Company, the Court denied the propriety of the Base Stock and other methods in favor of the Internal Revenue's FIFO requirement (Peloubet, 2000).

The defeat of the Kansas City Structural Steel case with the Supreme Court motivated LIFO supporters to head to Congress for support (Peloubet, 2000). Leading the fight was a business journalist joined by a growing accounting profession (Peloubet, 2000).

As a result of the losses caused by the Depression of 1929, businesses opted for the FIFO Method. However, as the recovery from the Depression developed and prices began to rise, supporters of the Base Stock and LIFO methods returned. Since the Treasury and the Supreme Court rejected the Base Stock method but did not explicitly eliminate the LIFO method a battle ensued. Arundel Cotter, an editor of the *Wall Street Journal* campaigned in the court of public opinion by writing several books and articles in which he supported corporate America and the LIFO method of inventory valuation. To justify LIFO Inventory valuation, he argued that the creation of the Securities and Exchange Commission by the Roosevelt Administration was a demonstration of the need for accurate financial reports for stockholders and investors (Cotter, 1936). Some Accountants considered Cotter as a partner in the struggle to have LIFO recognized by Congress.

Government regulation by the Roosevelt Administration led to the Securities Act of 1933. The Securities and Exchange Commission created in the SEC Act of 1933, cooperated with the accounting profession and asked for their advice in creating securities laws (Berle, 1938).

In 1936 the merging of the American Institute of Accountants (AIA) and the American Society of Certified Public Accountants (ASCPA) created a national organization to fight government control. Accountants fought to shape accounting policies in income tax legislation and securities regulation. One of the first issues to address was the Undistributed Profits Tax supported by the Treasury Department in

1936. The Undistributed Profits Tax required the use of the FIFO inventory method so consideration of the LIFO inventory was eliminated (Miranti, 1990).

Concerned with the backlash against the New Deal Program created by his administration, Roosevelt feared the intrusion of a tax reform program. As a recovery began to occur, he became less concerned with the opposition of business to his tax policies. However, in 1936 a fiscal emergency occurred because for World War I Veterans a bonus was created despite the fact that the president had vetoed it. As a result, the Treasury Department recommended the elimination of the existing corporate income tax replacing it with a tax on undistributed profits (Brownlee, 2004).

Strong opposition from corporate business resulted. In 1936 supporters of LIFO and those challenging the Undistributed Profits Tax appeared before Congress.   Maurice E. Peloubet a CPA with Pogson, Peloubet, and Company formerly with Price Waterhouse and Company testified before Congress on the need for the LIFO method for pricing inventories (Moonitz, 1965). The Senate Finance Committee took no action, referring the proposal to the Treasury Department.

Citing the Supreme Court decision, the Treasury Department decided against adopting the method. A further reason presented was that taxpayers would switch from LIFO to FIFO as prices went up or down (Watson, 1937). It became very obvious that a regulation to reform the valuation of inventories would not come from the Treasury Department. Instead any regulation would have to come from Congress. In March 1938 the supporters of LIFO returned to Congress and reappeared before the Senate Finance Committee. At the same time a recession weakened the Roosevelt administration and faced opposition from Roosevelt's tax program by his own party. However, the Treasury Department   rejected the adoption of the LIFO inventory stating that it would result in millions of lost revenue (Haas, 1938).

An attack on the Treasury's forecast was presented by George O May, senior partner with Price Waterhouse pointing out that Secretary Morgenthau of the Treasury Department had made errors in the figures used to support the Undistributed Profits Tax in 1936. The error caused Morgenthau to drop his support of the Undistributed Profits Tax (Congressional Record, 1938). Congressional leaders might have wanted to remind the Treasury Department that Congress dictates the tax policy and LIFO inventory was created.

WHY LIFO SUCH A BIG ISSUE

First In First Out Inventory Valuation, FIFO, uses the actual method of production in costing its products. LIFO does not follow the actual production of product. LIFO instead retains the older inventory values on the balance sheet. In periods of rising prices LIFO results in higher costs and as a result lower profits than would occur under FIFO. Thus the income statement shows a higher cost of goods sold, lower profits, and as a result lower income taxes to pay than would occur under FIFO.

The general impact of LIFO for income tax reporting in the United States becomes a momentous decision. In the 2007 tax reform proposal H.R.3970, the House Ways and Means Committee estimated that the provision to repeal LIFO for income tax reporting would raise approximately $106 Billion in ten years. The Bill was not acted on by the full Ways and Means Committee (House Ways and Means Committee, 2007). If LIFO were repealed for United States income tax purposes, companies would have higher income taxes.

THE REVENUE ACT OF 1939

The INTERNAL REVENUE CODE under Sec.472 (a) provided for the authorization for the LIFO CONFORMITY requirement Sec.472 (c) passed by Congress mandated that if LIFO was used for in

determining taxable income for tax purposes, it must also be used in reporting financial statements. (Hoffman 2009). Both remain in existence today. The decision that LIFO would be required for both calculating income tax and for financial reporting was determined by a three member committee appointed in 1938 by the Treasury Department. The members included Carman G. Blough, Arthur Anderson and Company, formerly the first chief accountant of the Securities and Exchange Commission, SEC, Edward Kracke, Haskins and Sells, and Roy B. Kester, a Professor at Columbia University. The Committee's final recommendation was that companies should be allowed to use LIFO, provided they used it both for financial reporting and tax reporting (Cooper, 1996).

Treasury department lawyers took into account the recommendations of the committee when drafting the LIFO legislation that became law in the Revenue Act of 1939   John Wanes, the new Under Secretary of the Treasury, stated to the Senate Finance Committee, that the Treasury had no objection to amending the law that was previously objected to. He also stated that the Treasury Department agreed to make the LIFO method available for income tax purposes to any taxpayer using the LIFO method in its financial accounting system. A motion was agreed to without objection. Congress authorized the use of LIFO for both income tax law and financial reporting with the passage of the Revenue Act of 1939 (Senate Finance Committee, 1939).

POSSIBLE SOLUTIONS

For the last seventy years companies have had the benefit of LIFO Inventory valuation and as a result paid lower income taxes. In considering the destiny of LIFO, it is necessary to note that the objectives of the Internal Revenue Code and the objectives of financial reporting (GAAP) are not necessarily similar. Taxable income for income tax purposes does not have to be calculated in accordance with GAAP. And GAAP does not have authority over US tax laws. However, it is the LIFO CONFORMITY REQUIREMENT that threatens the continued use of LIFO for income tax purposes. Thus the creation of the LIFO CONFORMITY REQUIREMENT by the Securities and Exchange Commission, SEC has mandated that if LIFO is used in financial reporting, it must also be used in calculating income taxes.

A repeal of the LIFO CONFORMITY REQUIREMENT and a continuation of LIFO income taxes is a possibility. But it is highly unlikely. After seventy years of lower taxes, Congress is not likely to permit companies to continue with lower tax bills.

OBAMA'S TAX PROPOSALS

The Obama budget for 2010 would repeal the election to use LIFO for income tax purposes. Taxpayers that currently use the LIFO method would be required to write-up that is to revalue their beginning LIFO inventory to its FIFO value in the first taxable year beginning after December 31, 2011. This one time increase in gross income would be taken into account ratably over the first taxable year and the following seven taxable years. Repealing LIFO and making companies pay tax on the accrued difference between LIFO and FIFO inventory valuations would impose a substantial one time tax and a smaller permanent tax as long as prices are increasing. In HR3970 Ways and Means Committee Chair Charles Rangel proposed to allow firms to spread income from the initial adjustment from LIFO to FIFO over eight years. (Urban Institute and Brookings Institution, 2009). Already proposed is the elimination of the LIFO inventory valuation beginning in 2012 by the Treasury department (Kiplinger, 2009).

TRENDS

In 2008 the AICPA reported that more than a third of the companies surveyed used a combination of cost flow assumptions. More than 65% used FIFO for a significant portion of their inventories. About 35% use LIFO. Less than 30% use weighted average or specific identification methods.

The industries with the largest percent of firms using LIFO include firms in the chemical industry and firms that manufacture industrial and farm equipment. Retailing firms use LIFO extensively. The industries with the smallest proportions of firms using LIFO include technology based firms which experience decreasing production costs such as computer and other electronic equipment (AICPA 2008).

CONCLUSION

The benefits of repealing LIFO and adoption of IFRS accounting standards will probably include financial statements that present higher figures. For example, balance sheets and income statements presenting better financial results will make companies more worthy of credit, expand opportunities for growth, help to create more jobs and as a result growth in the economy.

On a global basis, improved reporting consistency, enhanced global competition, and improved financial reporting transparency will occur. Many multinational companies will have cost savings because they will not have to report under several sets of standards (Lee & Smith, 2009). Congress will probably eliminate both the LIFO TAX RULE and the LIFO CONFORMITY REQUIREMENT and allow a period of several years to effect the change. With this action the roadblock for US adoption of IFRS will be removed.   .

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A STEP FORWARD IN THE ECONOMIC GROWTH OF THE COUNTRY: ANALYSIS OF MINING SECTOR DEVELOPMENT

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ABSTRACT

This paper provides an assessment of the mining sector and shows how it is critical for further sustainable growth in Mongolia. In 1990, Mongolia transferred from socialism to a parliamentary democracy and since then has implemented political and economic reforms that have constituted a sweeping break from the past; succeeding in a way that very few other post communist nations have been able to do. The Mongolian economy was mostly influenced by agriculture and small and medium sized businesses; however since the late 1990s, the Mongolian capital market has had a strong correlation with the fate of Mongolia's mining deposits, which are of worldwide interest. If these deposits were exploited, the Mongolian capital market would boom and thus strongly effect the whole economic situation. During the last few years the mining sectors have started to provide an important contribution to the GDP. Unfortunately without previous experience and the appropriate legal environment, the mining industry faces great challenges in further development; at same time investment opportunities for the whole country have been delayed for an uncertain period. Thus, this paper emphasises how to maintain the sustainability of Mongolian economic growth while identifying and analying the main difficulties, challenges and strategic efforts in the mining sector and determining appropriate solutions based on international experience and practices.

Keywords: *Mongolia, mining industry, investment and economic growth*

INTRODUCTION

In October 2009, the Government of Mongolia signed an agreement with Canada based private mining company, Ivanhoe Mines, to utilize the copper and gold deposits. This project was named the Oyu Tolgoi project. A week after the signing ceremony, Ivanhoe Mines handed out an initial 100 million USD to the state budget of the country. During this activity, the Minister of Finance, Mr. Bayartsogt declared that each citizen of the country will receive a one time incentive of 50,000 MNT or 35 USD from this payment within next year, 2010 (Ministry of Finance, 2009). 1 USD = 1428.5 MNT as of October 2009 (Mongol Bank, 2009).The population of Mongolia is around three million, if we multiply this figure by the 35 USD; it would be 105 million USD. I asked myself, why is the Government going to do such a thing. Thus, I was motivated to know that what kind of problematic issues are arising, how other countries deal with the mining sector, and how the mining sector can be a positively influence in the growth of the country.

Mongolia[1], which located in the heart of the Asian continent between Russia and China, is a democratic country with a free market economy and has extensive and largely untapped mineral resources. Thus the mining sector has started to play an important role towards the country's future economic development. The Government encourages foreign investment and has adopted several long-term programs in exploration, exploitation and processing of minerals, such as coal, copper, fluorspar, gold, oil and silver. The bubble in commodities in the world stock market has particularly benefited Mongolia either by raising the profits in the mining sector or increasing the value of the massive untapped mineral resources. Unfortunately, since April 2008, because of the financial crisis, commodity prices have sharply declined in the worldwide stock market, having a negative impact on the Mongolian economy. Despite this set

back, Mongolia continues to enjoy a rapid economic growth as GDP averaged 8.1% during 2004-07, and was 9.9% in 2008 and will continue its growth in 2009 and 2010. Per capita GDP at 1,490 USD is on a par with China 5 years ago. But sustaining this performance will require an intensive development program in the mining sector.

> *"In the period ahead, the Mongolian economy stands to benefit considerably from its significant mineral deposits. It is important, therefore, to press ahead with agreements in the mining sector and to strengthen institutions needed to effectively manage this mineral wealth," Kato.T (2009), stated.*

Figure 1: How Mine Production Contributes to the Export & GDP Of The Country
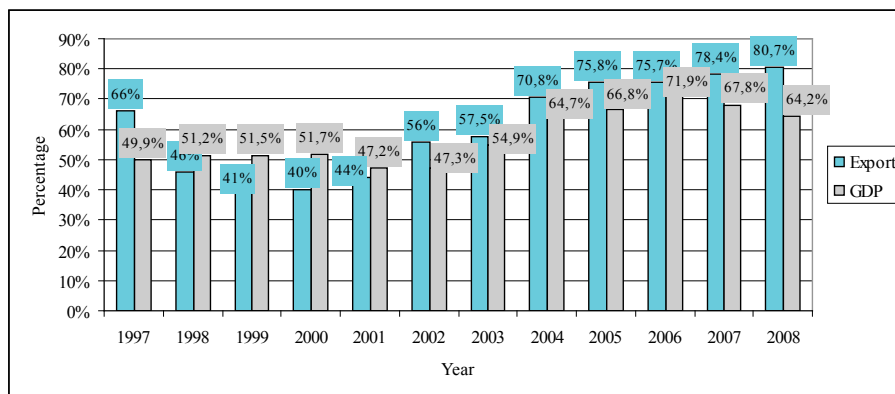
Source: Mineral Resource Authority of Mongolia, 2009

LITERATURE REVIEW AND HYPOTHESES

A Literature review indicates that the mining industry has become responsible for one-fifth of the GDP, two-thirds of industrial output, three-quarters of export earnings and one-half of public revenue of Mongolia (mnSec.com, 2009). Traditionally, to achieve the economic efficiency, the focus is on the interrelationship between neo-classic economic theory and government policy analysis. But in a competitive market some actions taken by government can cause a failure in the market, which in the real circumstances can be seen as a perfect in the short–term, but in fact are wrong in the long term (Edwards, 2007). The main objectives of the country are to set a favorable regulatory framework, a stability monitoring system, transparency of information within government agencies, consistency of regulation and legislations and avoidance of corruption (Husband. CH. & Songwe.V. 2003).

H1: The mining sector impacts the macro-economy of the country.

Before beginning to talk about the mining sector and its impact on the macro-economy of the country, the factors of macro-economics need to be understood, and will be briefly explained. The main measurements are: (1) gross domestic product (GDP), which is the total value of the production and services of a country within one year, and gross national product (GNP), which is as GDP plus the quantity of goods and services produced by a country within specified period of time; (2) total taxes of the country; (3) government spending and its percentage of total GDP; (4) inflation of the country; (5) interest rate; and (6) unemployment rate (Ghosh, 2006). Through an analysis of macro-economic measurements we could respond with the following questions: 1) How to sustain the economic growth of the country; 2) Is it possible to continue economic growth without limit, and 3) What actions can, or should, the government be able to take (Williamson, 2002).
The Mongolian economy has been through a rapid economic growth and, as of October 2009, the total production output was 2,936.7 million USD, with exports at 1,369.9 million USD and imports at 1,566.8

million USD (Narankhuu, 2008). If we look at the export of minerals; export of copper ore is 25.5%, unprocessed and semi-processed gold is 19%, coal is 16.2%, zinc is 6%, crude oil is 5.2%, iron ore is 3.9% and fluorspar is 2.4% - of total exported products. Mining accounted for about 30% of the country's industrial output and 60% of its export revenue. In 2007, the mining sector exports were 78.4% of total exports and in 2008 this figure rose to 80.7%, an increase of 2.3 percentage points from 2007 (World Bank Report, 2009). Between 1990 and 2001, the mining industry accounted for 31% of all foreign direct investment in Mongolia (Richmond. D. M. 2005). Thus the government has to prioritise the issues that positively impact the investment climate and manage the macro-economic stability (Hancock, 2008).

According to the statistics, today in Mongolia over 1.7 million working-age people[2] are in employment, 100,000 of them are engaged in artisanal small–scale mining[3] and approximately 100,000 employees are engaged in mid- and large-scaled mining companies (National Statistic Year Book, 2008). The unemployment rate was 3% in 2008 and 2.8% in 2009, which ranked 31 among world countries. As of September 2008 inflation had rapidly increased and reached 34%, which is the first time in the past decade of the country and this is the highest level of inflation in East Asia (CIA World Fact book, 2009). This rapid rise and high rate of unemployment is seen to be due to the current financial crisis.

Mining companies have been paying twenty different taxes, fees and charges to the state and local budgets, for instance, 2.1 million USD in 2002; 2.4 million USD in 2003, 5.7 million USD in 2004, 13.4 million USD in 2005 and 189 million USD in 2007 were paid to the state budget in exploration and operation license fees (World Bank Report, 2008). Looking at the numbers, we can say that those factors have highly improved the standard of living, wages and social benefits of the country (Mattis, 2009). But eventually it was not contribute the huge influence to the country.

Table 1: Main Economic Indicators of Mongolia, from 2003-2009

Economic indicators	2003	2004	2005	2006	2007	2008
GDP Growth (%)	3.7%	5.0%	10.6%	6.2%	7,5%	9.9%
GDP Per Capita (US$)	578	716	900	1,216	1,485	1,800
GDP purchasing-power-parity (PPP) Per Capita (US$)	2,163	2,163	2,396	2,600	2,875	3,200
Inflation (%)	3.0%	1.5%	11.0%	9.5%	9.0%	28.0%
Unemployment (%)	20%	4.6%	6.7%	6.7%	3.0%	2.8%

Sources: CIA World Fact book, IMF

> H2: The legal environment is essential to reduce the objective gap between the government and mining industry, while encouraging the whole business operation.

Generally, Mongolia has passed around 18 laws, rules, resolutions and orders to coordinate the mining sector and industry. Unfortunately the public and the community have a lack of knowledge about this legal environment, which causes problematic issues with the implementation of the legal actions. There are further challenges such as corruption in the bureaucracy, lack of transparency in regulatory and legislative processes become main indicators that affects the development of the mining industry in Mongolia (Arnold F.W.2004). The Law of Minerals was approved in June 1997 to regulate the relations for exploration, exploitation and production of mining minerals within the territory of Mongolia. Amendments were added in 2006 and January 2009 (Mineral Resource Authority, 2009). This law is considered to be best in the world, and provides investors with a clearly defined and stable legal environment (Richmond, 2005). Another important resolution is a Government Resolution that approves fifteen (15) strategically important deposits (Appendix 1) in Mongolia that could attract investors and among the best reserved deposits in the world. Other related laws that coordinate mining operations are General Taxation Law, Custom Law, Foreign Investment Law, Economic Entity and Organizational Income Tax Law and Customs Law and etc. (Mineral Resource Authority, 2009).

Additionally, the government of Mongolia has signed a production sharing agreement with oil exploration companies in which the government retains ownership of the natural resource and shares up to 55% of total income, while developers have benefits with taxation stability for up to 30 years as well as risk-sharing with the government (Arnold, 2004). Different agreements have been signed between the government of Mongolia and the mining companies in a move towards sustainable development of the country. Indeed, investors have to pay seven different taxes to the state budget, plus the mining royalty rate has been increased from 2.5% to 5%. Contrariwise, the governments of foreign countries usually maintain a lower rate to encourage more investors (Shapiro, 2009a). Therefore, it is essential to increase the awareness of local communities and broaden the range of options to collect data for government decision-making, especially prior to approving the mining related laws, rules and regulations. Hence policy development and implementation will be effective in the long run (Warlters, 2009).

H3: General international experiences will positively influence developing countries.

Theory and evidence suggest that developing countries need to follow fundamental policies and the regulation of developed countries not just a temporary measurement but a steady state (Eichengreen 2000). The governments of the countries that concentrate on the mining industry seek to implement public-private partnerships to mobilize the right development framework. Those units assess the main activities of the government agencies, and provide advisory support and guidance to the government (Warlters 2009). Foreign investors are the main contributors to mining industry development in any country that has rich mineral reserves. Therefore, each government considers strengthening the investment climate and tries to reduce any burdens to the investors.

METHODOLOGY

The focus of this paper is an analysis of the mining industry and the elucidation of a useful solution for the Mongolian situation based on a literature review and the hypotheses. The data and research materials were analyzed in order to understand the current situation, international practices and possible actions that could be taken towards the growth of the country.

Analysis 1: Mining industry of Mongolia

Mongolian geology is complex and its mineral potential is vast, with is over 1,000 mineral deposits and 8,000 occurrences of 80 different minerals known (Mineral Resource Authority, 2009). The main deposits are gold, silver, copper, tin, tungsten, molybdenum, coal, iron ore, uranium, limestone, lead, wolfram and crude oil. It is estimated that the country's gold and copper reserves are among the largest deposits in the world. In 1924, coal mining was the sole mining industry in Mongolia, which is the main supplier to electric power plants of Ulaanbaatar[4]. In the 1961 a major iron ore metallurgical plant was established in Darkhan province and in 1978, a copper and molybdenum processing factory was established in Erdenet province. In the late 1980s several coal mining sites were founded to supply the Power Plants of Ulaanbaatar. Meantime, limestone factories started their processing activities, becoming a major cement production center. Along with this, gold mining has been growing steady. In 1992 Mongolia exported 624 kg of gold, in 2001 were 14 tones of gold and in 2007 were 10.5 tones of gold. Currently 130 domestic and foreign companies engage in gold mining and exploration activities. In 2006 exploration expenditure for Mongolia reached 285.2 million USD, which accounts for 4% of the global exploration budget. This puts Mongolia on a par with Brazil, China, Russia and South Africa (United Nations Human Rights Team Group 2006).

As of June 2009, the Mineral Resource Authority issued 6,171 mining exploration and exploitation licenses covering 71,107,888.66 hectares; more than 45% of the Mongolian territory. In 2008, throughout Mongolia, 2,269 licensed companies engaged in exploration and mining activities (Mineral Resource

Authority, 2009). Currently, copper and molybdenum are exported to China, fluorspar to Russia, USA and Ukraine, and gold is exported to China, USA and Great Britain. China is the largest export market and accounts for more than 70% of total Mongolian exports, plus it is the main importer of Mongolian coal, copper and molybdenum concentrate. The volume of export of mineral resources increased from 2008 to 2009 as iron ore increased by 41%, coal by 65% and molybdenum concentrate by 73%; all to China. The Russian Federation is the third largest export market and accounts for 11% of total Mongolian exports and is the main importer of fluorspar concentrate (Ministry of Mineral Resource and Energy, 2009).

Erdenet was the main copper ore exploration and production factory in Mongolia from 1978 to 2000, and was a main contributor to the state budget and GDP. But, nowadays Oyu Tolgoi mining has became the largest reservoir of copper and gold mining and when operation once starts it will contribute 35% of the GDP. Therefore an appropriate use of Oyu Tolgoi mining will be essential to Mongolian economic growth. Oyu Tolgoi has copper and gold mines, which are located 80 km north of Mongolia's border with China. Recently, in October 2009, the Canada-based private company, Ivanhoe Mines, signed a fifty-year agreement with the Government of Mongolia. Another strategically important deposit is Tavan Tolgoi, which is the largest coal mining deposit in the world. Tavan Tolgoi coal mine is located near Oyu Tolgoi and has 6.5 billion metric tons of coking and thermal coal. The extraction will be 30 million tons a year for at least 30 years.

In 2008, Mongolia produced 129.4 thousand tons of copper, which is 0.6% of the 15.8 million tons of global copper production; 400 thousand tons fluorspar, which was ranked Mongolia third with 6.8% of global fluorspar production (global production 5.84 million tons); gold production was 15,184 kg, 0.6% of global gold production (global production 2,340 tons). In 2008, the mining sector produced a total of 1,292,047.32 USD, which became 64.6% of the total production of the country (Mineral Resource Authority, 2009).

Analysis 2: Legal Environment

Mongolia is a young developing country with wealth of natural resources, thus it is necessary to formulate an appropriate legal environment for the mining industry. The Law of Minerals coordinates all the activities related to the mining industry, strengthens the environmental protection and rehabilitation issues; entitles more rights to local administrative bodies, increases license holders' duties and determines the strategically important deposits. The main legal process starts by obtaining an exploration license from the Mineral Resource Authority of Mongolia. This license is initially for three years duration and can be extended for another two years. If exploration indicates viable resources then an owner can transfer the exploration license to a mining license with 30 years duration and renewable up to 20 years. The mining industry is coordinated by two Government organizations. One is the Ministry of Mineral Resource and Energy, which is in charge of the research and information related to the mining industries, and has responsibility to develop the budget, to plan investments in the mining sector, to expand foreign cooperation, to develop partnerships among public and private companies, to coordinate the policies in the foreign financial markets and to review the regulations. The second is the Mineral Resource Authority of Mongolia, which was established in 1997 to be responsible for the implementation of the mineral laws, regulations and resolutions, serve customers and investors of the mining industry, and enhance the contribution of the mining sector to the Mongolian economy. At the same time, there are Mining Association to provide an appropriate support, analysis and research to show their interest to the global financial market for private mining industry.

The definition of the strategically important deposits are: a) they are able to impact on Mongolian national security, economy and social development; b) that are in strong international demand and c) annual

mineral production will contribute at least 5% of country's GDP. If the deposit can be developed and identified with private funds then the government's participation in strategic deposits will be up to 50%.

Figure 2: Flowchart of Decision–making Process in Mongolia
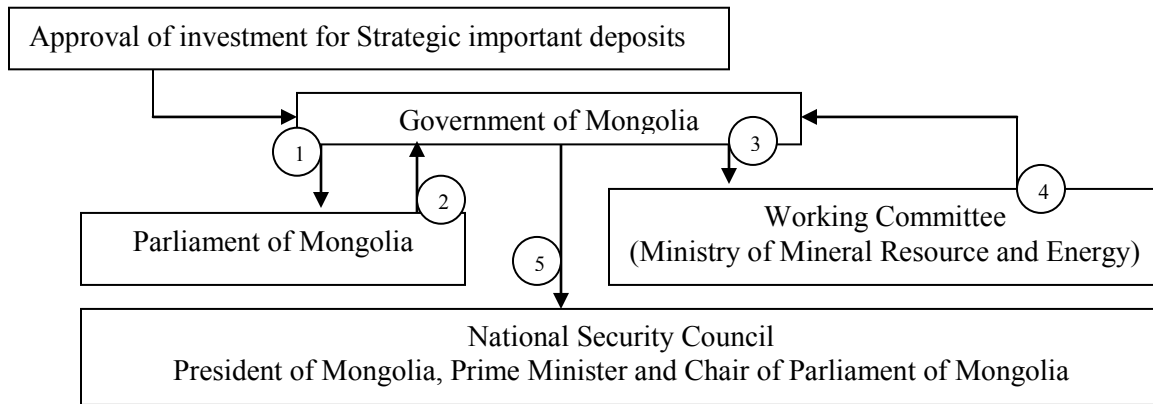
(1) Government of Mongolia introduces to Parliament of Mongolia the proposal by investor for strategic important deposit.
(2) Parliament of Mongolia allows/disallows a right to Government to complete an agreement.
   • If allows, Parliament will provide directions for further actions and goes to number (3).
   • If disallowed by Parliament, Government will work on it and try to re-introduce an improved version in the future.
(3) Government establishes a Working Committee under the Ministry of Mineral Resource and Energy to work with investor and assess the proposal.
(4) Working Committee will introduce the final proposal by the investor to the Government for approval.
(5) After approval by the Government, the proposal is introduced to the National Security Council of Mongolia. The National Security Council consists of the President, the Prime Minister and the Chair of the Parliament of Mongolia.

In 2007, the Parliament of Mongolia approved a Windfall tax law, which imposed a 68% tax on profits from mineral sales when the price of copper reached 2,600 USD and that of gold reached 500 USD per ounce on the London Metal Exchange (Law on Windfall Tax, 2007). This law was criticized by investors and had a negative influence on mining development, even major foreign investors in gold withdrew from the country and almost all mining companies adjusted their business and strategic plans. Eventually it was found that both prior to and after this law was enacted there was no research carried out and there was no economic justification for its implementation (Narankhuu 2008). But this law did not affect the companies who had a "stability agreement" with the Government of Mongolia and will be suspended by 2011. Considering a favorable legal and tax environment will have a critical effect on the future of foreign direct investment in the country (Shapiro, 2009b).

It is understandable that Mongolia needs to improve its legal system and environment for mineral resource usage, however, according to the agreement with Ivanhoe Mines; the Parliament of Mongolia has included several amendments to the Law of Minerals that consider the investors' needs and requirements. If looked at from the viewpoint of a dispute, it shows that the Mongolian legal system is unstable, that the enforcement capability of the law is not strong enough, that state agencies do not work properly to raise public awareness of the related laws, and the obedience rate to the law is lower,

compared to other countries. In a changing global economy, more legal effort needs to be put into the legal environment to create a more optimal system through high level research (Richmand 2005).

Analysis 3: Main Challenges That Have Arisen within the Mining Sector of Mongolia

Mongolia has very poor infrastructure, most areas in the countryside do not have paved roads, and the railway line only runs from Ulaanbaatar to the Chinese border in the south and to the Russia border in the north. A total distance of 1,100 km, with 4 branches. These branches connect the main mine sites of the Erdenet copper mine, Darkhan metallurgical plant and Baganuur, Shivee Ovoo and Shariin Gol coal mines (Railway Development Research, 2008). In addition, there is a shortage of water resources and power plants reaching the mining sites (Shapiro 2009). Considering these circumstances, every mining company has to develop its own strategic programs to support the infrastructure in its region from their profits and cooperate with the local government administration.

As a consequence of the recent global financial crisis, demand and prices for commodities have declined and influenced the investment flow to Mongolia. If the copper price was to continue to decrease further, it would probably hurt the trade balance of Mongolia; fortunately, the copper price has rapidly increased on London Metal Exchange since August 2009 (Bloomberg.com 2009). The Ninth International Fraser's survey announced that Mongolia has changed its rank from being in the top 10 to being in the bottom 10 within a one year period in 2007 due to its overnight change in regulatory environment (Law on Windfall Tax) in the mining sector. Corruption issues have also been worsening in the past several years and become the most difficult issue. Currently the government is taking major steps to address the problem as the Parliament has passed an anti-corruption law in 2006 and established an independent organization, named the Anti Corruption Bureau, but the situation has still not changed.

> *The World Bank Investment Climate Survey found "unofficial payments required for obtaining exploration and mining licenses were high and estimated at around 40% of the official fees. 26% of firms reported that they were required to pay bribes to obtain access to electricity, water, communications and/or infrastructure*" (World Bank, 2009)**.**

Analysis 4: Best Practices in Other Countries

From the 1970s, the Middle East countries have become economically the most promising part of the world as the economic, social and political development of those countries has been dominated by huge oil reserves. For instance, in 1980s Kuwait's per capita GNP was higher than most European countries. Despite this, the income generation among the population was different; the rich people became richer than the mid and lower level of the population. The majority of the population survived in hard living conditions, which became a difficult issue in the early 1990s. The youth unemployment rate was 30% - 50%; therefore it was necessary to replace foreign workers by locals. In addition the price of oil was booming in 1970, but since the 1990s the price of oil has been declining (Gokay 2006). Consideration of these problems led the Middle Eastern countries to take economic reforms that declared an independent private sector, direct taxation and related political reforms. In African countries, the mining sector contributes a powerful influence to the economy of a country. For example, in Zambia, investment rates are 20% of GDP and this is the most investment spent on improvement of the infrastructure and irrigation systems. Nevertheless, privatization has been encouraged in the long-term (Lundahl 2001).

China established a "socialist market economy" and started economic development reform in 1978 based on the coal industry. The serious problems faced by the coal industry were; poor infrastructure, insufficient regulation and legal environment, even the available laws and regulations could not effectively coordinate all the activities. The government encouraged the development of coal mine companies through low entry barriers, flexible coal prices, low tax and advanced management solutions, plus high technologies introduced for exploration and production of the mines. The government has built

an effective and efficient infrastructure system and encouraged foreign investment in the coal industry (Rui 2005)

The British economy is on based at industrial activity, including, a mining sector. One of the ways that the British had successful economic growth was that the investment flow from mining was spent on research and development activities, such as new and innovative technology and industrial construction during the late 1980s. Those investment distributions gave an opportunity to increase the economic capacity; furthermore these actions maintained the country's income and employment equality (Smith 1986). Australia faced some problems concerning the mining industry in that foreign capital inflow anticipated the external debt crises and caused a high degree of foreign ownership; therefore in the 1970s the Australian government took action to limit foreign investment in the mining sector. But this restriction was removed and foreign investment became more relaxed in 1980s according to the financial reform of the country; however uranium mining remains with the ownership restriction rule of up to 50% (Meredith 1999).

RECOMMENDATION AND FURTHER ACTIONS SHALL BE TAKEN

The Government shall achieve a market-oriented policy to sustain economic efficiency while extending foreign direct investment targeting market-orientation, human capital and monetary policies (Dutta, 1998). The long-term solution for growth of the country will be correct formulation and implementation of the trade, banking, industry, and population policies and renovation of the infrastructure (Meredith 1999). Next year, 2010, the Government's main priority will be signing a stability agreement with foreign mining companies on the Tavantolgoi (TT) mine; therefore it would be challenging in the same way as the Oyu Tolgoi mine.

It should be noted that mine resources are never recovered and the income has a limited term. Consequently, it is necessary to formulate a good strategy for accurate usage of foreign investment to strengthen other business sectors, especially to develop the proper macro-economic management strategies of the country. One government encouragement is The Development Fund in order to support the growth of the country by contributing to the mining industry income. Unfortunately, at the current stage, the framework has not been structured properly, but it is just in its formative period. In 2009, the World Bank allocated 9.3 million USD for improvement of the governance of the Mongolian mining sector through the mining sector technical assistance project (World Bank report, 2009).

> *Ivanhoe Mines, proposed by the Oyu Tolgoi agreement, will create 10,000 jobs at its open-pit and underground mines. Furthermore there will be an increase of 38,000 person years of employment during the first 35 years of operation at Oyu Tolgoi. In additional, there will be provision for the production of long-term electrical power generation in the South Gobi region (Ivanhoe Mines, 2009)*

The Government of Mongolia has formulated several country development policies to intensify the economic development of the country, create financial capacity and enhance mining production while adopting high level technologies. Another important issue that the Government of Mongolia has established is the "Erdenes MGL" state owned company to own the licenses of all strategically important deposits of Mongolia, and at the next stage the company is going to be listed on worldwide stock markets. This will impact both the transparency of deposits to the investors and the reliability of information.

CONCLUSION

The Oyu Tolgoi project has been approved by the Government of Mongolia after six years, two parliaments, three governments and an initial investment of one billion USD made by Ivanhoe Mines. After the signing ceremony between the Government of Mongolia and Ivanhoe Mines on the Oyu Tolgoi

project, Fitch rating updated Mongolia's outlook from "Negative" to "Stable", at the same time the World Bank cautiously agreed that the Mongolian economy may stabilize in the future (Dale 2009). Mongolia, which is located in Eurasia, has huge undeveloped resources, yet has a small but open market economy. This agreement between the Government of Mongolia and a private mining company, Ivanhoe Mines, is establishing favourable economic circumstances in Mongolia.

But from another point, if a country will not pay attention to the development of sustainability of other businesses; as it continues only to rely on foreign investment, there is little guarantee of ensuring the country's economic sustainability. The growing economy is creating acute needs for the developing infrastructure sector, especially railroads, highways and power generation facilities. The current infrastructure is far from meeting the present industrial demands. If the Government of Mongolia can effectively manage those strategically important deposits, then we can quickly transfer from an agriculture based economy to a mining based economy. Still, Mongolia remains a difficult country in which investors can conduct a business, due to the under-developed infrastructure, un-paved roads, high levels of poverty and weakness of technical professionals.

This is one reason why the Government distributing money to all citizens is completely wrong. Easing the life of the population, treating people with dignity and providing them proactive support are not promoting the quality of life; instead the government has to find a way of managing the economy.

NOTES

[1] Mongolia is located in central Asia and has an area of over 1.5 million sq km. It borders with Russia to the north and China to the south. The country is divided into 21 aimags (provinces) and has a population of only 2.9 million.

[2] National Statistic Year Book (2008) Ulaanbaatar, Mongolia. "Mongolia has a population of around 2.9 million, of which about 1.7 million are of working-age.

[3] Small-scale mining - people, who engage in mining, especially for gold and fluorspar without any permission or license and operate under a shadow economy.

[4] Ulaanbaatar is the capital of Mongolia, with a population of over 1 million as of December 2008.

[5] 1 USD = 1428.5 MNT as of October 2009 (Mongol Bank, 2009)

[6] Aimag is a top level administrative division, with the same meaning as 'province'. Mongolia is divided into 21 aimags. Each aimag is subdivided into several 'soum'. The capital of Mongolia is Ulaanbaatar, the sole city of Mongolia and divided into eight 8 districts.

[7] Erdenes MGL is a state owned limited liability company, which was established in 2007 to be responsible for the main activities of strategically important deposits, and represents government interest in those deposits.

APPENDIX

List Of Strategically Important Deposits Of Mongolia

#	Name of deposit	mineral	Location (name of aimag6)	Remarks
1	Tavan tolgoi (TT)	Coking coal	Omnogobi aimag	Total deposit is 6.5 billion tones.
2	Nariin sukhait	Coal	Omnogobi aimag	Total deposit is 134 million tones.
3	Baganuur	Brown thermal coal	Ulaanbaatar, Baganuur district	Total reserves are 360 million tonnes. Operation generalized since 1978.
4	Shivee ovoo	Brown thermal coal	Gobisumber aimag	Total reserve is 642 million tonnes and has operated since 1984.
5	Mardai	Uranium	Dornod aimag	Total reserves are 49,000 tonnes.

#	Name of deposit	mineral	Location (name of aimag6)	Remarks
6	Dornod	Uranium	Dornod aimag	
7	Gurvan bulag	Uranium	Dornod aimag	
8	Tomortei	Iron ore	Selenge aimag	Total reserves are 230 million tonnes
9	Oyu Tolgoi (OT)	Copper, molybdenum	Omnogobi aimag	Ivanhoe Mines Company signed a 50-year investment agreement with the Government of Mongolia. Reserves are 32 million tonnes of copper and 1,000 tonnes of gold.
10	Tsagaan suvraga	Copper molybdenum	Dornogobi aimag	240 million tonnes at 0.54% copper and 0.019% molybdenum
11	Erdenet	Copper molybdenum	Orkhon aimag	Total reserves are 1.5 billion tonnes. It contributes 27% of state budget and has operated since 1978.
12	Burenkhaan	Phosphorus	Khuvsgol aimag	Total reserves are 192.24 million tonnes and 4th largest phosphorus reserve in the world.
13	Boroo	Gold	Selenge aimag	24,523 tonnes of gold reserve
14	Tomortein ovoo	Zinc, lead	Sukhbaatar aimag	7,689.4 thousand tonnes of 11.5% zinc
15	Asgat	Silver	Bayan-Ulgii aimag	Total reserves are 6402.6 thousand tonnes

MAP OF STRATEGIC IMPORTANT DEPOSITS
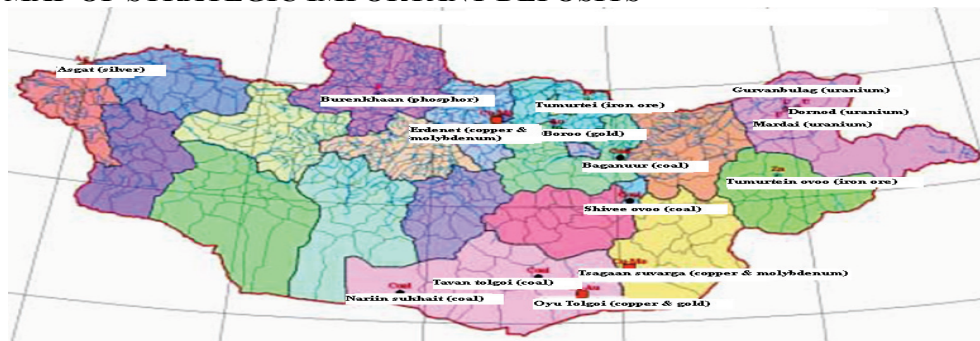
Source:
1. Mineral Resource Authority of Mongolia (2009), 2. Warlters, M. (2009) and 3. Erdenes MGL[7] (2009)

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THE STABILITY OF RENTS AND RETURNS AS A SOURCE OF INTERNAL FINANCING FOR APPALACHIAN COAL PRODUCERS

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ABSTRACT

In this paper, we have shown that response surfaces of the producers' surpluses are in general nonlinear with respect to changes in any parameters. Also, they are closely related to a given flow pattern in which only m+n-l positive coal flows prevail. Only when the flow patterns change would the response surfaces of the producers' surplus undergo structural changes.

INTRODUCTION

A major source of internal finance for producing firms in the Appalachian coal market is the generated rents or producers' surplus. One approach found successful for analyzing rents on a regional basis is that of spatial allocation modeling. The impact on location rents of Appalachian coal producers, due to changes in taxation policies or economic parameters (environments) in the framework of the spatial equilibrium model (Takayama and Judge 1964, 1971) has not been studied thus far due to the complex nature of the problem. In this paper, we first analytically' investigate this problem; then we perform some simulations on the stability of rents or returns of the Appalachian steam coal producing regions. The analysis is based on an estimated spatial equilibrium model (Labys and Yang ,1980) from which "optimum" shipments between Appalachian producers and eastern utilities are determined. It is capable of generating a set of optimal coal productions, consumptions, coal flows, and prices which, in turn, permit a calculation of producers' surplus. Further, in view of current financial stringency at regional levels, the relationship between different taxes and interconnected spatial rents is worthy of a careful evaluation. The paper is composed of three parts: (1) Mathematical Analysis of the Sensitivity of the Rent, (2) Nonparametric Analysis of the Rent Response Surface via Friedman's Test (M. Friedman, 1937), and (3) Policy Implications.

THE FORMULATION OF THE SENSITIVITY ANALYSIS

Historical developments of the spatial equilibrium model have been along the line of Enke (1951), Samuelson (1952), and Takayama and Judge (1964, 1971). Further extensions and applications based on Cottle-Dantzig's complementarity pivot theories (1968) or variation inequalities are witnessed in the works by Irwin and Yang (1982, 1983), Friesz et a1. (1983), Takayama and Uri (1983), Nagurney (1986), Yang and Labys (1985), Takayama and Hashimoto (1989), and Yang and Page (1993). The continued interest can be witnessed via the model applications by Uri (1989) and Peeters (1990). Readers are referred to Labys and Yang (1991) for a discussion of advances of the spatial equilibrium models; and to Thompson (1984) and Labys (1989) for model applications. Despite these advances, a study of the spatial rent of a production region has thus far evaded the literature. Our modest purpose of the paper is to fill a void in this regard.

The objective function of the original model is to maximize the "net social payoff" or NSP

Maximize

$$NSP(x_i, y_j, z_{ij}) = \sum_{j \in J} a_j y_j - \frac{1}{2} \sum_{j \in J} b_j y_j^2 - \sum_{i \in I} c_i x_i - \frac{1}{2} \sum_{i \in I} d_i x_i^2 \sum_{i \in I} \sum_{j \in J} t_{ij} z_{ij} \qquad (1)$$

Subject to
$$y_{ij} - \sum z_{ij} \leq 0 \qquad \forall j \in J$$
$$x_{ij} - \sum z_{ij} \geq 0 \qquad \forall i \in I$$
$$z_{ij} \geq 0 \qquad \forall ij \in (I \times J)$$

where a_j and c_i denote intercepts of demand and supply equations in region j and i respectively; b_j and d_i denote slopes of the demand and supply equations; x_i and y_j denote output and consumption of region i and j; t_{ij} and z_{ij} are the unit transportation rate and commodity flow from supply region i to demand region j respectively. For the detail of the model, one can find excellent sources in Takayama and Judge (1971). In order to analyze the responses of the producer's rents, we need to form the Lagrange equation of the above problem:

$$L(x_i, y_j, z_{ij}, \alpha_j, \beta_j) = \sum_{j \in J} a_j y_j - \frac{1}{2}\sum_{j \in J} b_j y_j^2 - \sum_{i \in I} c_i x_i - \frac{1}{2}\sum_{i \in I} d_i x_i^2 - \sum_{i \in I} \sum_{j \in J} t_{ij} z_{ij} +$$
$$\sum_{j \in J} \alpha_j (\sum_{i \in I} z_{ij} - y_i) + \sum_{i \in I} \beta_i (-\sum_{j \in J} z_{ij} + x_i) \qquad (2)$$

where α_i and β_j are Lagrange multipliers (imputed steam coal prices) for the *jth* demand and *ith* supply region. The corresponding Kuhn-Tucker necessary (also sufficient) conditions take the form as follows:

$$\frac{\partial L}{\partial y_j} = a_j - b_j \bar{y}_j - \alpha_j \leq 0 \qquad and \qquad \frac{\partial L}{\partial y_j} \cdot \bar{y}_j = 0 \qquad (3)$$

$$\frac{\partial L}{\partial x_i} = -c_i - d_i \overline{x_i} + \beta_i \leq 0 \qquad and \qquad \frac{\partial L}{\partial x_i} \cdot \bar{x}_i = 0 \qquad (4)$$

$$\frac{\partial L}{\partial z_{ij}} = \bar{\alpha}_j - \bar{\beta}_i - t_{ij} \leq 0 \qquad and \qquad \frac{\partial L}{\partial z_{ij}} \cdot \overline{z_{ij}} = 0 \qquad (5)$$

$$\frac{\partial L}{\partial \alpha_j} = \sum_{i \in I} \overline{z_{ij}} - \bar{y}_j \geq 0 \qquad and \qquad \frac{\partial L}{\partial \alpha_j} \cdot \bar{\alpha}_j = 0 \qquad (6)$$

$$\frac{\partial L}{\partial \beta_i} = x_i - \sum_{j \in J} z_{ij} \geq 0 \qquad and \qquad \frac{\partial L}{\partial \beta_i} \cdot \bar{\beta}_i = 0 \qquad (7)$$

where the barred variables are optimum values. .

Given known flow patterns, we substitute equations [3] and [4] into equation [5] for $x_i > 0$ and $y_j > 0$. In addition, by adding equation [6] to [7] for $\alpha_j > 0$ and $\beta_i > 0$, we have a system of m+n equations for the non-degeneracy case as shown below:

$$a_j - b_j \bar{y}_j - c_i - d_i \overline{x_i} = t_{ij} \qquad \forall \overline{z_{ij}} > 0 \qquad (8)$$

$$\sum_{j \in J} y_j = \sum_{i \in I} x_i \qquad (9)$$

Rewriting equations (8) and (9) in matrix form and assuming the case of non-degenerate flows, we have

$$\begin{bmatrix} -b_j & -d_i \\ -1 \dots -1 & +1 \dots +1 \end{bmatrix} \begin{bmatrix} \bar{y}_1 \\ \vdots \\ \bar{y}_n \\ \bar{x}_1 \\ \vdots \\ \bar{x}_m \end{bmatrix} = \begin{bmatrix} -a_j + c_i + t_{ij} \\ 0 \end{bmatrix} \qquad (10)$$

or $J K = L$ and hence $K = J^{-1} L$ where $J x R^{(m+n)x(m+n)}$, $K x R^{m+n}$, $L x R^{m+n}$. where R^{m+n} denotes

Euclidean mn dimensional space.

Differentiating equation (10) with respect to all c_i's (C) and d_i's (D) takes the form

$$
\begin{vmatrix}
\dfrac{\partial \overline{y}_1}{\partial C} \\
\vdots \\
\dfrac{\partial \overline{y}_n}{\partial C} \\
\dfrac{\partial \overline{x}_1}{\partial C} \\
\vdots \\
\dfrac{\partial \overline{x}_m}{\partial C}
\end{vmatrix}
= J^{-1}
\begin{vmatrix}
1 \\
\vdots \\
\vdots \\
\vdots \\
1 \\
0
\end{vmatrix}
\tag{11}
$$

$$
\begin{vmatrix}
\dfrac{\partial \overline{y}_1}{\partial D} \\
\vdots \\
\dfrac{\partial \overline{y}_n}{\partial D} \\
\dfrac{\partial \overline{x}_1}{\partial D} \\
\vdots \\
\dfrac{\partial \overline{x}_m}{\partial D}
\end{vmatrix}
= J^{-1}
\begin{vmatrix}
0 \\
\vdots \\
0 \\
\overline{x}_1 \\
\vdots \\
\overline{x}_m
\end{vmatrix}
\tag{12}
$$

MATHEMATICAL PROPERTY OF THE PRODUCER'S RENTS UNDER TAXATION AND CHANGING DEMAND AND SUPPLY ENVIRONMENTS

The net social payoff can be derived by subtracting equation [1] from the corresponding parts of complementarity slackness of equations (3) through (7) or

$$
NSP\big(a_j, b_j, c_i, d_i, t_{ij}, \overline{x}_i, \overline{y}_j, \overline{z}_{ij}\big) = \frac{1}{2}\sum_{i \in J} b_j \overline{y}_j^2 + \frac{1}{2}\sum_{i \in I} d_i \overline{x}_i^2
\tag{13}
$$

The second term on the right hand side of equation (13) is the producer's surpluses or rents (PS) of the Appalachian coal producers at a set of optimal solutions which correspond exactly to the well-known triangles above the supply curves. Evidently, the steeper the slope of the inverse supply curve (d_i) and/or the larger the optimum output $(\overline{x}_i)$, the greater the value of rent $(\frac{1}{2}\sum_{i \in J} d_i x_i^2)$ will be. Within a given set of commodity flows, a federal specific tax is equivalent to changing all the intercepts of supply equations (C) as shown in equation (11). Hence, its impact on the producer's surplus can be evaluated as

$$
\frac{\partial PS_i(a_j, b_j, c_i, d_i, t_{ij}, \overline{x}_i, \overline{y}_j)}{\partial C} = d_i \overline{x}_i \left(\frac{\partial \overline{x}_i}{\partial C}\right)
\tag{14}
$$

By the similar line of reasoning, the impact of an ad valorem tax (i.e., increasing the value of c_i and d_i by $v/(l-v)$ for all $i \epsilon I$) on the producer's surplus for a very small v is (1)

$$
\frac{\partial PS_i}{\partial v} = \overline{d}_i \overline{x}_i \left(\frac{\partial \overline{x}_i}{\partial d_i}\right)\left(\frac{\partial d_i}{\partial v}\right) + \overline{d}_i \overline{x}_i \left(\frac{\partial \overline{x}_i}{\partial c_i}\right)\left(\frac{\partial c_i}{\partial v}\right) + \overline{x}_i^2 \left(\frac{\partial d_i}{\partial v}\right)
\tag{15}
$$

where $\frac{\partial d_i}{\partial v} = \frac{v}{(1-v)}\overline{d}_i$ and $\frac{\partial c_i}{\partial v} = \frac{v}{(1-v)}\overline{c}_i$ in which c_i and d_i are the original unperturbed parameters.

The effect of changing slopes of demand and supply equation(s) in our case can be evaluated for given flow patterns:

$$\frac{\partial PS_i}{\partial b_j} = \bar{d}_i \bar{x}_i \left(\frac{\partial \bar{x}_i}{\partial b_j} \right) \tag{16}$$

$$\frac{\partial PS_i}{\partial d_i} = \bar{d}_i \bar{x}_i \left(\frac{\partial \bar{x}_i}{\partial d_i} \right) + \frac{1}{2} \overline{x_i^2} \qquad \forall\, i \in M \tag{17}$$

It is important to know that relations in equations (14), (15), (16) and (17) are neither deterministic nor linear; and they hold only in a given set of positive flow patterns. As is the case of analyzing response surface in flows, consumptions, and productions (Yang and Labys 1981, 1982; Page and Yang 1984) a deterministic conclusion is not feasible. However, once the directions of flow patterns are known, these relations can be predicted locally. In a later section, we shall employ a nonparametric test to perform the analysis on the producers' rents.

THE IMPACT ANALYSES OF SPATIAL RENTS

The impacts on producer's rents are shown in Table 1 as slopes of all demand equations are varied. Such variations in slopes may reflect the changing demand conditions for the Appalachian steam coal. The producer's rents in all supply regions of the Appalachian market would increase with the decreasing slopes of the demand schedules. This trend would help internal finance of the coal mine companies, especially in Southern WV, PA, MD, OH, Eastern KY and TN. However, producers in Northern WV, AL and VA would experience only relatively smaller increases in producers' rents.

Table 1: Producer's Rents with Changing Slopes of All Demand Equations

| | **Supply Region** | | | | | | |
% Change in all Demand Slopes	PA & MD	OH	Northern WV	Southern WV	VA	Eastern KY & TN	AL
-20%	3.22722	3.03928	2.45385	0.05531	1.05425	3.49491	0.6892
-15%	2.96235	2.77629	2.32413	0.04143	0.98933	3.13729	0.65555
-10%	2.73146	2.54596	2.20847	0.03047	0.93172	2.82682	0.62548
-5%	2.5271	2.34341	2.10494	0.0219	0.88037	2.5562	0.5985
0%	2.3455	2.16387	2.00157	0.01524	0.83426	2.31845	0.5744
5%	2.1835	2.00413	1.92708	0.01015	0.7927	2.10882	0.55204
10%	2.03842	1.86144	1.85032	0.00635	0.75511	1.92324	0.53193
15%	1.90812	1.73361	1.78042	0.00361	0.72099	1.75852	0.51359
20%	1.79035	1.61836	1.71637	0.00175	0.68987	1.61138	0.49675

The last simulation involves changing the slopes of supply schedules. An increasing supply slope of a coal producing region may indicate the increasing cost in extracting an additional ton of coal from a deeper mine deposit. The results are reported in Table 2. With changes made in supply slopes, coal mines in Northern West Virginia and Alabama would experience declining producers' rents as slopes of supply schedules are graduate1y increased, while the rest of supply regions would gain producer-'s surpluses with their slopes getting steeper by the same percentage. Hence, we have observed from Table 2 that response surfaces of supply region's revenues are not monotonic. Losses of revenues in certain regions may be made at the expenses of other regions and there is no single way to tell these directions.

Table 2: Producer's Rents under Changing Slopes of All Supply Equations

% Change in all Demand Slopes	PA & MD	OH	Supply Northern WV	Southern WV	Region VA	Eastern KY & TN	AL
-20%	2.10433	1.89299	2.07167	0.00076	0.82667	1.84948	0.60162
-15%	2.16929	1.966	2.05396	0.00298	0.82843	1.97521	0.59352
	+	+	-	+	+	+	-
-10%	2.23115	2.03559	2.03775	0.00628	0.83016	2.09454	0.58631
	+	+	-	+	+	+	-
-5%	2.28942	2.10125	2.02406	0.01044	0.83226	2.20952	0.57992
	+	+	-	+	+	+	-
0%	2.3455	2.16387	2.00157	0.01524	0.83426	2.31845	0.57414
	+	+	-	+	+	+	-
5%	2.39733	2.22301	2.00014	0.02051	0.83618	2.42357	0.56874
	+	+	-	+	+	+	-
10%	2.44829	2.27949	1.99026	0.02616	0.83827	2.52266	0.56404
	+	+	-	+	+	+	-
15%	2.49486	2.3333	1.98053	0.03205	0.84014	2.61801	0.55953
	+	+	-	+	+	+	-
20%	2.53989	2.38339	1.9717	0.038101	0.84185	2.70901	0.55533
	+	+	-	+	+	+	-

THE FRIEDMAN TEST ON RENTS OF THE APPALACHIAN COAL PRODUCING REGIONS

The welfare position in terms of locational rents was analyzed mathematically in the previous section. That is, the responses of rents under federal taxes or from changes in general economic environments are typically mathematically intractable. Hence, a statistical procedure is needed to test the overall stability of relative welfare positions (in terms of rankings) for the seven Appalachian coal-producing regions. The producers' rent for the ith region (PS_i) is $\frac{1}{2}d_i x_i^2$ where d_i (regression slope coefficient of the *ith* supply region) is essentially normally distributed and $\overline{x}_i$ represents the optimal coal production from the concave quadratic programming model. As the result, the probability distribution for the producer's rent PS_i may well not be normally distributed. Hence, the conventional analysis of variance cannot be used to test the stability of producers' rents. Instead, the Friedman Test (M. Friedman, 1937 and 1940) is used to perform the analysis of variance with the assumption that normality of the rent is violated.

The null hypothesis of the Friedman Test is that each ranking of the producers' rent within each block (row) is equally likely (i.e., the relative welfare's positions in terms of the producers' rents is the same for each of seven Appalachian coal-producing regions). To avoid the violation on the assumption of the Friedman Test (Iman and Conover, 1989), we chose only those policies that generate independent rankings within each block (i.e., policy changes must be significant enough to avoid the identical ranking). The rankings of rents on seven Appalachian coal-producing regions are reported in Table 3 with the sum of ranking and average ranking for each coal producing region R_j and $\overline{R}_j$ shown in bottom lines. To test the null hypothesis the Friedman F statistic with *k-1* and *(k-1)*(b-1)* degrees of freedom is shown below:

$$F = \frac{(b-1)[B - bk(k+1)^2/4]}{A - B} \tag{18}$$

$$where\ A = \frac{bk(k+1)(2k+1)}{6} \tag{19}$$

$$B = \frac{1}{b}\sum_{j=1}^{k} R_j^2 \qquad\qquad (20)$$

b = # of blocks or rows = 18
k = # of treatment or columns = 7
Rj = sum of rank for the j th column

The sample F from equation [18] of the Appalachian coal model is 134.81 and is significantly greater than the critical F = 2.809 at α = 1%. Consequently, the null hypothesis is rejected in favor of the claim that there exists a significantly unequal welfare position among seven coal-producing regions. To perform the multiple comparisons between each pair of coal- producing regions, we adopt the following rule (Iman and Conover, 1989):

$$IF \quad \left| \bar{R}_i - \bar{R}_j \right| > t(\frac{2(A-B)}{b(b-1)(k-1)})^{\frac{1}{2}} \qquad\qquad (21)$$

then there exists significant difference in relative welfare positions between region i and j. Note that $R1$ is the average ranking for the *ith* region and *t* is evaluated with the significant level of *α/2* and the degree of freedom of *(b-l)(k-l)*. In our simulation, the right hand side of equation (21) equals 0.65 and it indicates that there exist significant differences in producers' rents between each pair of coal producing regions except Northern West Virginia and Eastern Kentucky-Tennessee in which the difference is insignificant. An examination of *R*'s in Table 3 reveals that sizes of rents of seven coal producing regions can be ranked as shown in the last row: Pennsylvania and Maryland coal mines would receive highest location rent while Southern West Virginia coal mines remain in the least advantageous position.

Table 3: Rankings of Welfare Positions of Appalachian Coal Production Regions

	PA & MD	OH	Northern WV	Southern WV	VA	Eastern KY & TN	AL
No tax imposed	7	5	4	1	3	6	2
$1/ton tax(")	7	4	6	1	3	5	2
$2/ton tax	6	4	7	1	3	5	2
$2.5/ton tax	7	3	6	1	4	5	2
$3/ton tax	6	3	7	1	5	4	2
5% sales tax (supply)	7	5	4	1	3	6	2
8% sales tax (supply)	7	4	5	1	3	6	2
10% sales tax (supply)	7	5	6	1	3	4	2
15% sales tax (supply)	6	5	7	1	3	4	2
B(Change in all demand slopes)= -10%	6	5	4	1	3	7	2
B=5%	7	5	4	1	3	6	2
B=15%	7	4	6	1	3	5	2
B=20%	7	5	6	1	3	4	2
D(Change in all supply slopes)= -20%	7	5	6	1	3	4	2
D=-15%	7	4	6	1	3	5	2
D=-15%	7	4	5	1	3	6	2
D=-15%	7	5	4	1	3	6	2
D=-15%	6	5	4	1	3	7	2
sum	121	80	97	18	57	95	36
R_i	6.72	4.44	5.39	1	3.167	5.27	2

CONCLUDING REMARKS

In this paper, we have shown that response surfaces of the producers' surpluses are in general nonlinear with respect to changes in any parameters. Also, they are closely related to a given flow pattern in which only $m+n-l$ positive coal flows prevail. Only when the flow patterns change would the response surfaces of the producers' surplus undergo structural changes. In this light, changing welfare positions of coal-producing regions are analytically unpredictable and in some cases do not follow the same direction. Consequently, one must be cautious in implementing the policy in the spatial allocation model in which transportation cost constitutes a good portion of the commodity price. The intractability of the spatial model suggests a proper use of simulation analyses. For instance, some federal taxes may lead to the improvement of the financial positions of some regions at the expense of other coal supply regions. Furthermore the result of the Friedman test indicates that the relative welfare position in terms of producers' rents differs significantly in our simulation. While coal mines in Pennsylvania, Maryland, Northern West Virginia, Tennessee, and Eastern Kentucky continue to enjoy better revenues from location rents, Southern West Virginia and Alabama coal mines remain in the disadvantageous positions within all reasonable parameter values in our simulation. Therefore, a good policy (e.g., a differential federal coal tax) is not possible without taking into consideration comprehensive considerations of welfare positions of the entire steam coal markets in the Appalachian area.

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DYNAMICS AND LEVEL OF CONSUMER PRICES IN A COMPARATIVE APPROACH

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ABSTRACT

After Euro had been introduced in Slovenia prices started to rise. It was a phenomenon known from the other EMU members, but in Slovenia for a certain period the price growth was higher than in the other Euro countries although they were affected by the world prices in the similar way. By many economists the price growth was considered as a result of market imperfection, oligopoly and monopolistic behavior of certain suppliers. That is why the Company M's products have been analyzed, as Company M has the highest market share in retail trade. There are two parts of the results: in the first as the price reference to the Company M's prices the same or similar products in Austria were chosen, and in the second a price level comparative analysis for the period of the last three years has been carried out..

JEL: D43, L13, C43.

KEYWORDS: consumer price index, oligopoly, retail sector.

INTRODUCTION

Several months after the adoption of the euro in January 2007, price growth rates in Slovenia started to rise. The main causes of this development were exogenous: the upsurge in energy and food prices around the globe contributed to a buildup of inflationary indices (see, e.g., Dewbre et al., 2008). In Slovenia, however, the fact that prices were rising more steeply than in other euro-zone countries within a certain period aroused much attention, although the impact of the global price increase was quite comparable. Analyses of the causes behind the higher rate of price growth in Slovenia mainly focused on three aspects: the weighting system, price convergence, and the oligopolistic market structure.

This paper presents an analysis of price levels and dynamics that addresses the eventual oligopolistic market structure. The Company M Group's retail prices are compared with the price dynamics on the Slovenian market and with the corresponding price levels in Austria. Analysis of movement and relations between the prices observed was conducted in three cross-sections: the first section compares the prices of products on the observed company's shelves to the same or similar products found in stores in Austria; and the second section analyzes the changes in comparative price levels in the period of the last three years. The final section of the paper presents the basic conclusions.

LITERATURE REVIEW

Given the growing concentration in Slovenian retail trade in the last few years, many ascribed the surge in prices to oligopolistic conduct by the major players (IMAD, 2007; IMAD, 2008), although the empirical evidence (Aalto-Setälä, 2002; Asplund and Friberg, 2002; Cotterill, 2006; Cutts and Kirsten, 2006) shows that competition intensity and market structure variables can explain only part of the variation in retail grocery prices. In this regard, analysis of Company M Group product prices is particularly instructive because this company holds the largest share of the Slovenian fast-moving consumer goods (FMCG) retail market.

Kračun et al. (2006) carried out a study that showed that the general price level in Slovenia was at approximately 80% of the price level in Austria; the same ratio also applied to prices of food products. Because the analysis of FMCG price levels when compared to prices in Austria already included a comparison with average prices in Austria, we were able to use the findings of the international price comparison conducted by the IEDP-FEB (Institute of Economic Diagnosis and Prognosis at the Faculty of Economics and Business) in October 2005 as the starting point for the analysis of the relative price stability of the Company M Group's basket (Kračun et al., 2006). This was the last officially conducted comparison of national price levels between Slovenia and Austria; at the same time, it was conducted before Slovenia's accession to the EMU.

DATA AND METHODOLOGY

In order to assess the level of prices, we performed an international price comparison with the following simplifications:
- Only the level of retail prices was considered;
- The consumer basket (a sample of products based on which the prices were compared) was compiled on the basis of a basket for monitoring retail prices used by the Statistical Office of the Republic of Slovenia;
- All the calculations employed only the weighting system of the Slovenian statistical authorities and disregarded the weighting system of the reference country, Austria.

Calculation of purchasing power parity and average price parities for respective categories was the starting point for the analysis. From these figures we then derived the calculation of retail price level, price parity levels for respective categories, and disparity estimations for retail prices of the Slovenian company studied.

Price parity (PP) is understood as the relation between the price of a particular product "x" in Slovenia and the prices of the same product "x" in Austria. In our case, the basic formula for calculating the price parity of a commodity "x" is as follows:

$$\text{Price parity of commodity "x"} = \frac{\text{Price of commodity "x" in Slovenia (in EUR)}}{\text{Price of commodity "x" in Austria (in EUR)}} \tag{1}$$

Here, the result is equal to the purchasing power parity for the same currency in two different countries, expressed in terms of commodity "x".

Needless to say, the calculated price parities differ from one commodity to another. Using a system of weights, it is possible to calculate the average price parities for respective categories, as well as the aggregate price parity for the entire sample (the purchasing power parity).

Aggregate price parity (APP) is equivalent to the price level:

$$\textit{Price level} = \text{Agregate price parity} \cdot 100 \tag{2}$$

If the aggregate price parity is greater than 1, the level of retail prices of the Slovenian trade company observed is higher than in Austria, and vice versa.

Furthermore, we conducted a relative price comparison: the disparity calculation. In this case, we compared the price parity of a particular category with the aggregate price parity of the entire sample (APP = 100).

$$\text{Price parity level of a category} = \frac{\text{Price parity of a category}}{\text{Aggregate price parity}} \cdot 100 = \frac{PP}{APP} \cdot 100 \tag{3}$$

The discrepancy between the price parity level of a particular category and the aggregate price parity (APP = 100) reveals by how much (in percent) a particular category is relatively more expensive (if the price parity level is greater than 100) or less expensive (if the price parity level is lesser than 100) than the average of the entire sample at the Slovenian company studied.

These methods were employed to establish the disparities of retail prices at the largest Slovenian retailer compared to the reference country.

Due to the requirement of comparability, the price research was conducted based on direct price recording using field-work in both countries. During this work, statistical research principles were employed, including the composition of the basket. The appropriateness of the selection was confirmed by checking it against official statistical data. The research conducted in October 2008 included recording prices:
- In Slovenia, at the Company M Group;
- In Austria, at trade facilities comparable to those of the Company M Group.

Data collection and entry in October 2008 and its comparison to that carried out by the Statistical Office is presented in Table 1. The data set represents 90.31% of the relevant categories monitored by the national statistical authorities. The products are grouped into seven or fifteen categories in the same way the Statistical Office groups them for the purpose of calculating the consumer price index.

Table 1: Selection of Products (October 2008: Company M Group, Austria)

Group	Category	Number of items	Sample share compared to SORS data set
1	Food	185	100.00
2	Non-alcoholic beverages	14	100.00
3	Alcoholic beverages	11	100.00
4	Tobacco	7	100.00
5	Clothing and footwear	31	79.37
6	Household textiles	9	81.71
7	Household appliances	18	44.05
8	Small household appliances	3	75.00
9	Household maintenance products	14	100.00
10	Vitamins	2	100.00
11	Other medical and therapeutic products	4	100.00
12	Audio, video, and computer equipment	12	69.89
13	Small products for entertainment, sports, gardening, and pet care	12	63.60
14	Newspapers, books, and stationery	18	83.11
15	Personal care products	22	95.54
1–15	**Total**	**362**	**90.31**

One of the possible approaches to comparing the movement of prices monitored by the Statistical Office and the prices of products in the basket of the largest Slovenian retailer is the relative inflation analysis. This approach involves the data on the harmonized consumer price index. The harmonized index of consumer prices (HICP) indicates the changes in the retail price level of products and services compared to the composition of consumer spending (domestic and foreign) allocated for the purchase of consumer products in the territory of a particular country (the principle of domestic consumption).

The underlying idea is to prepare a projection, or estimate, of the price level for the current period, based on the analysis of the national price level in the previous period. The estimation is calculated by using relative inflation at the aggregate level as well as at the level of particular HICP subcategories, as follows:

$$K_{i,t}^{ri} = \frac{K_{i,t}^{SLO}}{K_{i,t}^{*}}, i = 1,...,n \tag{4}$$

where $K_{i,t}^{ri}$ is the coefficient of relative inflation for a particular category in the period t, $K_{i,t}^{SLO}$ is the coefficient of price growth for the observed category in Slovenia according to data from the Statistical Office, $K_{i,t}^{*}$ is the coefficient of price growth for the observed category abroad, and i is the indication of the category. The same calculation is also performed at the aggregate level. Particular coefficients are then used to calculate the projected, or estimated, price parities by category:

$$PP_i^P = K_{i,t}^{ri} PP_i^0 , i = 1,...,n \tag{5}$$

where PP_i^P is the projected price parity for a particular category and PP_i^0 is the actual price parity of a particular category in the previous period. Estimated values are then compared to the price levels calculated for the products in the leading Slovenian retailer's basket.

This international comparison includes a different consumer basket composition than in the case of largest Slovenian retailer and the SORS basket; hence, estimates could only be carried out for the categories that were directly comparable or translated to the same starting point.

The data for estimating relative inflation were retrieved from the EUROSTAT website (2008) where the HICP for Slovenia and Austria were available. The data is calculated on a monthly basis, which enabled an appropriate calculation for the period considered.

EMPIRICAL RESULTS

Aggregate findings clearly show that, assuming a level of 100 for the given basket in Austria, the price level of the same basket of commodities at Slovenia's biggest retailer amounts to 79.92. Hence, a consumer buying the same products in Austria would have paid on average 25.2% more than in Slovenia at the company observed.

Table 2 presents the findings of the analysis by commodity groups. In addition to the column with absolute parities which are a measure of the price level for a particular group at Company M assuming the price level for the same group amounts to 100 in Austria, Table 2 also includes a column with relative parities. Relative parities indicate the deviation of the given company's prices from the total average (or aggregate) parity: if the ratios between prices of individual products were the same as in Austria, the result would have been 100 in each case. Absolute parities in the first column directly compare Austrian prices to prices of the largest Slovenian retailer, with the level of Austrian prices set to 100 for each product or group of products. The relative parities in the second column compare the analyzed company's prices among themselves, with the relation between prices for the same products in Austria being set to 100.

Table 2: Price Parity Levels by Category and Sub-Category

No.	Category	Price parity level	
		PP * 100	APP = 100
1.01	Bread and cereals	77.64	97.14
1.02	Fresh meat	70.05	87.65
1.03	Processed meat	77.36	96.79
1.04	Fresh and processed fish	77.50	96.97
1.05	Milk, dairy products, and eggs	89.51	111.99
1.06	Oils and fats	85.66	107.17
1.07	Fresh and dried fruit	68.50	85.70
1.08	Fresh and processed vegetables	74.94	93.77
1.09	Sugar and confectionery	96.32	120.52
1.10	Other food products	76.61	95.85
1	Food	79.28	99.19
2.01	Coffee, tea, cocoa	92.63	115.90
2.02	Carbonated and non-carbonated beverages	84.62	105.88
2	Non-alcoholic beverages	87.20	109.11
I	**Food and non-alcoholic beverages**	**79.97**	**100.06**
3.01	Hard liquor	93.84	117.40
3.02	Wine	71.97	90.05
3.03	Beer	69.98	87.56
3	Alcoholic beverages	73.79	92.33
4	Tobacco	61.19	76.55
II	**Alcoholic beverages and tobacco**	**65.99**	**82.56**
5	Clothing and footwear	82.54	103.27
III	**Clothing and footwear**	**82.54**	**103.27**
6	Household textiles	62.37	78.03
7	Household appliances	76.34	95.51
8	Small household appliances	57.57	72.03
9	Household maintenance products	86.79	108.58
IV	**Household equipment**	**82.01**	**102.61**
10	Vitamins	100.00	125.12
11	Other medical and therapeutic products	93.07	116.44
V	**Medical products and appliances**	**94.24**	**117.92**
12	Audio, video, and computer equipment	100.63	125.90
13	Small products for entertainment, sports, garden, and pet care	73.85	92.40
14	Newspapers, books, and stationery	106.50	133.25
VI	**Recreation and culture**	**91.14**	**114.03**
15	Personal care products	84.53	105.76
VII	**Miscellaneous goods**	**84.53**	**105.76**
I–VII	**Total**	**79.92**	**100.00**

Source: authors' field research from October 2008 and authors' calculations.

The finding of prices that are approximately 20% lower at the largest Slovenian retail trade company than in Austria applies to the average of the total basket. The average prices of total categories are also lower without exception; only sub-categories include three instances in which the same or a slightly higher price level was observed.

The category of food and non-alcoholic beverages has, on average, the same parity as the entire sample; at the Company M Group, food prices only amount to 80% of those in Austria. Fresh meat is particularly inexpensive, reaching only 70% of the Austrian price level at the Slovenian retailer (with a relative parity of 88). The same applies to fresh and dried fruit, with the company's price level at 69 (and relative parity of 86). Among the food products, sugar and confectionery reach the highest price level (absolute level 96, relative level 120), followed closely by coffee, tea, and cocoa (absolute level 93, relative level 116). No subcategory from the group of food and non-alcoholic beverages at the largest Slovenian retailer exceeds the relevant Austrian prices. Only a few individual products featured a higher price.

In the category of alcoholic beverages and tobacco, the largest Slovenian retailer's average is even lower, with an absolute price level of 66 and relative price level of 83. The absolute price levels in the categories of clothing and footwear and household equipment are between 82 and 83 at the domestic retailer, pointing to considerable lagging behind Austrian prices. The highest relative levels were observed in the

categories of medical products and appliances and recreation and culture. Absolute levels are still lower than the Austrian ones (91–94); only relative levels (i.e., comparison to the Slovenian retailer's average) are higher (114–118). The only group for which the company's prices are substantially higher than Austrian ones in absolute terms is newspapers, books, and stationery; the reason lies in the subcategory of newspapers, whose absolute level of 113 drove up the level for the entire group to 6% over the Austrian price level.

Comparison between the Company M Group's basket with corresponding Austrian prices indicates that prices of the largest Slovenian retailer lag behind considerably. This applies both to the average and to nearly all categories and subcategories; in only a few cases are the company's prices higher than in Austria. Most products are found on the Slovenian retailer's shelves at prices about 20% lower than in Austrian supermarkets. In the last three years, statistical data for retail prices in Slovenia reveals a higher level of growth than in most other EU countries. Given its geographical position and size, a comparison with Austria seems appropriate. Such comparison pointed out that, during this period, consumer product prices in Slovenia have grown by 13.34% (HICP, 2005 = 100) whereas in Austria the price increase only amounted to 7.90% (HICP, 2005 = 100). The difference indicates considerable relative inflation in Slovenia.

Kračun et al. (2006) carried out a study that showed that the general price level in Slovenia was at approximately 80% of the price level in Austria; the same ratio also applied to prices of food products. Given the relative inflation (considering price movements by particular categories as observed by the Statistical Offices of Slovenia and Austria, respectively), the projection of these ratios for 2008 in Slovenia indicates that, in the period of observation, price parities of products in the consumer basket reached a level of 83, whereas the parities of food reached 87, taking into account the overall Slovenian average. However, if only the basket of Slovenia's largest retail trade company is considered, the level of 80 in comparison with the Austrian sample was maintained. A detailed breakdown of relative price comparisons between October 2005 and October 2008 is given in Table 3.

Comparison of the average parity of the Company M Group's prices with Austrian prices indicates that the growth of the company's prices from the sample was lower than the statistically observed growth levels in Slovenia. This applies both to the average of the basket and to the majority of the categories included. The difference between the price increase in Slovenia in general and the price increase for the Slovenian retailer's basket, according to the analysis based on relative inflation in Slovenia compared to Austria, amounts to 3 index points for the entire sample and 7 index points for the category of food.

CONCLUSION

The international price comparison showed that the Company M Group's basket prices are approximately 20% lower than in Austria. The comparison between the company's basket composed according to Statistical Office principles and the prices of relevant products in Austria thus showed that the largest Slovenian retailer's prices are lagging behind considerably. In addition, the category of food and non-alcoholic beverages on average has the same parity as the entire sample. Fresh meat is particularly inexpensive because it is available at the Slovenian retailer at prices that are 30% lower than in Austria; the same applies to fresh and dried fruit, which is, on average, 32% cheaper than in Austria. None of the subcategories from the food and non-alcoholic beverages group exceeds the relevant prices in Austria, on average. With alcoholic beverages and tobacco, the Slovenian retailer's average is even lower because the prices have an absolute level of 66, which means that alcoholic beverages and tobacco are, on average, 34% cheaper than in Austria.

Table 3: Comparison of Changes in Price Parity Based on Relative Inflation and the Company M Group's Basket

Category	Results October 2005	Forecast based on relative inflation	Results based on Company M's basket
Food	80	87	80
Fresh vegetables	75	87	68
Fresh fruit	66	73	71
Chicken eggs	72	85	74
Fresh fish	62	71	58
Wheat products	82	85	78
Processed and preserved vegetables	87	90	87
Processed and preserved fruit	88	91	79
Fresh meat	77	79	70
Processed and preserved meat	79	81	77
Processed and preserved fish	94	108	84
Fresh and processed milk	83	98	90
Fats	75	91	86
Other food products	89	93	77
Non-alcoholic beverages	77	79	87
Beverages and tobacco	70	73	66
Wine	63	70	72
Hard liquor	108	106	94
Beer	89	88	70
Beverages	78	81	74
Tobacco	60	63	61
Total	**80**	**83**	**80**

Forecasts of price parity levels were calculated for those groups that had the same structure in the price listing in October 2005 and in the current listing. Source: Kračun et al. (2006); EUROSTAT (2008); SORS (2008b); and authors' calculations.

Given the relative inflation in Slovenia, the projection of price parities for 2008 indicates maintenance of the average parity of the Company M Group's prices. This means that the growth of the Slovenian retailer's prices from the sample was lower than the statistically observed price growth rates in Slovenia. The difference between price increases in Slovenia in general and price increases in the company's basket, according to the analysis based on relative inflation in Slovenia compared to Austria, amounts to 3 index points for the entire sample and 7 index points for the category of food.

Considering the findings from individual sections of the analysis, it can be concluded that the largest Slovenian retailer's pricing policy for top-selling products led to lower growth of prices than that found by the Statistical Office of the Republic of Slovenia within its consumer price index. If the Statistical Office had calculated the consumer price index for the segment of food, beverages, and tobacco based on a basket of products offered at the Company M Group, the average annual rate of price increases for consumer products (the CPI) would have dropped from 6.25% to 5.56% in the given period, indicating a decrease in price growth rate by 0.69 percentage points.

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INCOME INEQUALITY AND EDUCATION IN CHINA
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ABSTRACT

Recent studies on China economy have pointed out income disparity among China's different regions. Several authors have showed that this income disparity might be due to inequality in labor productivity, or total factor productivity, or education expenditures. However, none of the exiting literature investigates a possible two-way causality between this income disparity and education defined as school enrollments. In this paper, we perform three stage least squares estimations using panel data for China. We first investigate the aggregate effects of education and find that there is a positive two-way causality between per capita income and education for all three levels of education. Concerning the income inequality and education, this two-way causality is very different for different regions with the higher income regions enjoy more benefits of education than the lower income regions.

KEY WORDS*: school enrollments; income disparity, two-way causality, China's economy.*

JEL*: J24, E23, O15*

INTRODUCTION

China has enjoyed high growth rate of GDP and per capita income in the past fifteen years. Additionally, research on China's education has pointed out that returns to schooling in China have dramatically risen during this period from far below world averages to almost the same as in major market economies (Zhang et al., 2005; Li, 2003; Li and Luo, 2004; and Yang, 2002). Empirical results also show that education has positive effects on GDP growth and per capita income (Fleisher, 2002; Demuger 2001; and Chen and Feng 2000).

Concerning income distribution, recent studies have pointed out that the overall pattern of income disparity in China has shifted from between urban and rural areas within a province to between two provinces, and from within the coast to between the coast and the interior. However, very few papers have addressed the possible correlation between income disparity and education inequality. Fleisher and Chen (1997) show that this income disparity might be due to inequality in labor productivity and total factor productivity. Heckman (2005) finds that education expenditures in China are very unequal among provinces and might contribute to the regional income disparity.

None of the exiting literature tries to investigate a possible two-way causality between per capita income and education. Neither examines the two-way causality between regional inequality and education defined as school enrollments. Observing China's school enrollments in during 1978-2005 in Figure 1, one can see that higher education and secondary education enjoy higher growth than primary education with secondary education enjoys the fastest grow rate. This inspires one to find out which one affects per capita income the most among these three levels of education.

Figure 1. Education growth in China
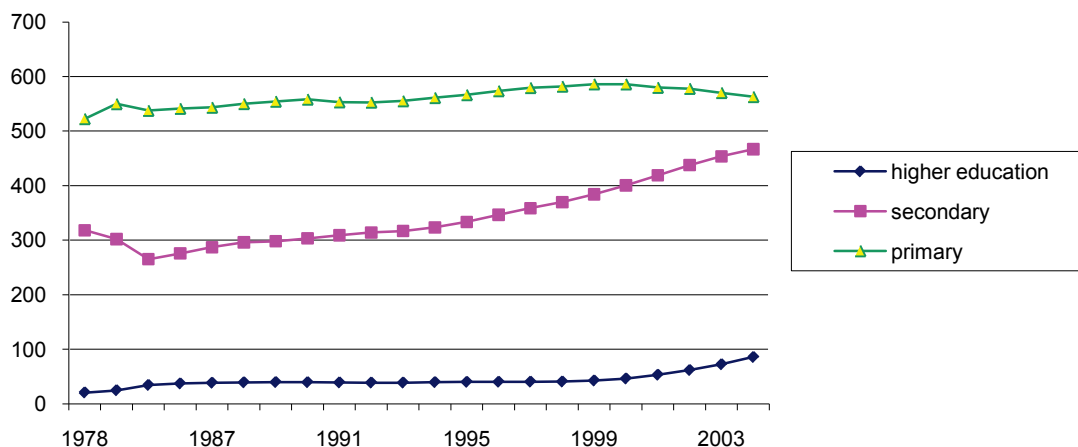
Each level of education is defined as school enrollments per capita.

In this paper, we use panel data for China during 1991-2005. The data are analyzed using three stage least squares approach to improve the efficiency of the estimators. We first investigate the aggregate effects of education and find that there is a positive two-way causality between per capita income and education for all three levels of education. Concerning the income inequality and education, this two-way causality is very different for different regions with the higher income regions enjoy more benefits of education than the lower income regions. Section 2 of this paper presents the model and data. Section 3 discusses methodology. Section 4 analyzes the results. Section 5 concludes.

MODEL AND DATA

We use an augmented Cobb-Douglas production function in log form:

$$\ln y_{it} = \ln A + \delta \ln k_{it} + \theta \ln e_{it} + \sum_{j=1}^{n} \gamma_j \ln c_{jt} \tag{1}$$

where y is per capita income, i is province index and t time index, k per capita capital, l is labor and e education ratio, defined as school enrollments divided by population; c is a vector of control variables that might affect per capita income such as foreign capital, infrastructure, foreign direct investment (FDI), trade, etc. To account for a possible two-way causality between education and per capita income, we add a second equation to the first one to make a system of equation:

$$\ln y_{it} = \ln A + \delta \ln k_{it} + \theta \ln e_{it} + \sum_{j=1}^{n} \gamma_j \ln c_{jt}$$

$$\ln e_{it} = \ln B + \phi \ln y_{it} + \sum_{k=1}^{m} \varphi_j \ln a_{jt}, \tag{2}$$

where a is a vector of auxiliary variables that might affect school enrollments such as expenditures on education, population, student-teacher ratio, etc.

Data for thirty regions—including 22 provinces, five autonomous regions, and three municipal cities—are from *China Statistical Yearbooks* for 1991-2005. Data for Tibet is not comprehensive. This might bias

the result, so we eliminate Tibet from the data set. Data for Chongqing were included into data for Sichuan before 1997, so we add data for Chonging to data for Sichuan during 1997-2005 as well. We follow Barro and Sala-i-Martin (2004) and calculate three-year average values of each variable to eliminate the short run impacts in the economy. Data for 1991-1992 have missing observations. If one observation is missing for a three-year period, we average the two remaining data points. This might bias the results somewhat. Hence, we also perform estimations on the data for 1994-2005 as another robust check.

We use accumulated investment in fixed assets by region as a proxy for physical capital, turnover volume of freight traffic as a proxy for infrastructure, and total retail sale of consumer goods as a proxy for trade. Data on exports (EX) and imports (IM) are measured according to location of managing unit by region. Data for foreign loans are accumulated to make a proxy for foreign capital (FOCAP). Data on education expenditures are not available for the whole period and therefore are not used in this paper.

The ratio of GDP to population is used as a proxy for per capita income. Data on foreign direct investment actually used are merged with data on foreign other investment for 1993-1995 period. Hence, we sum up the two categories when they are listed separately to obtain data for foreign investment (FI). Data are converted into real values using the price indices and respective GDP deflators. Data for FI are then accumulated to make a proxy for foreign capital.

An important issue, which might affect the estimated results but has not been discussed in empirical studies on China's per capita income, is the so-called floating population. Before reform, the Chinese government imposed one of the strictest rural-to-urban migration laws among the socialist nations in order to control the city sizes. A move from a rural to an urban area required two approvals: a migration certificate for changing from rural registration (*hukou)* to an urban one, and a converting certificate specifying certain qualifications for transferring from an agricultural to a non-agricultural status (*nongzhuanfei)*. Additionally, a travel permit from the local government is required for any journey to other locations. Hence, labor or any individual movement into cities to satisfy personal instead of state needs was effectively controlled and carefully watched.

Since 1979, travel permit requirement was abolished. Thus, rural labor has flocked to cities looking for jobs. Not allowed to register, this population has become the floating population (FP) mentioned earlier. In the *China's Statistical Yearbooks,* only permanently registered population is entered as urban population. Figure 3 show the difference between the official population and the one adjusted by adding the estimated FP. Since our data are divided through by data on population to obtain per-capita form on both sides of Equation (1), the FP does not affect the estimated results concerning the population issue. However, the presence of this FP might affect the results concerning school enrollments, and hence the effect of education on per capita income.

The problem is that many children of the FP, who is not allowed to register, are not allowed to attend regular schools. As a result, these children are either house schooled or attend schools organized specifically by the FP. Where this *hukou* system reduces the possibility of double counting the school enrollments due to moving population, it raises the possibility of underestimate these enrollments. Since most of the migrants are young couples with small children, the primary school enrollments are the one most underestimated. This phenomenon could cause a downward bias concerning the effects of primary education on productivity.   Thus, our results concerning the effect of primary education on per capita income might have to be interpreted with caution.

Figure 3: Population Comparison for China
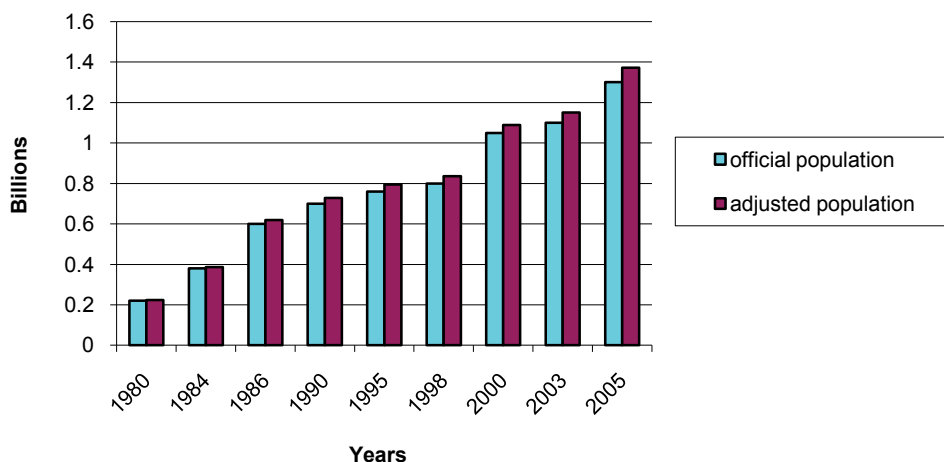
Sources: Zhu (1999, p. 42); Goodkind, D., and Loraine West (2002, pp. 1-21); and www.china.org.cn;

METHODOLOGY

We first perform the preliminary tests using three stage least squares instead of fixed effect three stage least squares to observe information that might be lost due to the fixed effect approach. Since each equation has at least one variable excluded from the other, and the test results for over-identifying restrictions show that at least one of the two excluded variables from each equation is not correlated with the residual, that is, at least one of the two excluded variables from each equation is exogenous. Hence, the order condition for the system is satisfied. Preliminary tests of the reduced form also show that some of these exogenous variables are statistically significant, implying that the rank condition for the system identification is satisfied.

Estimating system (2), we follow a testing-down approach to avoid omitted variables, starting with all variables that might affect per capita income in the first equation and education in the second equation. We first perform Variance Inflation Factor tests (VIF) as discussed in Kennedy (2003) to eliminate variables with high multicolinearity. After several elimination steps, we have seven explanatory variables left for the first equation and four variables left for the second equation. Our preliminary estimations are carried out with time dummies to control for autocorrelation. We also employ the White correction for the standard heteroskedasticity. An augmented Granger-Causality test shows that education does depend on per capita income. Hence, the econometric model is:

$$PERCA_{it} = \alpha_o + \alpha_1 EDU + \alpha_2 INRFA_{it} + \alpha_3 CAP_{it} + \alpha_4 EX_{it}$$

$$+ \alpha_5 FOCA_{it} + \alpha_6 TRADE_{it} + \alpha_7 FI_{it} + v_i + \varepsilon_{it}$$
$$EDU_{it} = \beta_o + \beta_1 PERCA_{it} + \beta_2 RATIO_{it} + \beta_3 PROD_{it} + \beta_4 POP_{it} + v_i + \varepsilon_{it} \tag{3}$$

where *PERCA* is per capita income, *EDU* school enrollment ratio (henceforth called education), *INFRA* infrasturcture, *CAP* per capita domestic capital (henceforth called capital), *EX* export, *FOCA* foreign capital, *TRADE* domestic trade, *RATIO* student-teacher ratio, *PROD* labor productivity, defined as output per worker, *POP* population, *i* and *t* the regional and time indices, respectively, v_i the specific effect

disturbance, and ε_{it} the idiosyncratic disturbance. The variable *TRADE* has VIF varies between 9.02 and 10.45, depending on the sample sizes. Kennedy (2006) suggests that we eliminate any variable with VIF > 10, hence we also estimate an alternative model specification without *TRADE* as another robust check. Performing the Akaike (1973) Information Criterion (AIC) procedure on the first equation, we find that only the first lagged value of the higher education (college enrollments) is statistically significant. All past values of secondary and primary school enrollments are insignificant. The results also show that none of the past values of per capita income is statistically significant. The same procedure on the second equation shows that none of the lagged values is significant. Hence, only the first lagged value of the college enrollments is included in the subsequent estimations.

RESULTS

Aggregate Effects

We estimate Equation (3) for 29 regions in China, continuing to use the White correction for heteroskedasticity and time dummies to control for any autocorrelation that might arise. The results for primary, secondary, and college enrollments are reported in Table 1. Each level is estimated using alternative time periods of 1991-2005 and 1994-2005. From this table, education at all three levels increases per capita income. The coefficient estimate of secondary education is highly significant for both sample periods. For college enrollments, the involvement of the current enrollment, EDU_{it}, and its lagged value, $EDU_{i,t-1}$, requires special analysis:

In the long run equilibrium, $EDU_{it} = EDU_{i,t-1} = EDU$, so we can rewrite the result as:

$$\beta_1 EDU_{it} + \beta_2 EDU_{i,t-1} = \beta_1 EDU + \beta_2 EDU = \left(\beta_1 + \beta_2 \right) EDU \qquad (4)$$

From Table 1, this sum is positive, and an F test shows that it is significantly different from zero at 5% level. The F-statistics for the joint significance of the two coefficients is also significantly different from zero at 5% level. The signs and the magnitudes of our results are similar to the results from Fleisher et al. (2006) using microeconomic data: education increases productivity for both highly educated workers and less educated workers, with the effect on highly educated workers much greater than that on the less educated workers. Table 2 reports the results for the model without *TRADE* and shows that they are very similar to those in Table 1.

Regional Effects

We then investigate the possible two-way causality between regional income disparity and education for each level of education. We use the ranking of per capita income for six typical groups in Li (2000), from highest to lowest: Northeast, North, East, Central and South, Northwest, and Southwest. The North is used as the base region (reference group). Slope dummies are generated for five different regions: Northeast, East, Central and South, Southwest, and Northwest. To interpret the effect of education on per capita income for each group, its coefficient is added to that of the North, and a test for the significant of their sum is performed. The estimations are first performed on the original model with *TRADE* for 29 regions. Since the results for the controls variables re similar to those in Tables 1 and 2, we only report the results for the benchmark variables[1]. Table 3 reports the results for the model with *TRADE*. They show that the effects are quite different for different regions. The two-way causality is positive and highly significant for the North at all levels of education. The effects of all three levels for the Northeast are slightly greater than those of the North, where as the effects of all three levels for the East are slightly smaller than those of the North, although they are all positive for both ways.

Table 1.Two-Way Causality Between Per Capita Income and Each Level of Education: Model with Trade
Panel (1.a) Dependent Variable: Per Capita Income

Variable	Primary		Secondary		College	
	1991-2005	1994-2005	1991-2005	1994-2005	1991-2005	1994-2005
EDU_{it}	.2207**	.2193**	.1905**	.1878**	-.0088**	-.0246**
	(.1118)	(.1005)	(.0979)	(.0902)	(.0037)	(.0124)
$EDU_{i,t-1}$					.3517**	.3206**
					(.1769)	(.1592)
CAP	.2959***	.2853***	.2887***	.2901***	.2913**	.2897**
	(.0419)	(.0554)	(.0395)	(.0569)	(.1476)	(.1403)
INFRA	.4642***	.4431***	.4226**	.4423***	.4017**	.4123**
	(.0927)	(.0989)	(.2186)	(.0928)	(.2001)	(.2057)
FI	.1182**	.2211**	.0892**	.0918**	.1054**	.1132**
	(.0569)	(.1189)	(.0408)	(.0462)	(.0522)	(.5487)
FOCAP	.2583***	.2532**	.2358***	.2554***	.2418**	.2487**
	(.0352)	(.2304)	(.0341)	(.0487)	(.2103)	(.2236)
EX	.0432*	.0512	.0282**	.0641**	.0459**	.0371*
	(.0246)	(.0652)	(.0179)	(.0356)	(.0213)	(.0203)
TRADE	.0299**	.0363**	.0229*	.02315**	.0319*	.0298**
	(.0150)	(.0161)	(.0131)	(.0120)	(.0176)	(.0143)
Observations	145	116	145	116	115	86
Overall R^2	.6874	.6166	.6548	.5243	.6354	.6098
F-statistics (2, 81) for Joint EDU_{it} and $EDU_{i,t-1}$					5.16	4.98
F-statistics (1, 81) for Sum of EDU_{it} and $EDU_{i,t-1}$					6.25	5.76
p-val. F-test	.0000	.0000	.0000	.0000	.0000	.0000

Panel (1.b) Dependent Variable: Each Level of Education

Variable	Primary		Secondary		College	
	1991-2005	1994-2005	1991-2005	1994-2005	1991-2005	1994-2005
PERCA	.2048**	.2124**	.3058**	.2621**	.2987**	.3008**
	(.1035)	(.1096)	(.1475)	(.1314)	(.1454)	(.1516)
RATIO	-.2056**	-.1841*	-.2198*	-.2201**	-.2015**	-.2156*
	(.0992)	(.0954)	.1024	(.1079)	(.1004)	(.1402)
PROD	.3298**	.3612**	.3796**	.3674**	.3297**	.3408*
	(.1644)	(.1803)	(.1858)	(.1835)	(.1646)	(.1698)
POP	.2379**	.2858**	.2597***	.2896**	.2639**	.2794**
	(.1198)	(.1432)	(.0446)	(.1423)	(.1332)	(.1386)
Observations	145	116	145	116	115	86
Overall R^2	.7082	.6921	.7184	.7298	.6923	.6476
p-val. for F test	.0000	.0000	.0000	.0000	.0000	.0000

*The *, **, and ***, denote 10%, 5%, and 1% significance levels, respectively. Standard errors are in the parentheses.*

Table 2. Two-Way Causality Between Per Capita Income and Each Level of Education: Model Without Trade

Panel (2.a) Dependent Variable: Per Capita Income

Variable	Primary		Secondary		College	
	1991-2005	1994-2005	1991-2005	1994-2005	1991-2005	1994-2005
EDU_{it}	.2172***	.2211**	.2017**	.1915**	.2189**	.2243**
	(.0736)	(.1102)	(.1046)	(.1103)	(.1035)	(.1124)
$EDU_{i,t-1}$					.3386**	.3172**
					(.1685)	(.1538)
CAP	.2970***	.3001***	.3081***	.2826***	.2943***	.2796***
	(.0529)	(.0584)	(.0403)	(.0562)	(.0785)	(.0687)
INFRA	.3781***	.3479***	.4111***	.3552***	.3628**	.3587**
	(.0942)	(.1012)	(.0893)	(.1001)	(.1823)	(.1775)
FI	.0362**	.0443**	.0686*	.0351*	.0675***	.0692***
	(.0197)	(.0212)	(.0492)	(.0198)	(.0102)	(.0232)
FOCAP	.2477***	.2542***	.2512**	.2566***	.2745**	.2586**
	(.0792)	(.0406)	(.1284)	(.0582)	(.1362)	(.1264)
EX	.0382**	.0382*	.0434**	.0447**	.0418*	.0395**
	(.0192)	(.0219)	(.0204)	(.0215)	(.0264)	(.0193)
Observations	145	116	145	116	145	86
Overall R^2	.6823	.5175	.6912	.5443	.6475	.5976
F-statistics (2, 81) for Joint EDU_{it} and $EDU_{i,t-1}$					4.86	5.02
F-statistics (1, 81) for Sum of EDU_{it} and $EDU_{i,t-1}$					7.32	6.26
p-val for F-test	.0000	.0000	.0000	.0000	.0000	.0000

Panel (2.b) Dependent Variable: Each Level of Education

Variable	Primary		Secondary		College	
	1991-2005	1994-2005	1991-2005	1994-2005	1991-2005	1994-2005
PERCA	.2139**	.2195**	.1586**	.1402***	.1028**	.1136**
	(.1028)	(.1104)	(.0792)	(.0203)	(0517)	(0552)
RATIO	-.1932**	-.1965*	-.2093**	-.1852**	-.2197**	-.1958*
	(.0976)	(.1091)	.1041	(.0934)	(.1054)	(.1102)
PROD	.3624**	.3437**	.3556**	.3387**	.3523***	.3268**
	(.1753)	(.1712)	(.1794)	(.1702)	(.1056)	(.1624)
POP	.2634**	.2713**	.2395**	.2743**	.2486**	.2574**
	(.1254)	(.1385)	(.1206)	(.0934)	(.1241)	(.1259)
Observations	145	116	145	116	115	86
Overall R^2	.6965	.7195	.6852	.7058	.6914	.6763
p-val. for F test	.0000	.0000	.0000	.0000	.0000	.0000

The *, **, and ***, denote 10%, 5%, and 1% significance levels, respectively. Standard errors are in the parentheses.

Table 3. Two-Way Causality between Regional Income Inequality and Education: Model with Trade

Panel (3.a). Dependent Variable: Per Capita Income. Reference Group: the North

Variable	Primary		Secondary		College	
	1991-2005	1994-2005	1991-2005	1994-2005	1991-2005	1994-2005
EDU_{it}	.1104**	.1131**	.1362***	.1437**	- .0781	- .0832**
	(.0527)	(.0532)	(.0465)	(.0533)	(.0543)	(.0405)
$EDU_{i, t-1}$					.2015***	.1973**
					(.0747)	(.0671)
CAP	.2962**	.2893***	.3041**	.3083**	.3041**	.2904***
	(.1423)	(.0552)	(.1405)	(.1521)	(.1523)	(.0591)
NORTHEAST	.0343***	.0327**	.0308***	.0322**	.0312**	.0275**
	(.0102)	(.0162)	(.0102)	(.0161)	(.0143)	(.0133)
EAST	-.0242**	-.0228**	-.0293**	-.0275***	-.0212**	-.0275***
	(.0120)	(.0112)	(.0142)	(.0065)	(.0112)	(.0136)
CENTRAL & SOUTH	-.1109**	-.1192**	-.0727**	-.0802**	-.0786***	-.0657**
	(.0573)	(.0601)	(.0324)	(.0423)	(.0235)	(.0324)
SOUTHWEST	-.1103**	-.1164**	-.0845**	-.0794**	-.0923**	-.0745**
	(.0534)	(.0574)	(.0412)	(.0375)	(.0435)	(.0386)
NORTHWEST	-.1106***	-.1125**	-.0797***	-.0843**	-.0865**	-.0696**
	(.0252)	(.0524)	(.0216)	(.0421)	(.0432)	(.0337)
Observations	145	116	145	116	115	86
Overall R^2	.7002	.6801	.7851	.7232	.6971	.6262
F-statistics (2, 81) for Joint EDU_{it} and $EDU_{i,t-1}$					5.16	4.98
F-statistics (1, 81) for Sum of EDU_{it} and $EDU_{i,t-1}$					6.25	5.76
p-val. for F-test	.0000	.0000	.0000	.0000	.0000	.0000

Panel (3.b). Dependent Variable: Each Level of Education. Reference Group: the North

Variable	Primary		Secondary		College	
	1991-2005	1994-2005	1991-2005	1994-2005	1991-2005	1994-2005
PERCA	.2143**	.2217**	.1707***	.1715**	.1489**	.1382***
	(.1089)	(.1128)	(.0348)	(.0862)	(.0723)	(.0187)
NORTHEAST	.0445**	.0465***	.0314**	.0295**	.0287**	.0326**
	(.0229)	(.0128)	(.0148)	(.0150)	(.0121)	(.0161)
EAST	- .0436***	-.0563**	-.0416**	-.0398***	-.0286**	-.0384**
	(.0084)	(.0281)	(.0203)	(.0136)	(.0133)	(.0192)
CENTRAL & SOUTH	-.2176**	-.2243**	-.2179***	-.2018**	-.1894**	-.1792***
	(.1123)	(.1105)	(.0756)	(.1021)	(.0932)	(.0354)
SOUTHWEST	-.2104**	-.2265**	-.1732**	-.1705***	-.2895***	-.2684**
	(.1078)	(.1134)	(.0895)	(.0067)	(.0879)	(.0823)
NORTHWEST	-.2139**	-.2237**	-.1709***	-.1716***	-.1574**	-.1468***
	(.1098)	(.1122)	(.0089)	(.0093)	(.0736)	(.0082)
Observations	145	116	145	116	115	86
Overall R^2	.7024	.6832	.7352	.7017	.6792	.6184
p-val. for F test	.0000	.0000	.0000	.0000	.0000	.0000

The *, **, and *** denote 10%, 5%, and 1% significance levels, respectively.   Standard errors are in the parentheses.

Table 4. Two-Way Causality between Regional Income Inequality and Education: Model Without Trade
Panel (4.a) Dependent Variable: Per Capita Income. Reference Group: the North

Variable	Primary		Secondary		College	
	1991-2005	1994-2005	1991-2005	1994-2005	1991-2005	1994-2005
EDU_{it}	.1097**	.1124**	.1385***	.1312***	- .0882	- .0722**
	(.0524)	(.0586)	(.0448)	(.0623)	(.0285)	(.0318)
$EDU_{i, t-1}$					.2034***	.1862**
					(.0794)	(.0911)
CAP	.3123***	.2968***	.3041***	.3092***	.2922***	.2716***
	(.0459)	(.0634)	(.0477)	(.0591)	(.0566)	(.0621)
NORTHEAST	.0314**	.0301**	.0327**	.0342**	.0319**	.0295**
	(.0153)	(.0151)	(.0164)	(.0201)	(.0152)	(.0146)
EAST	-.0226**	-.0243**	-.0276**	-.0283**	-.0267***	-.0284**
	(.0113)	(.0125)	(.0134)	(.0165)	(.0012)	(.0146)
CENTRAL & SOUTH	-.1168**	-.1145**	-.0769**	-.0795**	-.0867**	-.0732***
	(.0579)	(.0587)	(.0328)	(.0389)	(.0435)	(.0029)
SOUTHWEST	-.1109***	-.1108***	-.0812**	-.0804***	-.0823**	-.0793***
	(.0053)	(.0057)	(.0401)	(.0035)	(.0410)	(.0082)
NORTHWEST	-.1086**	-.1129***	-.0734**	-.0829**	-.0817***	-.0732**
	(.0553)	(.0052)	(.0356)	(.0416)	(.0043)	(.0361)
Observations	145	116	145	116	115	86
Overall R^2	.7052	.6132	.7193	.7272	.6806	.6692
F-statistics (2, 81) for Joint EDU_{it} and $EDU_{i,t-1}$					5.97	5.08
F-statistics (1, 81) for Sum of EDU_{it} and $EDU_{i,t-1}$					6.76	5.32
p-val. for F-test	.0000	.0000	.0000	.0000	.0000	.0000

Panel (4.b) Dependent Variable: Each Level of Education. Reference Group: the North

Variable	Primary		Secondary		College	
	1991-2005	1994-2005	1991-2005	1994-2005	1991-2005	1994-2005
PERCA	.2283**	.2187**	.1727***	.1695***	.1389**	.1282**
	(.1139)	(.1028)	(.0341)	(.0386)	(.0183)	(.0147)
NORTHEAST	.0361***	.0306**	.0302***	.0328**	.0342**	.0294**
	(.0074)	(.0151)	(.0069)	(.0202)	(.0172)	(.0142)
EAST	-.0235**	-.0263**	-.0247**	-.0233**	-.0239***	-.0273***
	(.0112)	(.0122)	(.0121)	(.0118)	(.0064)	(.0046)
CENTRAL						
& SOUTH	-.2147**	-.2293**	-.2098**	-.2135**	-.1925***	-.1834**
	(.1102)	(.1145)	(.1056)	(.1076)	(.0039)	(.0903)
SOUTHWEST	-.2239**	-.2186**	-.1732***	-.1694**	-.2835**	-.2713***
	(.1121)	(.1035)	(.0089)	(.0086)	(.1328)	(.0626)
NORTHWEST	-.2254***	-.2186**	-.1832***	-.1702***	-.1436**	-.1425**
	(.0982)	(.1102)	(.0082)	(.0078)	(.0702)	(.0714)
Observations	145	116	145	116	115	86
Overall R^2	.7082	.6921	.7184	.7298	.6923	.6476
p-val. for F test	.0000	.0000	.0000	.0000	.0000	.0000

*The *, **, and *** denote 10%, 5%, and 1% significance levels, respectively. Standard errors are in the parentheses.*

For the other three regions, the effects of primary enrollments on per capita income are not significantly different from zero. The effects of secondary and college enrollments on per capita income are positive but much smaller than those of the North. The most interesting results are the disparities in the effect of per capita income on education for each group. For the Central and South, the effect of per capita income on secondary and college enrollments is negative and significant, whereas that effect on primary

enrollment is not statistically different from zero. For the Southwest, this effect on college enrollment is negative and more so than that for the Central and South, whereas those on secondary and primary enrollments are insignificant. For the Northwest, this effect on college enrollment is also negative but much smaller than that for the Central and South, whereas those on secondary and primary enrollments are also insignificant. The results are robust to alternative sample periods of 1991-2005 and 1994-2005. Table 4 reports the results of the benchmark variables for the model without *TRADE* and shows that they are very similar to those in Table 3.

CONCLUSION

In this paper, macroeconomic data are averaged every three year to reduce fluctuation effect of the business cycle in the short run. Education is measured as school enrollments in each level of education.

Data are divided by population to yield a proxy for education that contributes to changes in real GDP per capita in China. Three stage least squared estimations are performed to enhance the efficiency of the estimator.

The results show that there evidence of a two-way causality between education and per capita income. Specifically, education at all three levels increases per capita income at aggregate level. For the regional effects, the effects of primary enrollments on per capita income are not significantly different from zero. The most interesting results are the negative effects of per capita income on the less developed regions. Since the Northeast, East and North enjoy higher per capita income than the other regions do, this implies that there is a correlation between income disparity and education defined as school enrollment at all three levels. Specifically, the more developed a region, the more benefits it would enjoy from higher levels of education. More importantly, per capita income only affects school enrollments positively for developed regions. In the less developed regions, per capita income seems to create high opportunity costs of going to schools and deters enrollments in higher levels of education. Our results are robust to sample size changes and alternative model specifications.

Future research can explore the possible two-way causality between inequality in education defined as expenditures on education and income disparity when future data for education expenditures are available for a long period of time.

Notes
[1]- For the results of the control variables, please contact Tam Vu at tamv@hawaii.edu

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AN ANALYSIS OF THE EFFECT OF U.S. STOCK MARKET TO VIETNAM STOCK MARKET: THE CASE OF S&P 500 AND DOW JONES INDICES TO VN-INDEX

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ABSTRACT

This paper uses the Generalized Autoregressive Conditional Heteroscedasticity - Autogressive Moving Average (GARCH-ARMA) and the Exponentially General Autoregressive Conditional Heteroscedasticity-Autogressive Moving Average (EGARCH-ARMA) models to study the effect of the U.S. stock market to the Vietnam stock market. The total observations of study are 1,483 samples with daily data from December 04, 2003 to August 28, 2009 and divided into four sub-groups based on special political events between the two countries. The study finds that the U.S. stock market, particularly the S&P 500 Index has a positive and strong significant influence to the VN-Index return in recent years. However, there is no evidence of volatility effect of the S&P 500 Index on the VN-Index. To support the initial findings, the study also performs robustness test to examine the effect of Dow Jones Index to the VN-Index return using the same method and shows similar results that the U.S. stock market influences the Vietnam stock market. These findings provide additional evidences that the Vietnam is a viable market economy and contribute to strengthening the investing strategies of fund managers by considering the movement of the U.S. stock market before making investment decisions on Vietnam stock market.

KEYWORDS: Index, stock market, volatility effect.

INTRODUCTION

In recent years, the financial markets in both developed and developing countries experienced liberalized capital movements, financial reforms, and advances in information technologies. These changes have increased the interaction between domestic markets to other markets from the rest of the world. Especially, the linkage between stock markets around the world has increased rapidly. Many studies have found that the U.S. stock market has strong influence on other stock markets like Japan, European stock markets, etc. However, until now there is no official research to examine how the influence of the U.S. stock market (like S&P 500 and Dow Jones Indices) on Vietnam stock market (VN-Index). Market analysts frequently try to explain the movement of the Vietnam stock market (VN-Index) in the financial news with the movement of the U.S. stock market. Statements such as "VN-Index declines…after the plunge by Wall Street" and "VN-Index is up…due to the soar of Dow" are quite common. Those claims seem to suggest that the U.S. stock market transmits its influence to the Vietnam stock market. Hence, there is a need to study this effect in order to answer the question: How is the influence of the U.S. stock market to the Vietnam stock market? This is a study of empirical nature investigating the effect of a mature stock market to an infant stock market; particular to examine the influence of the S&P 500 and Dow Jones Indices on VN-Index in each period time combined with special political events between the U.S. and Vietnam governments through the GARCH-ARMA and EGARCH-ARMA models. The findings show that the S&P 500 Index has positive and statistical significant effect to the VN-Index return after the visits of top leaders from both countries in 2005. These findings provides evidence pointing to the fact that through the special political events and visits of top leaders from the U.S. and Vietnam, the Vietnam stock market has been influenced by the U.S. stock market, particularly the influence of S&P 500 Index on VN-Index has more significant and stronger in recent years. However, there is no volatility effect of S&P 500 Index on VN-Index. The robustness test is performed to support the initial findings by examining the effect of Dow Jones Index to the VN-Index return using the same method, number of observations and time period show similar results that the U.S. stock market influences in the Vietnam

stock market is getting stronger in recent years. These findings could contribute to strengthening the investing strategies of fund managers by considering the movement of the U.S. stock market before making investment decisions on Vietnam stock market. It could also contributes as one of the evidences that Vietnam is a market economy, particularly the Vietnam stock market as the same with many other stock markets influenced by the U.S. stock market.

LITERATURE REVIEW

There are two broader context related to interdependence among international markets: interdependence in return (Errunza, 1985) and interdependence in volatility (Hamao et al., 1990; Theodossiou and Lee, 1997; Koutmos and Booth, 1995; Liu and Pan, 1997; Jang and Sul, 2002; Leong and Felminglam, 2003; Darrat and Benkato, 2003; Cifarell and Paladino, 2004; Hoti, 2005). Most of the studies have focused on the developed markets especially the interdependence among the U.S., Japanese and major European markets. Priyanka, Brajesh and Ajay (2009) find that there is greater regional influence among Asian markets in return and volatility than with European and US. Japanese market, which is first to open, is affected by the U.S. and European markets only and affects most of the Asian Markets. Bekaert and Harvey (1997) examine the volatilities of emerging equity markets and find that in the integrated markets global factors influence the volatility, whereas local factors affects the segmented markets. Jang and Sul (2002) analyze the co-movement of Asian stock markets in the past, during and after the Asian Financial Crisis. They conclude that the co-movement among the Asian markets increased during the financial crisis period.

Many researchers have applied multivariate GARCH model to estimate volatility spillover: Engle, Ito and Lin (1990) investigate the intraday volatility spillover between US and Japanese foreign exchange markets. Bekaert and Harvey (1997), Ng (2000), Baele (2002), Christiansen (2003), and Worthington and Higgs (2004) used the same model for further application on various capital markets. Karolyi (1995) finds a short-run interdependence of return and volatility between Toronto and New York stock market. Theodossiou et al. (1997) investigates stock market returns in the U.S., Japan and the UK during 1984 to 1994 and found some statistically significant volatility spillovers from the U.S. and Japan to the UK. Chen and Huang (2008) use the GARCH-ARMA and EGARCH-ARMA models to study the impact of spillover and leverage effects on returns and volatilities of stock index and Exchange Trade Fund for developed and emerging markets.

METHODOLOGY

To get the target, this study focuses on the analysis of the influence and level effect of the S&P 500 Index in the U.S. stock market on the VN-Index in the Vietnam stock market by using the GARCH-ARMA and EGARCH-ARMA models. The paper uses the logarithm of daily price index to measure the returns. This is the difference between the logarithm of the index at time t and the logarithm of the index at time t-1. The GARCH-ARMA and EGARCH-ARMA models are as follows:

The Stock index (S&P 500 Index) returns model:

$$R_{i,t}^{SP} = \alpha_0 + \sum_{i=1}^{g} \alpha_i R_{i,t-i}^{SP} + \varepsilon_{i,t}^{SP} + \sum_{i=1}^{s} \theta_i \varepsilon_{i,t-1}^{SP} \tag{1}$$

where

$R_{i,t}^{SP}$: stock index (S&P 500 Index) returns at period t,

$\varepsilon_{i,t}^{SP}$: stock index (S&P 500 Index) returns residual at period t,

θ_i : unknown parameter.

To the stock index (VN-Index) returns model:

$$R_{i,t}^m = \beta_0 + \sum_{i=1}^{g} \beta_i R_{i,t-i}^m + \varepsilon_{i,t}^m + \sum_{i=1}^{s} \gamma_i \varepsilon_{i,t-1}^m \tag{2}$$

$$h_{i,t}^m = b_0 + \sum_{i=1}^{q} b_i \varepsilon_{i,t-i}^{m^2} + \sum_{i=1}^{p} \zeta_i h_{i,t-i}^m \text{, for GARCH} \tag{3}$$

$$Log\left(h_{i,t}^{m^2}\right) = b_0 + \sum_{i=1}^{q}\left(b_i \left|\frac{\varepsilon_{i,t-i}^m}{h_{i,t-i}^m}\right| + \delta_i \frac{\varepsilon_{i,t-i}^m}{h_{i,t-i}^m}\right) + \sum_{i=1}^{p} \zeta_i \log\left(h_{i,t-i}^{m^2}\right) \text{, for EGARCH} \tag{4}$$

where

$R_{i,t}^m$: stock index (VN-Index) returns at period t,

$\varepsilon_{i,t}^m$: stock index (VN-Index) returns residual at period t,

$h_{i,t}^m$: conditional variance of stock index (VN-Index) returns at period t,

δ_i : the leverage term,

γ_i : unknown parameter.

The effects of returns (S&P 500 Index to VN-Index):

$$R_{i,t}^m = \beta_0 + \sum_{i=1}^{g} \beta_i R_{i,t-i}^m + dR_{i,t-1}^{SP} + \varepsilon_{i,t}^m + \sum_{i=1}^{s} \gamma_i \varepsilon_{i,t-1}^m \tag{5}$$

$$h_{i,t}^m = b_0 + \sum_{i=1}^{q} b_i \varepsilon_{i,t-i}^{m^2} + \sum_{i=1}^{p} \zeta_i h_{i,t-i}^m \text{, for GARCH} \tag{6}$$

$$Log\left(h_{i,t}^{m^2}\right) = b_0 + \sum_{i=1}^{q}\left(b_i \left|\frac{\varepsilon_{i,t-i}^m}{h_{i,t-i}^m}\right| + \delta_i \frac{\varepsilon_{i,t-i}^m}{h_{i,t-i}^m}\right) + \sum_{i=1}^{p} \zeta_i \log\left(h_{i,t-i}^{m^2}\right) \text{, for EGARCH} \tag{7}$$

The effects of volatility (S&P 500 Index to VN-Index):

$$R_{i,t}^m = \beta_0 + \sum_{i=1}^{g} \beta_i R_{i,t-i}^m + \varepsilon_{i,t}^m + \sum_{i=1}^{s} \gamma_i \varepsilon_{i,t-1}^m \tag{8}$$

$$h_{i,t}^m = b_0 + \sum_{i=1}^{q} b_i \varepsilon_{i,t-i}^{m^2} + \sum_{i=1}^{p} \zeta_i h_{i,t-i}^m + l\varepsilon_{i,t-i}^{SP^2} \text{, for GARCH} \tag{9}$$

$$Log\left(h_{i,t}^{m^2}\right) = b_0 + \sum_{i=1}^{q}\left(b_i \left|\frac{\varepsilon_{i,t-i}^m}{h_{i,t-i}^m}\right| + \delta_i \frac{\varepsilon_{i,t-i}^m}{h_{i,t-i}^m}\right) + \sum_{i=1}^{p} \zeta_i \log\left(h_{i,t-i}^{m^2}\right) + l\varepsilon_{i,t-i}^{SP^2} \text{, for EGARCH} \tag{10}$$

This paper also uses robustness test to examine the effect of Dow Jones Index to VN-Index. The models are the following:

The stock index (Dow Jones Index) returns model:

$$R_{i,t}^d = \alpha_0 + \sum_{i=1}^{g} \alpha_i R_{i,t-i}^d + \varepsilon_{i,t}^d + \sum_{i=1}^{s} \theta_i \varepsilon_{i,t-1}^d \tag{11}$$

where

$R_{i,t}^{d}$: stock index (Dow Jones Index) returns at period t,

$\varepsilon_{i,t}^{d}$: stock index (Dow Jones Index) returns residual at period t,

θ_{i} : unknown parameter.

The effects of returns (Dow Jones Index to VN-Index):

$$R_{i,t}^{m} = \beta_0 + \sum_{i=1}^{g} \beta_i R_{i,t-i}^{m} + dR_{i,t-1}^{d} + \varepsilon_{i,t}^{m} + \sum_{i=1}^{s} \gamma_i \varepsilon_{i,t-1}^{m} \tag{12}$$

$$h_{i,t}^{m} = b_0 + \sum_{i=1}^{q} b_i \varepsilon_{i,t-i}^{m^2} + \sum_{i=1}^{p} \zeta_i h_{i,t-i}^{m} \text{ , for GARCH} \tag{13}$$

$$Log\left(h_{i,t}^{m^2}\right) = b_0 + \sum_{i=1}^{q}\left(b_i \left|\frac{\varepsilon_{i,t-i}^{m}}{h_{i,t-i}^{m}}\right| + \delta_i \frac{\varepsilon_{i,t-i}^{m}}{h_{i,t-i}^{m}} \right) + \sum_{i=1}^{p} \zeta_i \log\left(h_{i,t-i}^{m^2}\right) \text{ , for EGARCH} \tag{14}$$

The effects of volatility (Dow Jones Index to VN-Index):

$$R_{i,t}^{m} = \beta_0 + \sum_{i=1}^{g} \beta_i R_{i,t-i}^{m} + \varepsilon_{i,t}^{m} + \sum_{i=1}^{s} \gamma_i \varepsilon_{i,t-1}^{m} \tag{15}$$

$$h_{i,t}^{m} = b_0 + \sum_{i=1}^{q} b_i \varepsilon_{i,t-i}^{m^2} + \sum_{i=1}^{p} \zeta_i h_{i,t-i}^{m} + l\varepsilon_{i,t-i}^{d^2} \text{ , for GARCH} \tag{16}$$

$$Log\left(h_{i,t}^{m^2}\right) = b_0 + \sum_{i=1}^{q}\left(b_i \left|\frac{\varepsilon_{i,t-i}^{m}}{h_{i,t-i}^{m}}\right| + \delta_i \frac{\varepsilon_{i,t-i}^{m}}{h_{i,t-i}^{m}} \right) + \sum_{i=1}^{p} \zeta_i \log\left(h_{i,t-i}^{m^2}\right) + l\varepsilon_{i,t-i}^{d^2} \text{ , for EGARCH} \tag{17}$$

DATA DESCRIPTION

There are two main reasons to select the U.S. stock market for this study: (1) U.S. stock market is one of the leading stock markets on the world; and (2) the foreign direct investment (FDI) from the U.S. into Vietnam market has increased sharply in recent years (Table 1). In the first eight months of 2009, the U.S. was the largest foreign investor in Vietnam, occupying $3,956.1 million of registered capital.

Table 1: The Amount of Investment from the U.S. to Vietnam Market

	Until 27/12/2004	Until 31/12/2007	Until 19/12/2008	Until 31/08/2009
Number of projects	215	376	428	474
Registered capital (Million USD)	1,281.3	2,788.6	4,258.6	8,681.7
Rank	11	8	12	7
Number of countries investing into Vietnam	-	82	84	88

Source: Foreign Investment Agency, Ministry of Planning and Investment (2004, 2007, 2008, 2009)

The research uses S&P 500 Index, as it is the most widely used index of large-cap firms in the U.S. stocks market and is the bellwether for the U.S. economy. Moreover, on Vietnamese public media, when people discuss about the U.S. stock market, they always mention of S&P 500 and Dow Jones Indices. According to Vietnam Foreign Investment Agency, until 21/11/2008, 60% of projects invested in Vietnam from the U.S. focus on industrial and construction fields. Therefore, changes in the U.S. economy will effect to the Vietnam economy and the stock market as well.

The data consists of daily prices from the three indices over the period of December 04, 2003 to August 28, 2009. The S&P 500 and Dow Jones Indices, and the VN-Index data sources extracted from the Yahoo Finance website and from the website of HoChiMinh Stock Exchange, respectively. Because the U.S. stock market closes at 3 AM (Vietnamese time) and the Vietnam Stock market opens at 8:30 AM, the data uses opening price for VN-Index and closing price for S&P 500 and Dow Jones Indices. The observation samples are 1,483 and divided into 4 periods as illustrated in Figure 1.

Figure 1: Time, Political Events and Number of Samples
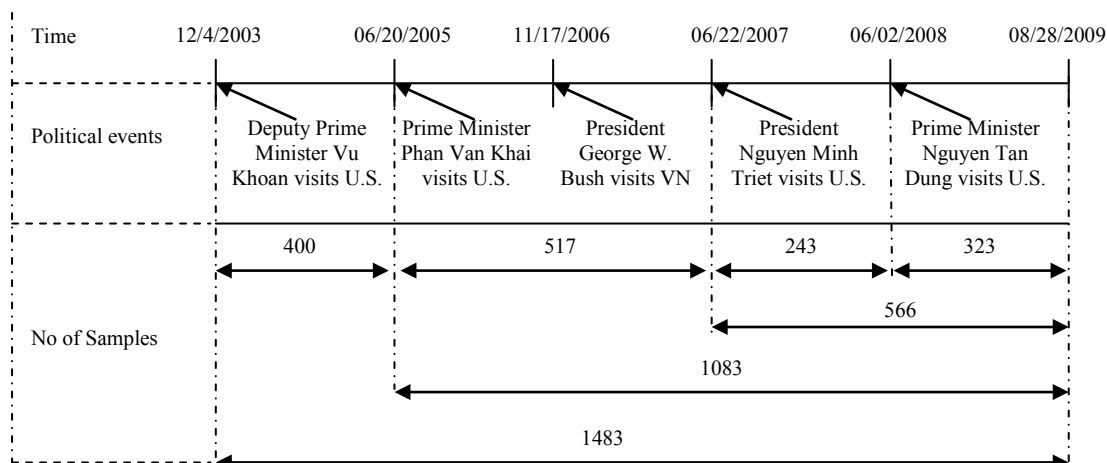
In each period, the relationship between Vietnam and the U.S. has developed in different levels. On December 04, 2003, Deputy Prime Minister Vu Khoan visited and signed an "Aviation Agreement" with the U.S. and on December 11, 2004, the United Airlines of America opened the first direct flight between Vietnam and America. On June 19-26/2005, Prime Minister Phan Van Khai made an official visit to the U.S. through the invitation of President George W. Bush. This visit strengthened the relationship between the two countries not only on political issues but also on economic and social issues. On November 17, 2006, President George W. Bush visited Vietnam and attended the APEC (Asia Pacific Economic Corporation) forum in Hanoi. On June 22, 2007, President Nguyen Minh Triet visited Washington and encouraged American investors to invest in Vietnam market aside from discussing political and social issues of the two countries. As a result, in 2007 the investments from the U.S. reached the eighth position and jumped to the seventh position in first eight month of 2009 (Table 1) after the visit of Prime Minister Nguyen Tan Dung to the U.S. on June 26, 2008. In short, visits of top leaders from both countries made the relationship between the two countries tighter and resulted in the influx of investment from the U.S. effecting to the development process of the Vietnam economy and the stock market as well. Figure 2 gives the general pictures of the prices of the three indices from December 04, 2003 to August 28, 2009.

From Table 2, indices are positive and right skewed. Meanwhile, the Jarque-Bera statistic for residual normality is not equal to zero indicating that the distribution of the residual is normal distribution. Figure 3 shows the daily return of VN, S&P 500 and Dow Jones Indices in each period time. For instance, the author observed that VN-Index is more volatile than S&P 500 and Dow Jones Indices.

Figure 2: Price of VN-Index (VNI), S&P 500 Index (SPI) and Dow Jones Index (DJI) (12/4/03-08/28/09)
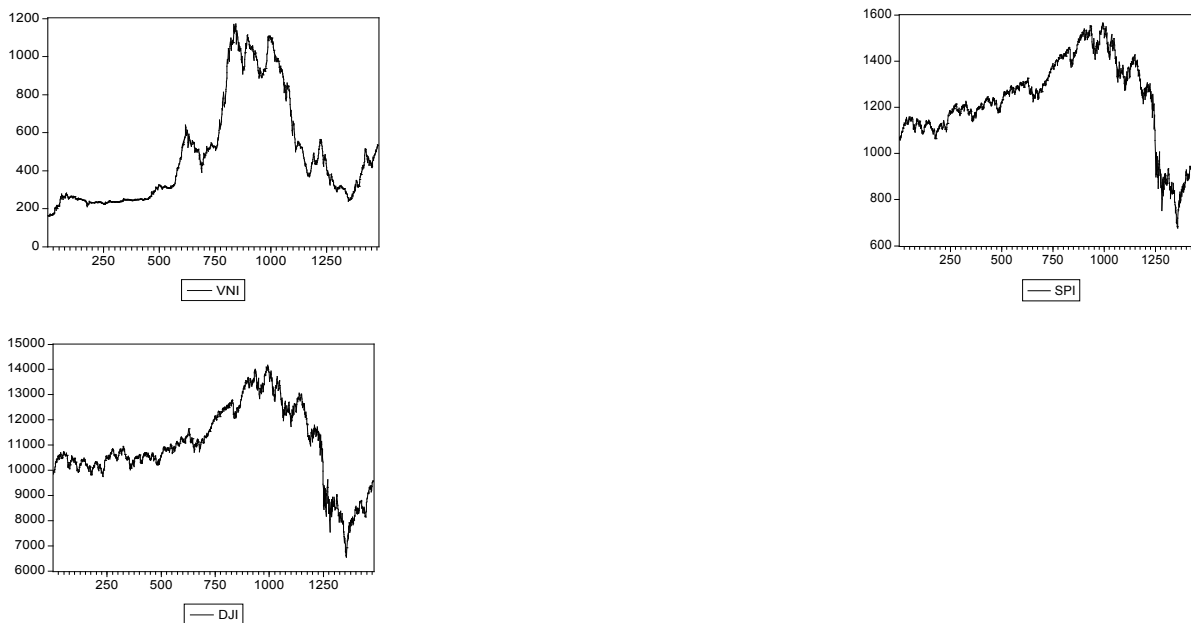
EMPIRICAL RESULTS

Findings in Table 3 accept the alternative of no unit roots (ADF test) in each sample, which support a stationary time series data. The author uses the SBC (Schwarz Criterion) by selecting its minimum value in choosing the suitable models of ARMA, GARCH-ARMA and EGARCH-ARMA. The results of LM tests show that there is no serial correlation in each model. The paper estimates GARCH-ARMA and EGARCH-ARMA models to examine the effects of S&P 500 and VN indices return. As shown in Tables 4 and 5 the estimation value of ζ_1 is far larger than b_1 means that the lagged conditional variance has a higher explanatory power than the lagged innovation. Moreover, all positive and significant coefficients of b_1 and ζ_1 indicate that the lagged conditional variance of stock returns has a positive impact on current conditional variance.

The multiple GARCH-ARMA and EGARCH-ARMA models also used to determine whether S&P 500 Index has an effect on VN-Index in terms of returns and variance as illustrated in Table 6. The results show that the lagged S&P 500 Index return has positive and strong effect (0.21) to the VN-Index return after the visit of Prime Minister Phan Van Khai to the U.S. from June 20, 2005 to August 28, 2009. The influence of S&P 500 Index on VN-Index return has jumped from 0.14 in the period June 2007 to June 2008 (after the visiting of President Nguyen Minh Triet to the U.S.) to 0.26 in the period June 2008 to August 2009 (after the visiting of Prime Minister Nguyen Tan Dung to the U.S.). In the whole period from June 2007 to August 2009, the effect of S&P 500 Index on VN-Index return is 0.22. In short, the effect of S&P 500 Index on VN-Index return is positive and getting stronger in recent years. It means that through the special political events and visiting of top leaders from the U.S. and Vietnam, the U.S. stock market has influenced the Vietnam stock market. However, there is no volatility effect of S&P 500 Index on VN-Index. Figure 4 illustrates the results.

Table 2: The Time Span of Datasets and Summary Statistics of the Daily Return of VN, S&P 500 and Dow Jones Indices from December 04, 2003 to August 28, 2009

Time	Index	Obs.	Mean	SD	Skewness	Kurtosis	Jarque-Bera
12/04/03–08/28/09	VNI	1482	0.0985	1.9495	0.4356	5.6442	478.63
	S&P 500	1482	0.008	1.4553	0.0482	14.5383	8221.47
	DJI	1482	0.0062	1.3357	0.3175	14.8753	8733.04
12/04/03 – 06/17/05	VNI	399	0.1143	1.5829	2.0410	18.4211	4230.62
	S&P 500	399	0.0347	0.6898	-0.1206	2.8657	1.26
	DJI	399	0.0192	0.6752	0.0414	2.8897	0.32
06/20/05 - 06/21/07	VNI	517	0.2959	1.9058	0.0021	3.9050	17.64
	S&P 500	517	0.0454	0.6474	-0.2868	5.0281	95.70
	DJI	517	0.0490	0.6234	0.3905	4.9221	92.72
06/22/07–05/30/08	VNI	243	-0.3602	1.7816	0.0830	3.5850	3.74
	S&P 500	243	-0.0256	1.3263	0.0561	3.6374	4.24
	DJI	243	-0.0212	1.2150	0.0262	3.4345	1.94
06/02/08 – 08/28/09	VNI	323	0.1081	2.4402	0.2790	3.3407	5.7524
	S&P 500	323	-0.0597	2.6740	0.1163	5.6799	97.38
	DJI	323	-0.0576	2.4295	0.3281	6.0801	133.49
06/22/07 – 08/28/09	VNI	566	-0.0930	2.1925	0.3286	3.7178	22.34
	S&P 500	566	-0.0451	2.1975	0.1119	7.2919	435.61
	DJI	566	-0.0419	1.9991	0.3231	7.7387	539.42
06/20/05 – 08/28/09	VNI	1083	0.09266	2.0688	0.1664	3.7654	31.44
	S&P 500	1083	-0.0019	1.6503	0.0633	12.0057	3660.52
	DJI	1083	0.00145	1.5080	0.3082	12.4946	4085.04

Figure 3: The daily returns of VN, S&P 500 and Dow Jones Indices

06/02/08-08/28/09

06/22/07-08/28/09

06/20/05-08/28/09
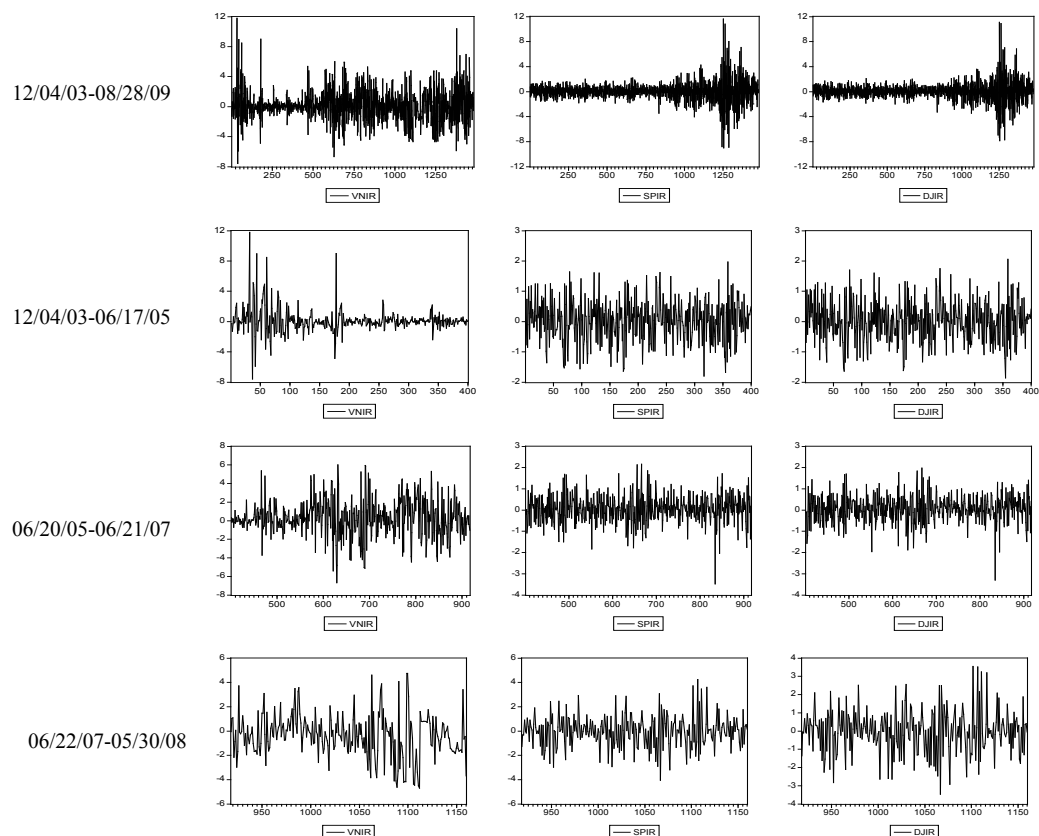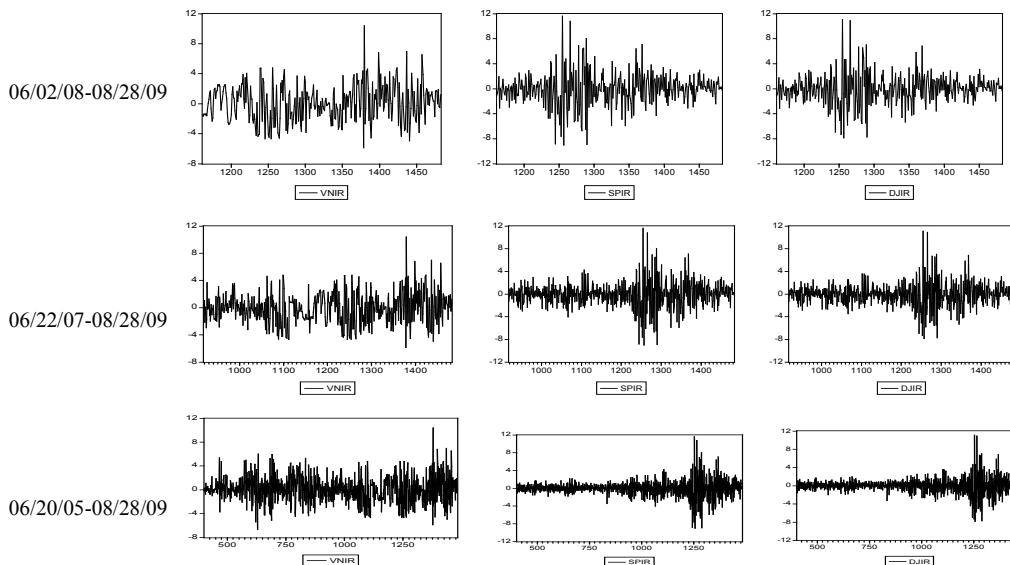
Table 3: Summary Statistics of Unit-Root, LM and ARCH-LM Tests for VN, S&P 500 and Jones Indices

Time period	Type	ADF	ARMA	SBC	LM	ARCH-LM	GARCH	SBC	ARCH-LM	EGARCH	SBC	ARCH--LM
	VNI	-17.49 ***	(3,1)	3.74	1.93	11.49 ***	(1,1)	2.73	0.429	(1,1)	2.76	0.075
12/04/03 –	S&P 500	-20.94***	(1,1)	2.11	0.38	0.90						
06/17/05	DJI	-20.97 ***	(2,2)	2.10	0.02	0.26						
	VNI	-16.34 ***	(2,2)	4.09	0.11	42.29 ***	(1,3)	3.85	0.029	(1,1)	3.85	0.889
06/20/05 -	S&P 500	-24.04***	(1,1)	1.99	1.12	0.15						
06/21/07	DJI	-23.19 ***	(1,1)	1.92	0.89	0.15						
	VNI	-11.99 ***	(0,1)	3.98	1.37	42.07 ***	(1,1)	3.84	0.241	(1,1)	3.86	0.024
06/22/07 –	S&P 500	-19.54***	(0,1)	3.37	0.82	0.01						
05/30/08	DJI	-19.11 ***	(0,1)	3.21	1.04	0.21						
	VNI	-14.27 ***	(0,1)	4.58	0.11	28.73 ***	(1,1)	4.49	0.971	(1,1)	4.51	2.960
06/02/08 –	S&P 500	-22.30***	(2,0)	4.78	0.24	9.29***						
08/28/09	DJI	-15.92 ***	(2,0)	4.58	0.58	10.05 ***						
	VNI	-18.57 ***	(1,2)	4.37	0.12	63.72 ***	(1,1)	4.20	0.003	(1,1)	4.20	0.854
06/22/07 –	S&P 500	-29.61***	(0,1)	4.37	0.83	21.38***						
08/28/09	DJI	-20.63 ***	(2,0)	4.19	0.99	24.31 ***						
	VNI	-25.67 ***	(0,5)	4.23	1.04	119.75 ***	(1,1)	4.01	0.623	(1,1)	4.01	0.649
06/20/05 –	S&P 500	-28.24***	(0,1)	3.80	1.93	64.82***						
08/28/09	DJI	-28.16 ***	(2,3)	3.63	0.02	68.98 ***						

*Note: ADF is the statistics for the Augmented Dickey Fller test with an intercept and trend at the level. SBC is Schwarz Criterion. LM is Breusch-Godfrey Serial Correlation LM test. *** denote significance at α=1% or less.*

Table 4: GARCH-ARMA result for VN -Index returns

	Model	Mean equation						Conditional variance equation				
		β_1	β_2	β_3	γ_1	γ_2	γ_5	b_0	b_1	ζ_1	ζ_2	ζ_3
12/04/03 – 06/17/05	GARCH(1,1)-ARMA(3,1)	-0.0797 ***		-0.1310 ***	0.9237 ***			0.0662 ***	0.6621 ***	0.4874 ***		
06/20/05 - 06/21/07	GARCH(1,3)-ARMA(2,2)		-0.4444 ***		0.1935 ***	0.3518 **		0.0557 ***	0.2580 ***	0.8251 ***	-0.6975 ***	0.6292 ***
06/22/07 – 05/30/08	GARCH(1,1)-ARMA(0,1)				0.2379 ***			0.2731 *	0.2717 ***	0.6523 ***		
06/02/08 – 08/28/09	GARCH(1,1)-ARMA(0,1)				0.3028 ***			0.1443	0.1883 ***	0.8011 ***		
06/22/07 – 08/28/09	GARCH(1,1)-ARMA(1,2)	0.9760 ***			-0.7171 ***	-0.2297 ***		0.1799 **	0.2428 ***	0.7341 ***		
06/20/05 – 08/28/09	GARCH(1,1)-ARMA(0,5)				0.2455 ***		0.0706 **	0.0811 ***	0.1779 ***	0.8154 ***		

*Notes: *, ** and *** indicate significance at 10, 5 and 1% levels, respectively.*

Table 5: EGARCH-ARMA Result for VN - Index Returns

		Mean equation						Conditional variance equation			
		β_1	β_2	β_3	γ_1	γ_2	γ_5	b_0	b_1	ζ_1	δ
12/04/03 – 06/17/05	EGARCH(1,1)-ARMA(3,1)	-0.7692 ***		- 0.1483 ***	0.9091 ***			- 0.4343 ***	0.6065 ***	0.9332 ***	0.0217
06/20/05 - 06/21/07	EGARCH(1,1)-ARMA(2,2)		- 0.4660 ***		0.1986 ***	0.3871 ***		- 0.1704 ***	0.2847 ***	0.9532 ***	0.0221
06/22/07 – 05/30/08	EGARCH(1,1)-ARMA(0,1)				0.2400 ***			- 0.2147 **	0.3851 ***	0.8878 ***	-0.0818
06/02/08 – 08/28/09	EGARCH(1,1)-ARMA(0,1)				0.3275 ***			- 0.1920 **	0.3835 ***	0.9266 ***	-0.0773 *
06/22/07 – 08/28/09	EGARCH(1,1)-ARMA(1,2)	0.9230 ***			- 0.6367 ***	- 0.2046 ***		- 0.2302 ***	0.3860 ***	0.9349 ***	-0.0706 **
06/20/05 – 08/28/09	EGARCH(1,1)-ARMA(0,5)				0.2507 ***		0.0654 **	- 0.1865 ***	0.3276 ***	0.9427 ***	-0.0222

Notes: *, ** and *** indicate significance at 10, 5 and 1% levels, respectively.

Table 6: The Effect of S&P 500 Index to VN-Index Return through Each Period

	The effect of Returns		The effect of Volatility	
	GARCH-ARMA	EGARCH-ARMA	GARCH-ARMA	EGARCH-ARMA
12/04/03 – 06/17/05	-0.0841**	0.0244	-0.2072	0.0056
06/20/05 – 06/21/07	0.0543	0.0845	0.1020	-0.0022
06/22/07 – 05/30/08	0.1402**	0.1439**	0.0863	-0.0044
06/02/08 – 08/28/09	0.2589***	0.2627***	0.0076	0.0007
06/22/07 – 08/28/09	0.2244***	0.2229***	0.0215	0.0021
06/20/05 –08/28/09	0.2095***	0.2109***	0.0117	0.0014

Notes: *, ** and *** indicate significance at 10, 5 and 1% levels, respectively.

ROBUSTNESS TEST: AN ANALYSIS OF THE EFFECT OF DOW JONES INDEX ON VN-INDEX RETURN

The paper performs robustness test to examine and analyze the influence and level effect of Dow Jones Index on VN-Index by using the GARCH-ARMA and EGARCH-ARMA and the same related procedures. The results show that the lagged Dow Jones Index return has positive and strong effect to the VN-Index return in recent years; however, there is also no volatility of Dow Jones Index to the VN-Index returns (see Table 7 and Figure 5). By comparing the effect of S&P 500 and Dow Jones Index to the VN-Index returns in each period time, the Dow Jones Index has stronger effect than S&P 500 Index (see Figure 4 and 5).

Figure 4: Time Period, Political Events and Effect of S&P 500 Index on VN-Index Return
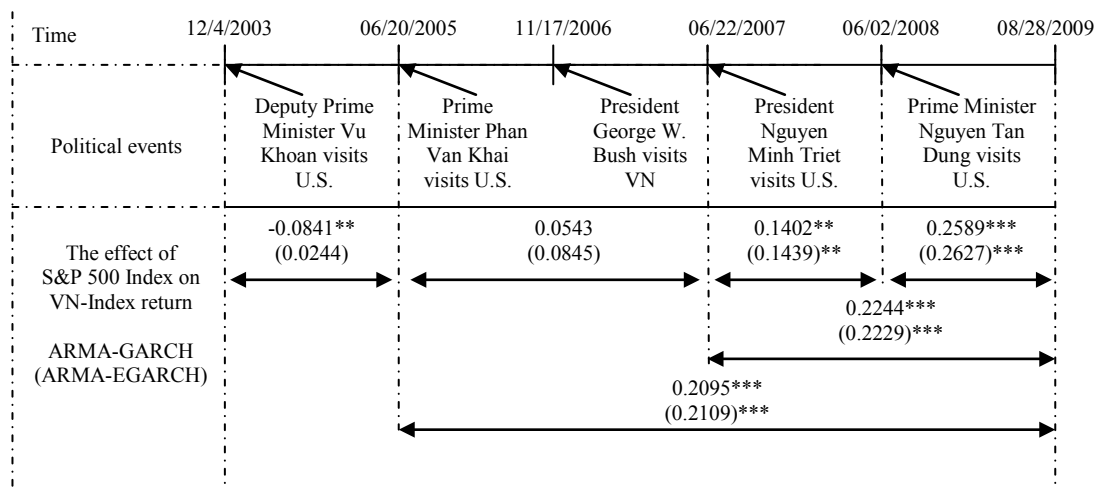
Table 7: The Effect of Dow Jones Index to VN-Index Return from Each Period

	The effect of Returns		The effect of Volatility	
	GARCH-ARMA	EGARCH-ARMA	GARCH-ARMA	EGARCH-ARMA
12/04/03 – 06/17/05	-0.0549	0.0430	0.0659*	0.0166
06/20/05 – 06/21/07	0.1161*	0.1367*	0.0837	0.0516
06/22/07 – 05/30/08	0.1465*	0.1533**	0.1160	-0.0011
06/02/08 – 08/28/09	0.2805***	0.2807***	0.0137	0.0013
06/22/07 – 08/28/09	0.2428***	0.2400***	0.0374	0.0029
06/20/05 –08/28/09	0.2309***	0.2299***	0.0186	0.0020

Notes: *, ** and *** indicate significance at 10, 5 and 1% levels, respectively.

Figure 5: Time, Political Events and Effect of Dow Jones Index on VN-Index Return
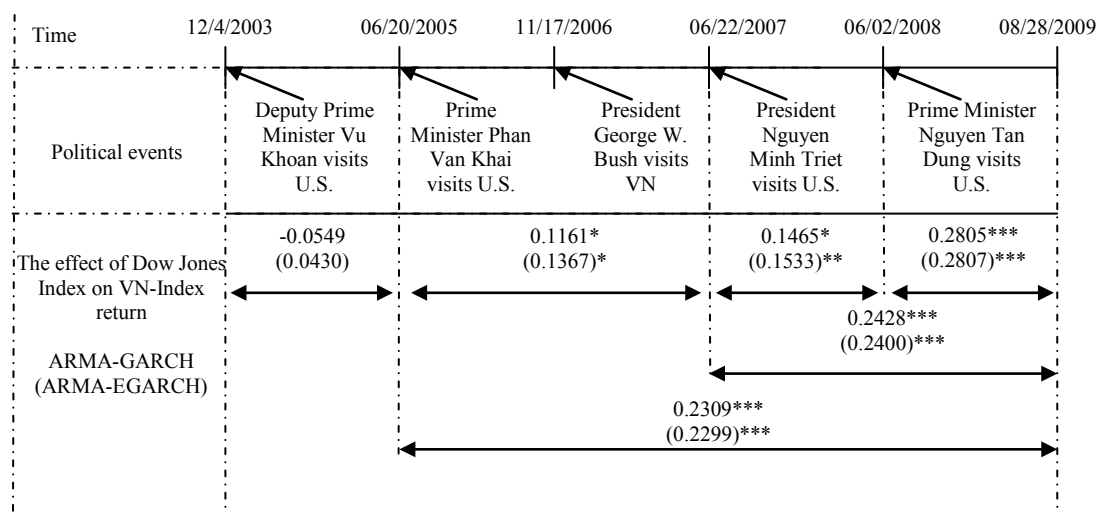
CONCLUSION

To understand the relationship between stock indices in developed and developing countries, the paper uses the multiple GARCH-ARMA and EGARCH-ARMA models to analyze the effects of returns and volatilities of S&P 500 Index to VN-Index return. The result shows that there are strong effects of returns of S&P 500 Index to VN-Index return. It indicates that the U.S. stock market has an increasing influence to the Vietnam stock market in recent years after the visits of top leaders from both countries. However, there is no volatility effect of S&P 500 Index on VN-Index. The results of robustness test using the Dow Jones Index to affect the VN-Index yield similar results having the U.S. stock market with increasing influences on the Vietnam stock market.

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AUDIT COMMITTEE INVOLVEMENT IN AUDITOR-CLIENT INTERACTIONS: THE CONGRUENCY OF AUDIT COMMITTEE, CHIEF FINANCIAL OFFICER AND EXTERNAL AUDITOR PERCEPTIONS

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ABSTRACT

There is a growing body of research on auditor-client interactions. While prior research provides insights regarding auditor-client interactions, there has been limited evidence or consideration of the involvement of the audit committee in the interaction process (Beattie, Fearnley, & Brandt, 2000; Gibbins, Salterio, & Webb, 2001; Gibbins, McCracken, & Salterio, 2007; McCracken et al., 2008). Research on auditor-client interactions to date has tended to focus on dyadic interaction between auditors and management without considering the input from audit committees. Therefore, there has been limited research examining the triadic relationship of the CFO, the auditor and the audit committee (Brown & Wright, 2008; McCracken et al., 2008). The change in corporate governance practices, particularly the strengthening of the audit committee role, might influence the auditor-management interaction process. Therefore, Nelson and Tan (2005) suggest that in order to provide a complete understanding of this interaction process, it is important to explore the involvement of the audit committee's interaction between the parties. In response to this need, a recent study by Beattie et al. (2008) examines auditor-client interactions by surveying audit committees in addition to CFOs and external auditors. However, the study explores recent experiences of discussions and negotiations on financial statement issues and does not directly examine the congruency of the perceptions towards the role played by the audit committees in the interaction process. As the ACs role is crucial to achieve high quality financial reporting, the lack of evidence from the triadic relationship of the CFOs, ACs and EAs reinforces the need to examine this topic (Brown & Wright, 2008; McCracken et al., 2008). Therefore, this study surveyed CFOs, ACs and EAs of Malaysian publicly listed companies to elicit their perception of the involvement of audit committees in auditor-client interactions to resolve contentious accounting issues. A total of 100 usable responses were received. The study found some divergence in the perceptions of EA, CFO and AC members concerning the role of audit committees. The findings suggest that ACs tend to perceive that they suggest solutions to resolve the issues compared to CFOs and EAs. Compared to the other groups, EAs are less likely to perceive that ACs monitor the contentious issues from the beginning. Finally, the EAs tend to perceive that audit committees side with management.

KEYWORDS: audit committee; external auditor; chief financial officer; auditor-client dispute resolution.

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MEDLEY OF ORGANIZATIONAL CHANGE MODELS; AN AFRICAN PERSPECTIVE

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ABSTRACT

Organizational Dynamics, Corporate Culture and how changes affect leadership as well as the employee ranks is a major area of interest to scholars especially at the face of recent global economic problems. With the growth in globalization, organizations are forced to continuous changes as they adjust to their global market environment, African market not excluded.. Based on rigorous literature review and discussions with scholars and practitioners This study synthesizes various organizational development and change management modules in contemporary African context in an effort to provide a clear and concise understanding of scope and complexity of organizational change and development systems. The question of applicability and practicability of fundamental theories and research outcomes in this area is the major driver of this study. Findings are limited to cases /issues associated with organizational change and development models within the American corporate culture.

INTRODUCTION

Organizational Change Theory has evolved from different social studies disciplines most of which looked at how changes has and is taking place among social groups. But they have not maintained the leadership role in looking at the application to social and workplace needs under specific cultural context such as Africa's with very convincing reasons. Change has both positive and negative impact on those affected by change and it raises sometimes ethical and legal questions as the result. For this reason, management practitioners and scholars, like applied social scientists, must examine organizational change issues carefully if they are to be viewed as effective and if the organizations they lead are to be viewed as socially responsible and successful. Organizational Change Management has evolved over the years and is now seen as a particular set of skills, tools, methods and techniques that when used correctly can bring about effective change However the success of these modules has been very Eurocentric or purely American context based. The nature of global markets American businesses now operate in demand that organizations continuously evolve and change in order to succeed. The ability to successfully understand change management theories will be a significant competitive advantage for American organizations with operations in Sub-Saharan African region.

Africana Perspectives

Globalization began to be prominent in the aftermath of the oil crises in the seventies. This gave new impetus to technological innovations , increased international financial transactions, as oil producing countries invested their surging revenues in industrialized countries, mainly in European currency markets and the United States dollars, while financing loans to developing countries ,changed the structure of trade to lower proportion of manufactured goods, and higher proportion of services and technology products In this process, American and Western European businesses are the major actors who actually move their goods, services, money and work globally changed the relative costs of production , productivity and of course styles of leadership.
In the case of Sub-Saharan region all these developments were interrelated, and their effects were further strengthened through floating exchange rates. Before the first oil crisis in 1973, the most important stabilizing pillar of the postwar monetary system, the dollar-gold equivalence standard, had collapsed in the early seventies.. Floating exchange rates vitalized speculation in currency markets and created

insecurity within national economies and markets. When growth slowed and unemployment increased, protectionist tendencies also emerged. This socio-economic changes affected consumer behavior worldwide but with different momentum in individual African countries.

During the era of nationalism of the fifties and sixties, African countries witnessed rapid growth , mass production, mass sales and mass consumption became firmly established features. This allowed department stores, supermarkets, and specialty shops all to enjoy fast-expanding sales. But after growth slowed as a result of the oil crises, consumers became less interested in simply acquiring more possessions, and their desires began to show more diversity and individuality. For American businesses and leadership, this new environment of continuous change meant restructuring, thus modules such as; Management by Objectives, to empower and encourage participative leadership. Total quality management process and applications to create a mind set of quality in production and service sector particular in developing economies Flexible, just-in-time production systems (to supply a greater variety of goods in smaller lots, and to offer rapid response to market impulses with minimal inventories) moving production closer to the consumer and securing access to the local market (replacing exports with FDI) Diversification of operations (shifting resources out of declining sectors or regions and into promising ones, and improving risk management). Thus forces to participate in globalization. People are linked together economically and socially by trade, investments and governance. These links are spurred by market liberalization and information, communication and transportation technologies. With varying results

Medley of Organizational Models

 Early Christian literature and thinking viewed society as constant in change moving toward a final judgment that would result in a pure and just social order. The concept of creating conditions that assure individual development and promote social justice is a part of this theory. Thus one of the earliest theories of change soon after came Evolutionary theories: The emphasis on these theories is on progress rather than perfectibility. Quickly adopted in some academic areas, they are characterized by impersonal and instrumental relationships. Cyclical theories: According to this approach, all societies, organizations, etc., have periods of rise and fall, growth and decline. These concepts of change address "variably or creatively recurrent patterns."

While we can see the influence of all three of the above theories on methodologies currently in use in addressing organizational change, we can also recognize the influence of theories built around major factors of change. Economic theory: Based on the concept that economic change is a prime mover of social change. It remains debatable because it can be argued that ideological commitment and revolutionary politics are preconditions of economic change. Ideational theory: This theory emphasizes the primacy of ideas, which are, according to it, the key determinants of social change. It can be convincingly demonstrated that ideational change, and a degree of commitment, is a precondition or at least a major supporting factor of all large-scale change. The debate, however, relates to the fact that socio-economic and cultural influences are propitious for the effective transmission and acceptance of ideas.

Technological theory: There is little doubt today that social change can be directly correlated to technological change. The debate is that far-reaching social change can occur without any technological change and that technology itself must adapt to the societies where it is promoted. Conflict theory: Conflict between different groups and segments builds up pressures and provides an impetus for change. Opposition and conflict between different segments of the social system and culture can thus be viewed as major change producing factors. The debate of the theory is based on the fact consensus and cooperation are equally important components of successful large-scale change.

Adaptation and tension-management theories: Adaptation to the environment is viewed as the principal function of change in this theory. Culture, by its modern definition, is regarded as an adaptive mechanism, and it contributes towards adaptation iof the social system to both the natural and the social environment. The debate here is that no proof has been offered to suggest that social change is oriented to total adaptation since it may have certain non-adaptive elements also. Organizational change models and theories, emphasize the relation between change and adaptive behaviors more generally, the prosaic nature of change, the ways in which normal and ordinary processes, combine with an anxious society to produce something new, and the implicit altruism of organizational success or failure. Most models conceptualize organizational change in regard to organization-wide change, as opposed to smaller changes such as adding a new person, modifying a program, etc. They exemplify that organization-wide change might include a change in mission, restructuring operations such as , restructuring to self-managed teams, layoffs, new technologies, mergers, major collaborations, "rightsizing", new programs such as Total Quality Management, re-engineering, etc. Some scholar and experts refer to organizational transformation. Often this term designates a fundamental and radical reorientation in the way the organization functions

An organization's culture has a significant effect on how its employees view their organizational responsibilities and their loyalty to the organization. "If an organization is to meet the challenges of a changing world, it must be prepared to change everything about itself except its basic beliefs as it moves through corporate life…The only sacred cow in an organization should be its basic philosophy of doing business" (Collins & Porras, 1994, p. 81). Collins and Porras found that companies sometimes get into trouble by confusing core ideology with specific, non-core practices. Arguing that companies can cling too long to non-core items, and that things should be changed in order for the company to adapt and move forward, Collins and Porras suggest that while a visionary organization should carefully preserve and protect its core ideology, it must be open for change and evolution of the manifestation of its core ideology. According to Collins and Porras (1994), it is absolutely essential not to confuse core ideology with culture, strategy, tactics, operations, policies, and other non-core practices. Collins and Porras continue to assert that over time, cultural norms, strategy, product lines, goals, competencies, administrative policies, organizational structure, and reward systems must change. They submit that ultimately, the only thing an organization should not change is its core ideology.

Organizational Drive for Progress

Core ideology in an organization works hand in hand with a relentless drive for progress that impels change and forward movement in all that is not part of the core ideology (Collins and Porras, 1994). The drive for progress arises from a deep human urge to "explore," to "create," to "discover," to "achieve," to "change," and to 'improve" (p. 82). The "drive for progress is not a sterile, intellectual recognition that progress is healthy in a changing world or that healthy organizations should change and improve or that we should have goals; rather, it's a deep, inner, compulsive, almost primal drive" (pp. 82 & 83). A useful perspective regarding what to change comes from the management guru and business/organizational observer and philosopher Peter Drucker (Burke, 2002). Drucker (1994) argues that highly successful companies that do the right things often end up doing them "fruitlessly," and decline ensues. This "paradox," as Drucker called it, set the stage for his articulation of what he labeled "the theory of the business."

> It is a drive articulated by William E. Boeing during the early days of the company:
> It behooves no one to dismiss any novel idea with the statement that it "can't be done." Our job is to keep everlastingly at research and experiment, to adapt our laboratories to production as soon as practicable, to let no new improvement in flying and flying equipment pass us by. (Collins & Porras, 1994)

Indeed, Collins and Porras (1994, p. 84) advance that the drive for progress is never satisfied with the "status quo, even when the status quo is working well." Like a persistent and incurable itch, the drive for progress in an organization is a never-ending process, if the organization is highly successful. "We can always go further; we can always find new possibilities;" as Henry Ford said, "you have got to keep doing and going."

This theory is a set of assumptions about how a given business can succeed in a particular environment and marketplace (Burke, 2002). According to Drucker, these assumptions "shape any organization's behavior, dictate its decisions about what to do and what not to do, and define what the organization considers meaningful results" (Burke, p. 144). Like core ideology, the drive for progress is an internal force (Collins & Porras, 1994). The drive for progress does not wait for the external world to say "it is time to change" or "it is time to improve" or "it is time to invent something new" (p. 84). In times of trouble for a business, Drucker argues that what to change is the theory of the business, the fundamental beliefs and assumptions about what causes what and how success is defined (Burke, 2002). Companies therefore get into trouble when "the assumptions on which the organization has been built and is being run no longer fit reality" (Burke; Drucker, 1994, p. 95).

Through the drive for progress, an organization displays a powerful mix of "self-confidence" combined with "self-criticism" (Burke, 2002, p. 84). Self-confidence allows an organization to set audacious goals and make bold and daring moves, sometimes flying in the face of industry conventional wisdom or strategic prudence; it simply never occurs to such an organization that it can not beat the odds, achieve great things, and become something truly extraordinary (Collins & Porras, 1994). As such, the drive for progress pushes from within for continual change and forward movement in everything that is not part of the core ideology.

Edelman (2006) has twelve strategies for organizational cultural paradigm shift. Edelman outlines the following strategies to help organizations nurture a positive organizational culture:

1. Encourage and reward workers who are willing to go the extra mile.
2. Maintain open lines of communication at all levels.
3. Reduce or eliminate micromanagement.
4. Maintain competitive salaries and benefits.
5. Encourage ethical decision-making at all levels of the organization.
6. Leadership must be mission-driven rather than ego-driven.
7. Downsize with dignity and professionalism.
8. Make low turnover rates the goal. .
9. Show them the money … and the freedom.
10. Build and maintain a superior reputation for excellence.
11. Value people equally as part of the process.
12. Never stop learning. When people feel empowered and supported in reaching their goals and objectives, they are far more likely to stick around when the going gets tough (Edelman).

According to Burke (2002), Drucker's (1994) theory of business has three parts associated with it:

1. Assumptions about the external environment of the organization, such as society and its structure, the market, the customer, and technology
2. Assumptions about the organization's mission, purpose, and raison d'etre
3. Assumptions about the organization's core competencies, that is, the skills and abilities required to accomplish the mission (Burke, 2002).

Drucker (1994) as cited by Burke (2002) suggests the following four specifications of, or criteria for, a valid theory of the business:
1. The three assumptions listed above must fit reality.
2. All three assumptions must fit or be congruent with one another.
3. The theory of the business must be known and understood by all organizational members.
4. The theory needs to be tested constantly.

Burke (2002) stated that although Drucker (1994) did not label his ideas as such, it was clear that he was addressing transformational or discontinuous change. Drucker's argument, as Burke postulates, was that tinkering with the organization when its theory of the business is out of sync with what is going on in the external environment will inevitably lead to business failure. According to Burke, Drucker theorizes that organizations that have experienced considerable success in the past tend to hold on to their assumptions and theories entirely too long; that is, persisting when reality has already changed. Burke (2002) cited a recent study by Audia, Locke and Smith (2000) that supports this implication quite dramatically. Their study found:

> That greater past success led to greater strategic persistence after a radical environmental change and such persistence induced performance declines. The laboratory study also demonstrated that dysfunctional persistence is due to greater satisfaction with past performance, more confidence in the correctness of current strategies, higher goals and self-efficacy and less seeking of information from critics (Burke).

The content of change, according to Burke (2002), can consist of a variety of possibilities. Burke uses the discontinuous category of change compared with the continuous category to differentiate content. With discontinuous change, Burke associates his content more with transformational factors, such as the external environment, mission, purpose, and strategy, or in Drucker's (1994) language, the fundamental assumptions or theory of the business. With continuous change, Burke's content is concerned more with day-to-day operations and transactions, and the focus is on factors such as products and services, work flow processes, organizational structure, and information technology.

The model by Porras and Robertson (1992) presented examples of the content for organization change: vision, technology, physical setting, organizational arrangements, and on-the-job behavior (Burke, 2002). According to Burke, the organizational models covered provide more examples of content: purpose, rewards, helpful mechanisms, leadership, tasks, informal organization (culture), mission, and strategy. Finally, Burke (2002) notes that the more successful an organization has been in the past, the more senior managers seem to hold on to the business content that led them to their current level of success, in spite of radical changes in their organization's external environment. Burke cited the example of General Motors' insistence on business as usual when the Japanese were encroaching on their territory as an example. Burke concludes that change comes the hardest for organizations that have experienced success in the past; asserting that the values of staying in touch with one's external environment and listening to criticism cannot be overemphasized when it comes to change that is needed for future success and survival.

THE THEORETICAL FRAMEWORK FOR CHANGE PROCESS

In an attempt to integrate the pluralistic quality of theory about organization change, Van de Ven and Poole (1995), using the key words change and development, conducted a computerized literature search across disciplines (Burke, 2002). Burke said that Van de Ven and Poole identified 20 different theories of change and development and clustered them into four "ideal-type" development theories. These four schools of thought are life cycle theory, teleological theory, dialectical theory, and evolutionary theory (Burke, 2002).

*The Theory of Life Cycle :*This school of thought of the life cycle theory, according to Burke (2002), is that an organization follows a single sequence of stages or phases, which cumulatively and conjunctively are acquired in their earlier stages and retained in the later stages; and are related to a common underlying process (Burke; Van de Ven & Poole, 1995). Since change is inevitable, life cycle theory rests on the metaphor of organic growth. This posits that an organization is a living organism and that although an organization may undergo change as it passes through its phases, perhaps in both form and function, its identity is maintained throughout the process.

Greiner (1972) said there are five stages in an organization's life cycle: "creativity" the start-up phase, "direction" where more focus is needed, "delegation" as the organization grows larger, "coordination" with differentiation of functions, integration is then required, and "collaboration," working together more effectively as a total entity (Burke, 2002). Each of these stages culminates in a different dialectical crisis "of leadership, autonomy, control, red-tape, and question marks which Burke asserts was Greiner's symbol for not knowing what this stage would be.

The Teleological Theory: Rooted in the philosophical doctrine of teleology, this theory according to Burke (2002) assumes that an organization is purposeful and adaptive. Accordingly, the development of an organization is toward a goal or some end state (Burke). "Proponents of this theory view development as a repetitive sequence of goal formulation, implementation, evaluation, and modification of goal based on what was   learned or intended by the entity" (p. 148). The point as postulated by Burke is that organizations change as goals and purposes change; since this process is ongoing and iterative, this indicates that organizations are never static or in permanent equilibrium.

The Dialectical Theory: This theory assumes that organizations exist "in a pluralistic world of colliding events, forces, or contradictory values that compete with each other for domination and control" (Burke, 2002; Van de Ven & Poole, 1995). Burke advances that organizational change occurs as two different points of view collide and some resolution is reached. The desired resolution is a creative synthesis of the two opposites, or at least the two sufficiently different positions.
Creative synthesis is usually mutually beneficial, but this type of outcome is very rare; therefore, organizational change that occurs as a consequence of a dialectical process may be either good or bad (Burke).

The Evolutionary Theory: This school of thought theorizes that organizational change proceeds, as a result of biological evolution, in accordance with the cycle of variation, selection, and retention among organizations' competing resources in a designated marketplace or environment (Burke, 2002). Burke propounds that competition for scarce environmental resources between entities inhabiting a population generates this evolutionary cycle (Van de Ven & Poole, 1995). Burke explains organization change in terms of an ongoing, evolving process. As in biological entities, this evolution is constant.

According to Burke (2002), Van de Ven and Poole (1995) argued persuasively that although these four schools of thought may seem discrete, in reality, they are not. Van de Ven and Poole as cited by Burke developed a framework of 16 possible explanations of organization change and development (Burke, 2002). Van de Ven and Poole conclude that a major extension of their framework of 16 explanations of organizational change and development is to develop and study nonlinear dynamics systems models, for example, chaos as an alternative explanation (Burke).

The Applications Process of Organizational Change: Before initiating organizational change process, it is important to determine as clearly as possible how ready people in the organization are to accept and implement the change (Burke, 2002). Burke states that one way to assess the degree of readiness is to conceptualize the potential according to what the social and psychological costs may be. Burke submits

that both clarity of change direction and motivation are necessary for acceptance and commitment on the part of organization members.

According to Burke (2002), Lewin (1974) concluded that to be successful, the change process needed to follow a three-step procedure: (a) unfreezing, (b) moving, and (c) freezing at a new level (or refreezing). The first step is to unfreeze the present level of behavior. This step according to Lewin, can take many forms and needs to be tailored as much as possible to the particular situation (Burke, 2002). To reduce prejudice, for example, Burke said, this first step of unfreezing might be catharsis (Allport, 1945), or participation in a series of sensitivity training sessions (Rubin, 1967). The second step involves moving toward the new desired level of behavior. This might take the form of (a) training managers to behave differently toward their subordinates in order to improve customer service, or (b) implementing action plans for changing work processes or improving information systems (Burke, 2002). The third step, refreezing, establishes ways to make the new level of behavior "relatively secure against change" (Burke, 2002; Lewin, 1947, p. 344). This step could include installing a new reward system to reinforce the new, desired behavior (Lawler, 1977) or restructuring certain aspects of the organization so that new accountability arrangements and new ways of measuring performance are put into place. Schein (1987) has appropriately pointed out that although Lewin's steps may convey discrete actions, the opposite is true. Schein argues that the steps overlap and the process is more elaborate and complicated than a mere three steps. Schein expanded on the Lewin's three steps.

The Stages of Change Process

Stage 1: Unfreezing – This is the stage where the motivation and readiness to change is created. Schein (1987) asserts that there are at least three ways of unfreezing an organization. Burke (2002) outlines the following steps:

1. Disconfirmation or lack of confirmation: This is where the need for change is demonstrated.
2. Induction of guilt or anxiety: This is where the need for change, guilty feelings, and general anxiety are induced into the members of the organization.
3. Creation of psychological safety: Creating disconfirmation and inducing guilt and anxiety are not enough to accomplish the unfreezing stage (Burke, 2002). Schein (1987) contends that for people to move to the second stage and actually change, they must believe that doing so will not cause feelings of embarrassment, humiliation, or loss of face or self-esteem.

Stage 2: Changing – According to Schein (1987) this stage involves cognitive restructuring. The organizational members need to see things differently. Burke states that two processes are necessary to accomplish this stage:

1. Identification with a new model, mentor, leader, or even a consultant to "begin" to see things from that other person's point of view.
2. Scanning the environment for new, relevant information. This is where members of the organization seek relevancy and best benchmarks.

Stage 3: Refreezing – This stage involves the integration of the change for organizational members, and for Schein (1987) has two parts:

1. Personal and individual – This is where the new behavior is linked with one's self-concept. Schein notes that this process requires considerable practice.
2. Interpersonal – This is where the organization makes sure that the new behavior fits well with others who are significant in the organization and that these other significant individuals are comfortable with the new behavior from the changed person (Burke).

According to Burke, Ronald Lippitt also elaborated on the three-step procedure (Lippitt, Watson & Westley, 1958). Supporting Schein's (1987) point, Lippitt and his colleagues thought that phase was a

better term to use, because the overlap occurs across the three steps. Lippitt proposes the following five phases:

1. Development of need for change (unfreezing)
2. Establishment of a change relationship between the change agent and the client organization
3. Working toward change (moving)
4. Generalization, stabilization, and change (refreezing)
5. Achieving a termination in the relationships (Burke, 2002).

The Eight-Stage Change Process

Kotter (1996) submits that the methods used in successful transformations are all based on the fundamental insight that major change will not happen easily for a long list of reasons. Kotter posits that organizational needed change can stall due to "inwardly focused cultures, paralyzing bureaucracy, parochial politics, a low level of trust, lack of teamwork, arrogant attitudes, a lack of leadership in middle management, and the general human fear of the unknown" (p. 20). Kotter (1996) advances that for organizational change to be successful and effective, a method designed to alter strategies, reengineer processes, or improve quality must address these barriers and address them well. Kotter summarizes the steps needed for producing successful change of any magnitude in organizations. According to Kotter organizational change process has eight stages, each of which is associated with one of the fundamental errors that undermine transformation. Kotter outlined the steps for organizational change as follows: (a) establishing a sense of urgency, (b) creating the guiding coalition, (c) developing a vision and strategy, (d) communicating the change vision, (e) empowering a broad base of people to take action, (f) generating short-term wins, (h) consolidating gains and producing even more change, and (i) institutionalizing new approaches in the culture.

Kotter surmises the first four steps in the transformational process as the stage that helps defrost a hardened status quo, while the next three stages are to introduce many new organizational practices. Kotter suggests the last step as the stage that grounds the changes in the corporate culture and helps sustain them; concluding that culture is not something that organizations manipulate easily. Kotter argues that organizational culture changes only after successfully altering people's action, after new behavior produces some group benefit for a period of time, and after people see the connection between the new actions and the performance improvement.

The Successful Change Models

According to Kanter, Stein and Jick (1992), company survival depends on courage and imagination; the courage to challenge prevailing business models, and the imagination to invent new services, new products and new markets. The challenge of change is not simply a large scale conceptual and philosophical issue, it is every bit an immediate, practical issue, such as choosing first steps and concrete actions.

Organizational success can have two very different interpretations, both of which are relevant. First, success of the organization in its market, a matter of its relationship with customers and other stakeholders (Kanter et al., 1992); and it can mean, second, the activities and actions required to bring about those changes. What happened to get there and what was done to stay there are preeminently the concerns of the change strategist (Kanter et al.). External success goals suggest environmental interventions, which according to Kanter et al., aim to modify the organization's relation to its supply or demand markets and, therefore, to change the organization's identity. The internal success goals suggest operational intervention, which according to Kanter et al. aim to modify the organization's internal structures, process and systems, and its use of available resources and opportunities to change the organization's coordination or culture. Kanter et al. advance that how these initiatives are undertaken

varies greatly, and they assert that it is here that the concerns and actions of the change strategist become the core of the issue of change implementation.

The "Bold Strokes" and "Long Marches"

According to Kanter et al. (1992) leaders engage in two types of actions that help promote and sustain organizational success; they called these actions "bold strokes" and "long marches." Kanter et al. posit that bold strokes are big strategic decisions or major economic initiatives. Long marches on the other hand were described by Kanter et al. as more operational initiatives, such as combining several divisions, transforming quality or customer relationships, or enhancing organizational effectiveness. Kanter et al. (1992) propound that productive organizational changes, which increase a company's capacity to meet new challenges, tend to come about through a combination of five major building blocks. They outline these building blocks as follows:

Event 1: Grassroots innovations ,Event 2: Crisis or Galvanizing, Event   3:   Change   Strategists   and Strategic Decisions,   Event 4: Individual "Implementors" and change champions   Event 5: Action Vehicles –   Kanter et al. (1992) conclude that organizations always have to steer a course between the need to express change in concrete actions and the danger of falling into faddism and action for its own sake; and too great emphasis on the big picture, with the danger that it becomes just another campaign that will pass in time. It helps to keep in mind that journeys are not simply to somewhere; they are also from somewhere, almost by definition, somewhere unsatisfactory (1992). For Kanter et al. a number of tactics that must become standard operating procedures for any organization to achieve significant organizational change is required. He. called this the ten commandments of change and outline them as follows:

1. "Analyze the organization and its need for change." For change process to take hold, managers must understand the organization's operational systems and how they will affect the proposed changes, and be able to craft an effective implementation plan (Nadler & Tushman, 1989; Kanter et al.).
2. "Create a shared vision and common direction." According to Kanter et al., one of the first steps in engineering change is to unite the organization behind a central vision. This is where the organization attempts to articulate what a desired future for the company would be.
3. "Separate from the past." In order to move forward, it is critical that the organization disengage from the past. Kanter et al. submit that it would be difficult for the organization to embrace a new vision of the future without first isolating the structures and routines that no longer work within proposed change.
4. "Create a sense of urgency." A change leader must generate a sense of urgency around the new vision without appearing to be "crying wolf." This is the critical rallying point behind the organization's need to change (Kanter et al.).
5. "Support a strong leader role." A strong leader with the support of the organization, "change advocates" or "magic leaders" (Nadler and Tushman, 1989, 1999; Kanter et al.) play a critical role in creating the organization's vision, motivating employees to rally around the vision and in crafting the organizational structure.
6. "Line up political sponsorship." "Leadership alone cannot bring about large-scale change" (Kanter et al.). Success depends on the organizational leadership rallying a broad support base with other individuals who act first as followers, helpers, and finally as co-owners of the change (Nadler & Tushman, 1989; Kanter et al.).
7. "Craft an implementation plan." According to Kanter et al. the organization must have a "road map" for the change effort (Beckhard & Harris, 1987) detailing every step of the change process.
8. "Develop enabling structure." "These mechanisms may be part of the existing corporate structure or may be established as a full-fledged parallel organization (Stein & Kanter, 1980; Kanter et al.).

Enabling structures designed to facilitate and spotlight change range from the practical to the symbolic.

9. "Communicate, involve people, and be honest." Change leaders should communicate openly and seek out the involvement and trust of people throughout their organizations. These approaches are potent tools for overcoming resistance and giving employees a personal stake in the outcome of the transformation (Beer, 1980; Kanter et al.).

10. "Reinforce and institutionalize the change." Commitment to the process of transformation must be seen as a top priority of the change managers and leaders. Tichy and Devanna (1986) describe this as the phase for institutionalizing change, as "shaping and reinforcing a new culture that fits with the revitalized organization (Kanter et al.).

Going from A to Z Steps

"An organization, constantly in the process of development, will degenerate without attention" (Ouchi, 1981). If the glue that holds the organization together is a constant state of excitement, Ouchi submits, the romance will wear off after a short period of time and the institution will fall apart. Ouchi characterizes the steps in initiating a change to theory Z as involving the development of people's skills, the creation of new structures, incentives, and a new management philosophy. Ouchi outlines the following steps:

Step 1 – "Understand the Type Z organization and Your Role." Ouchi (1981) described this step as the stage where the management should openly solicit skepticism to the new change process. Ouchi suggests that managers invite skepticism since this is fundamental to eventually building trust. Secondly, Ouchi suggests that a more fundamental reason to invite skepticism has to do with the development of trust. This is the trust that comes from knowing that, fundamentally, the leaders and followers within the organization desire a more effective working relationship together and that neither desires to harm the other (Ouchi). Of the many ways in which openness can be encouraged, the only one that really matters, according Ouchi, is by setting an example. Ouchi propounds that the leader who frankly disagrees with others and who goes out of his way to create an atmosphere where differing opinions are welcomed will produce change.

Step 2 – "Audit Your Company's Philosophy." According to Ouchi (1981), a statement of the organization's objective, its philosophy, gives people a sense of values to work and live by. This statement suggests ways in which people will behave in the organization and a way the organization behaves in response to its people (Ouchi). Ouchi makes the point that the statement should not be to define what the organization should be, but what it is.

Step 3 – "Define the Desired Management Philosophy and Involve the Company Leader." Ultimately, Ouchi (1981) submits, a process of organizational change cannot succeed without the direct and personal support of the top person in the hierarchy. Top management is best served by promoting a decision-making authority that permits a development of trusting relationship with subordinates.

Step 4 – "Implement the philosophy by creating both structures and incentives." Ouchi's idea of a completely efficient and perfectly integrated organization is one that has no organizational chart, no divisions, and no visible structure. While most organizations need structure to guide them towards cooperation and subtlety, "towards the long view when other conditions dictate the opposite," it is no disgrace for a group of managers to admit their frailties and to erect formal committees, reporting relationships and divisions of people and tasks that will support their long-term desire to learn how to work together (Ouchi).

Step 5 – "Develop interpersonal skills." According to Ouchi, the skills that involve dealing with clients, customers, and family are the kind of skills people will need to learn in order to adapt to colleagues and

coworkers in a theory Z organization. These skills are central to the Z way of doing business, since working cooperatively and considerately are not just a means for soothing egos, but will become a way of life (Ouchi, 1981).

Step 6 – "Test yourself and the systems." Here Ouchi suggests that top level management must test themselves to determine how much of the philosophy has taken hold within themselves before implementing theory Z management to lower level management and other employees.

Step 7 – "Involve the union." Ouchi suggests that if the organization going through the change process is in a unionized environment, that it will have to involve the union in its plans. Since dealing with unions is among the most "emotionally-charged" elements in a process of organizational change, Ouchi strongly recommends bringing the union on board with the new changes.

Step 8 – "Stabilize employment." Ouchi advances that stability of employment comes in part as a direct outcome of policy. "A great deal of voluntary termination by employees who have better alternatives can be overcome by providing them with a work environment that offers equity, challenge, and participation in decisions about their work" (p. 100).

Step 9 – "Decide on a system for slow evaluation and promotion." Ouchi (1981) suggests that slowing down the process of evaluation and promotion is vital to underscore to employees the importance of long-run performance.

Step 10 – "Broaden career path development." Research results to date suggest that managers who continue to circulate across jobs within an organization, without hierarchical promotion, retain their enthusiasm, their effectiveness, and their satisfaction at a level almost as high as that of the "stars" who continue to move both around and up (Ouchi, 1981).

Step 11 – "Preparing for implementation at the first level." If employees at the bottom of the organization pyramid are to be included in cooperative and trusting working relationships that depart sharply from their current state, they will have to overcome the deepest sort of skepticism (Ouchi, 1981). This skepticism, according to Ouchi, can be overcome only through great effort and only with the most consistent approach from top management.

Step 12 – "Seek out areas to implement participation." Ouchi suggests that management seek out and solicit employees as a group for areas to implement participation of Theory Z.

Step 13 – "Permit the development of holistic relationships." According to Ouchi (1981), holistic relationships are a consequence of, rather than a cause of, organizational integration. They help to maintain the egalitarian nature of the organization by bringing supervisors and subordinates together as temporary equals and demonstrate that the distance between them is neither great nor impassable (Ouchi). Ouchi recommends talking to employees about how the organization is working against competitors, success, and concerns. "Be prepared to ask as well as answer some tough questions" (Ouchi). These work related issues hold the key to holistic relations and keep them free of any organization paternalism, Ouchi surmises. In conclusion, Ouchi (1981) advances that the process of participative management, once begun, is largely self-sustaining because it appeals to the basic values of all employees. This process, Ouchi asserts, promotes greater productivity and efficiency through better coordination and flourishes unless intentionally stopped by either a disenchanted or threatened union or top management.

CONCLUSION

No question that American and western scholars have contributed immensely to the literature of organizational change and leadership, however the interaction and effectiveness of the American and African management and leadership practices in emerging markets and developing economies of sub-Saharan have not been very inclusive enough in the context of how African cultural environment affect management of organizational . Many of the modules reviewed in this paper show strong euro centrism to an extent of doubt on how they work in Africa. Theoretical medley of organizational dynamics can be usefully conceptualized in Terms of process and content. Process refers to how change occurs. Content theories describe what actually changes in the organization. These theories and models are analysis of organizational change that seek to explain why organizations change as well as what the consequences are of change. Empirical evidence on both questions is fragmentary and occasionally contradictory. Models that consider both process and content show the greatest potential for resolving this situation and cannot be adequate without taking into account cultural spectrum of global economic integration.. Such models can be used to test social science theories as well as to evaluate programs of organizational change promulgated by consultants and practitioners. Actual and factual organizational theories would be enhanced by greater attention to organizational change

The process of organizational change consists of several steps, with equal involvement of both leaders and followers of the organization. These steps should be put at an appreciable level of priority within the organization. Moreover, it is important that organizational change models are created among and across boundaries to allow for self-organizing and adaptation; thus, interventions for transforming exchanges such as different change models, communication links, information exchanges, material exchanges, ideas exchanges among respective agents. It should be observed that self-organizing and growth yield to a state of unpredictability with which leaders and organization members are mostly not comfortable with. In view of this, it becomes imperative to manage the state of unpredictability based on the capacity of the organization to absorb changes, and the rate of change occurring in its environment. In the United States of America organizational dynamics vary according to particular institution's intervening, factors, agents and process of change, provoking un-uniformity in the relevance and applicability of organizational change theories analyzed in this article. All of the theories explain some aspect of change and suggest that a factor mix may contribute to particular types of change. Collectively, they offer many research opportunities for scholars and practitioners with the African business perspectives

NOTES
Figures are available upon request.

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THE BENEFITS OF RESPECTING ERGONOMIC REQUIREMENTS WITHIN VIRTUAL WORKPLACES

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ABSTRACT

The transition from a traditional economy to a digital economy is achieved with skilled human capital. So the heart of the development of future generations, in the light of reducing the physical and intellectual effort and sizing importance is investment in human capital. Thus, ergonomic design requirements of any computer system must be revealed and made aware in all professional environments in which human factors can improve quality of life through promoting the concepts of independence and job security. Therefore, ergonomic requirements benefits to the new type of job- virtual work, will result in sizing economic and social progress, which will be on the primary base of high-grade capitalization of new information technologies, in compliance with general guidelines of strategic policy guidance as to optimize the use of human capital and protecting the quality of life.

INTRODUCTION

In the context of the reorganization of work systems in the contemporary period, the study of the interaction between people and machines and the factors that affect this interaction is being highlighted as materialized in developing the concept of ergonomics. The main aim of the ergonomic requirements of a job is to improve system performance by improving human-machine interaction, extrapolating to the analysis of virtual job, we can observe the vital need to respect those in safeguarding the quality of life. Experience of specialists in the field tends to bring into the spotlight the "internal design" of a better interface or the "external design" of factors within work environment, tasks or within labor organization which reduces human-machine performance (Manolescu, A., Mironescu, A., Matei, I., 2008).

Thus, being in a perpetual search of ways to improve the human factor interaction with the common working environment and in particular with virtual workplaces, the cost-benefit analysis conducted in this area tend to forward the ideas of design / redesign of working systems in the context facilitating access of human operators its components. Improving work systems can provide enhanced benefits under the observance of respecting, almost literally, the ergonomic requirements. Therefore, in terms of improvements of work systems we highlight the following necessary changes (Figure 1).

Thus, in light of compliance with respecting the ergonomic requirements, systems improvement that can be done may possible be:

- ➢ *User interface design* to make it more compatible with the task and the user;
- ➢ *Change of work* environment to make work safer and more appropriate for the task;
- ➢ *Changing of task* make it more compatible with user characteristics;

  ➤ *Changing the way of work* to accommodate social and psychological needs of people.

If we bring into the spotlight the improvement of working conditions within the virtual workplaces, we must consider the informational-technologic task, so that the interface must be redesigned in order to move to reduce user memory load. Environments can be improved by eliminating vibration and noise and provide better job sitting at work, air conditioning or lighting.

Figure 1: Changes Needed For Improving Virtual Workplace
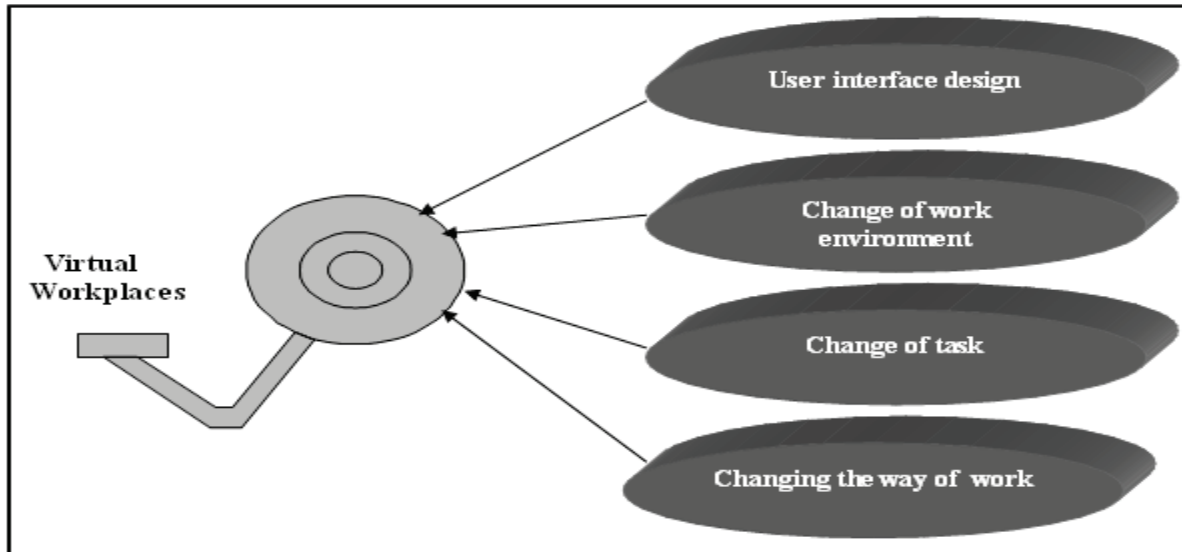
This figure shows the interaction between the necessary changes to be done within the components of the virtual environment and the improvement of the virtual workplace.

New tasks can be made more easily learned and executed through their design so that it resembles to the task or procedure with which people are already familiar. Work organization can be improved by allowing workers to work at their own pace, so that to reduce physical and psychological stress "related to the machine" or by introducing subsidiary tasks in order to increase physical activity in the work area and to provide contact with others. Therefore it is a must to comply with ergonomic requirements in the workplace, especially in the present times, within the virtual workplace.

Therefore, the implementation and compliance of designing ergonomic requirements for the components of the systems would have to make the system work better by eliminating the undesirable aspects of its operations which can be uncontrolled or unacceptable, Figure 2.

Benefits of virtual job improvement, it will undoubtedly noticed by reducing, and ultimately, the elimination of:

  ➤ *Inefficiency*: when worker's effort produces an inadequate result;
  ➤ *Fatigue:* in bad designed positions people get tired very quickly;
  ➤ *Accidents, Injuries And Errors*: due to bad designs interfaces or physical or mental stress or excess;
  ➤ *Difficulties in use for human operators:* due to combinations that are inappropriate for making the subtasks dialogue / burdensome and unnatural interaction;
  ➤ *Low Moral and Apathy*: due to repetitive tasks monotony and lack of rotation on stations.

Figure 2: The Improvement of Work System by Eliminating the Undesirable Aspects
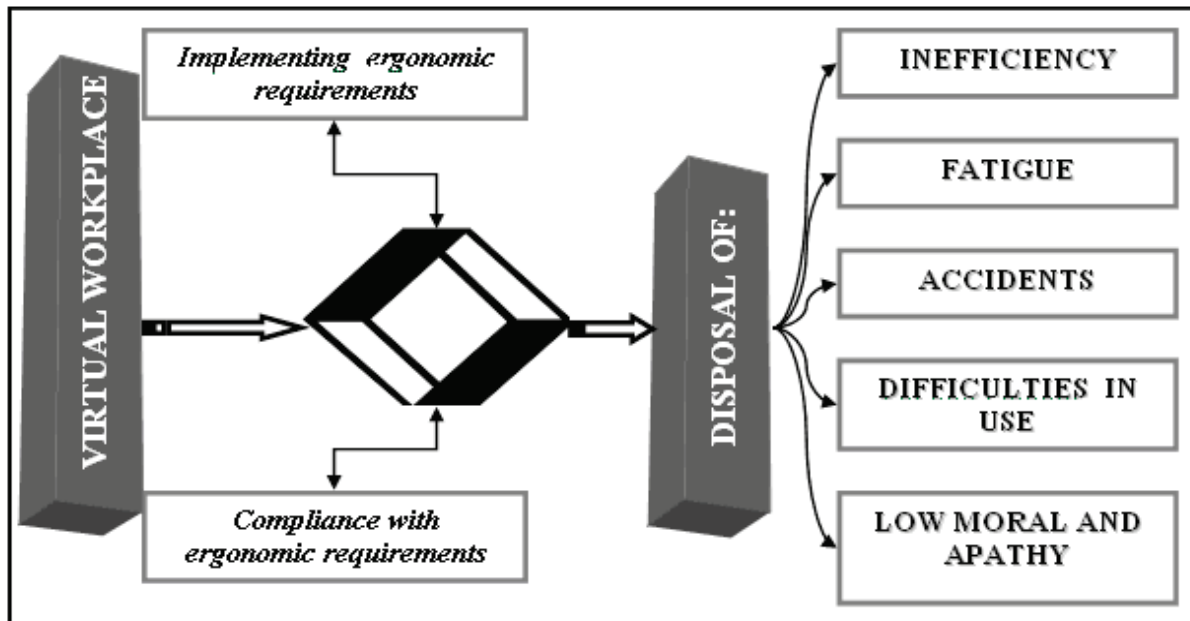
This figure shows the needed changes to be made in order for the work system to better function by eliminating the undesirable aspects of its operations which can be uncontrolled o r unacceptable

At the same time benefits do not delay to appear, following implementation and respect to ergonomic requirements in designing components or systems of work, in terms of absenteeism, injury, poor quality and high levels of unacceptable human error as systemic problems, rather than problems of the people, the solution found seems to stand in designing a better work system rather than a better "human management" or incentives, to "motivate" workers or introducing safety slogans and other propaganda.

Given that a system is recognized as a set of elements, the relationship between these elements and border around them seems to be materialized even in human-machine interaction, and sizing reliability and accuracy of working systems operating rules of its components can only find their beneficial effects within protecting the human factor quality of life.

Of course, most systems consist of men and machines that perform a function together to produce some form of production. Entries are received in the form of matter, energy and information and for ergonomics, man is the main part of the system and must be fully integrated into it since the design stage. This may even take into consideration human factor needs requirements are also those of the system, rather than secondary considerations and may be declared in general terms the requirements for:

> ➢ *Equipment*: that is useful and safe;
> ➢ *Tasks*: that are compatible with expectations, limits and training people;
> ➢ *Environment:* that is comfortable and suitable to the tasks
> ➢ *The system of work organization:* this recognizes social and economic needs of the people.

The benefits of respecting the ergonomic requirements within the workplace are foreseeable also from the corresponding management of virtual compatibility between the user and the rest of the system, which can be achieved at a significant number of levels: biomechanical, anatomical, physical, behavioral and cognitive. In order to obtain compatibility we need to assess claims information of technological and environmental constraints and to weigh them in the balance with capabilities of users. Modern

ergonomics database contains information on many people's capacities and characteristics that can be used successfully in designing / redesigning the common working environment and especially virtual working environment.

We do not exclude, in this sense, the occurrence of a weak operating system possibility, caused by a lack of compatibility in some or all interactions involving human operators. This incompatibility may occur due to a variety of reasons, such as those to be mentioned below, emphasized by the doctrine of specialty (Bridger, R. 2009):

- *Human requirements for optimal functioning of the system:* were never considered in the design stage;
- *Task improper design*: new devices unexpectedly introduced change the way tasks are brought to a conclusion and are incompatible with the habits, knowledge or ability of the user or are incompatible with other tasks;
- *Lack of prototyping process:* modern successful software development is recurrent. Users should be consulted from the conceptual stage until the stage of pre-production of prototypes.

Also, we have to keep always in the forefront of our analysis that: virtual environments are more than just 3D images. They are models of implemented interactive systems. The intent is to create the idea of existing "there", in this environment, to be able to move in it, to explore and to be able to manipulate objects placed in it. The main instruments are the instruments used to design virtual environments, training simulators and visual aids. The degree of similarity between the model and the real system can vary. The image can be on the computer screen or can be viewed with a stereoscopic object mounted on the head (head-mounted display HDM) or by projecting the image on a wall.

Also in case of a "virtual room" user is surrounded by screens. With awareness of the progress and results achieved in promoting the quality of man-machine interaction within the workplace, subjective reactions of the human operator can be positive through this experience or the fact that he is immersed in the system or negative in case of dizziness, lack of orientation, visual discomfort or problems with balance.

The sense of existing in the virtual environment seems to depend on the number of variables, including reaction time of the system to user actions, reflected in the time needed to improve the image, optical flow determined by the entrance of the user into the system and internal geometry of the virtual objects and how easy to change distance and viewing angle in comparison with the real world (Figure 3).

Thus, is promoted the upward trend of development and perpetual improvement of the work system components in the virtual work environment under the primary purpose of protecting the quality of life for sizing the human factor, in this sense we are promoting:

- *Functionality*: provide the necessary interface control that users awaits from a task;
- *Natural elements*: user can interact with the system in a natural way;
- *Display:* the information is understood, relevant to the task and clear;
- Consistency: the system contains operations that provides an understanding of tasks by the user and the conversation with him;
- *Flexibility:* users are not artificially constrained by the limits of the system;
- *Fidelity of model:* the interaction takes place in a model of the system or task;
- *Correction of errors:* mistakes can be corrected before a permanent change is to be made;
- *Involvement:* user feels that is part of the system;
- *Support:* available online;
- *Ease of use:* interaction should be intuitive (the relevant user model).

Figure 3: The Internal Geometry of the Virtual Workplace for Sizing Life Quality
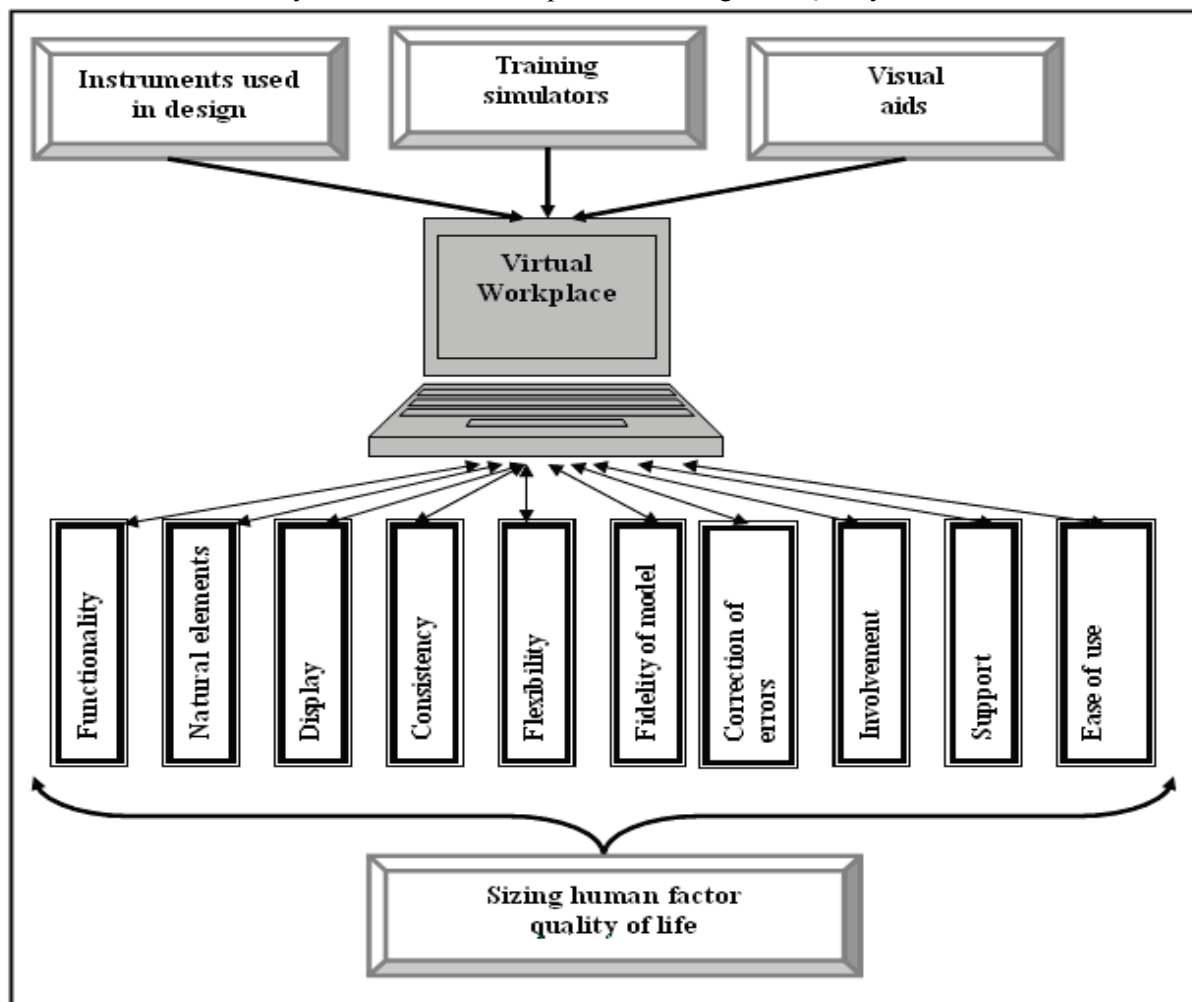
This figure shows the ergonomic core elements of the virtual workplace that must be respected within all components in order to protect and size security and safety of human capital and above all ensuring the growth of life quality.

In addition to these findings, there should be mentioned also the possible negative side effects of doing work over a long period in a virtual space. Interacting with the virtual environment may produce three types of unpleasant effects, recognized by professionals as cyber sickness as the symptoms are (Salvendy, G., 2006):

➢ Dizziness and vomiting;
➢ Visual disabilities;
➢ Loss of balance condition.

Therefore, depth of research specialists reveals that cyber sickness is caused by the gap between the rate of change of image experienced by user within the virtual environment and the dynamic of the manually control and, in particular vibrations. When entering for the first time in the virtual environment, users must learn to control their reactions depending on the images they watch. When leaving the virtual environment is necessary for a certain period of time to readjust to the real world.

Testing subjects before and after the tasks of handling objects and the action in the virtual environment for 30-minute shows that they felt the effects as dizziness, visual disabilities and disorientation after

finishing a meeting on virtual environment, these effects persisted even for30 minutes. Focusing errors were numerous, but only when the eyes were closed (Nica, E., Mironescu, A., Profiroiu, A.G., 2009),. This demonstrates that the virtual environment to induce a reassessment of the information collection process. Practical implications are that users need a recovery period after the entry into the virtual environment after it is necessary to return to their daily routine-especially if it requires the coordination of eyes and hands.

In this sense, the felt of dizziness during cyber sickness site, as loss of balance, is caused by sensory conflict between sensations from the visual system and vestibular system. Conflict can occur when the scene changes to show the user's movement in the virtual environment, but the user's head remains motionless (in the real world).

So sensations from the vestibular system do not match those of the visual medium. For users wearing the Head Mounted Display the virtual environment can be explored by moving the head. Head Mounted Display sensors detect movement and scene changes depending on it. However, delays occur when updating the scene remains unchanged when the head moves and continues to change when the head stands still. So there are two potential sources of conflict. It was proceeded to compare severity of dizziness in two virtual environments, one in which the scene is modified by a hand control and a changing head position. Results showed that both virtual environment cause dizziness, but the controlled environment of head movement are more stringent An interesting thing was the additional sensors that were poorly correlated between head movement and change of scenes by the Head Mounted Display -for each head rotation of 120 degrees, the stage was rotating at 130 degrees.

The loss of state of equilibrium is another cyber sickness's syndrome caused by exposure to visual indications within virtual workplaces in the absence of any other movement. Loss of state of equilibrium is the illusion of movement in the opposite direction. The loss of equilibrium condition seems to be similar to the feeling we have after we looked out the window in a train when the train slows down, then it produces the illusion of movement in the opposite direction. Loss of balance condition can cause dizziness. Therefore investigations were conducted on dizziness and loss of balance condition in people who enter a virtual environment. Occurrence rate of dizziness and loss of steady state increased with increasing the speed of sailing. In the range of 3-10 m / s were found the highest increases. Over 10m / s the rate decreased until the speed reached 59 m / s. To avoid discomfort, it seems to necessary travel very fast or very slow within virtual environment. In general, crossing cyber sickness can be avoided by minimizing sensory conflict.

Virtual head-mounted devices have a significant number of advantages over fixed screens when: updating images in time and space can be synchronized with head movement. Disparate images of the virtual environment may be addressed to the naked eye to this perception of intensity. However, screens that show these images may be only 50-70 mm distance between the eyes with a lens, there are concerns about adverse effects of the visual system. The light from virtual devices mounted on the head passes through a lens before it reaches the eye, so light rays are parallel when they reach the eye, such as if the images could be forever. Under normal conditions with regard to seeing, accommodation and limitations of the system, they are connected, as with differentiation (in the double image), is an indication of the restriction and limitation together with the effect of fog, as an indication of accommodation. In the real world as an object is approaching the limiting demand for accommodation increases.

In the virtual environment, on the other hand, focal distance can be infinite, but the limitation may be necessary to avoid a double image and to determine a stereoscopic image. The discrepancy between accommodation and limitation is due the aesthenopy of virtual devices mounted on users head or the effects of the closing session. Although the visual system requires a certain amount of plasticity, the extent and purpose of adaptation are not known yet. Individual differences in focal lengths do not seem

such a problem and eye adjustable Tools are not necessary for virtual devices mounted on the head. However, discrepancies between lens centers used to join beams and imaging center that issue them cause undesirable visual effects.

In the first phase it would seem that head-mounted virtual devices offer an advantage for navigating within 3D spaces. The means of movement of the head that we use in the real world are available in the virtual environment and therefore, the link between evidence and real world in a virtual environment would be closer. Available evidence is equivocal. It was compared performance of search requests using head mounted displays and cathode ray tube devices. The performance of head mounted displays was lower than that of cathode ray tube devices in terms of time required to locate a target, efficient navigation and the number of tests when subjects were running out of time. Orientation in space of the subjects did not differ in conditions where they were equally able to create a map of space. It is possible that the level of development of the current generation of head-mounted virtual devices to be unable to use certain indications that the movement of the head of navigation offers in the real world- they simply can not be used or are not enough natural in the present. It suggests that the use of these devices require certain cognitive features that test the ability of those who have a low orientation in space.

The aspects of use and health are related to the limitation in the virtual environment technology. Virtual head-mounted devices have a refresh rate of 60 Hz (frequency at which the screen image is repeated). Higher refresh rates can improve image quality. The discount rate is the rate at which the display screen image may change and depends on the capacity and processing speed of the system. It is needed a minimum of 12 fps (frames per second). Faster the update rate, the more noticeable and less realistic user interaction is represented by the virtual world.

Also, the lag is the delay of the system made by a user action and perception in the virtual environment. The more small delay is the more likely for the user to feel this. System delays may cause sensory conflict and cyber sickness. There is an indirect relationship between field of view and resolution, especially if the array of pixels is small (360x240 pixels).

Seeing the virtual environment in such conditions may be similar to the interaction with real world use without the practice. For a sense of presence and a greater comfort, the virtual environment needs the following (Helander, M. 2006):

> ➢ High resolution;
> ➢ High refresh rate;
> ➢ 24 fps or more;
> ➢ System as fewer delays.

All these applications depend on the available power of computer processing.

The primary perspective of designing a computerized workplace is to create and implement an user-friendly interface easy to remember. In the design and implementation of human-computer interfaces should be imposed the compliance with the principles of usability, as talking about (Manolescu, A., Mironescu, A., Matei, I., 2008):

features that affect the user abilities - the main ones concerns supporting the user, at the functionality, transparency and consistency of interface, the secondary ones take into account off-line support and online assistance (aid opportunities via electronic books, Web sites, etc.) , completeness, accuracy, fitness for purpose, safety and observance plus feedback and familiarity with that user interface;

features that affect execution- the main ones are in the operability, flexibility and robustness, and the secondary concern both responsiveness, monitoring, simplicity and accessibility, and the initiative dialogue, task migration, adaptability that user interface can display; still here, are taken into account maturity, error tolerance and recoverability (Hubă Stefănescu, Carmen Catălina 2008);

features that affect user satisfaction - the main concern aesthetic presentation, while secondary features take into account the consistency of interface objects, composition of spatial location and interaction style.

Compliance with the ergonomic requirements in designing a computerized workplace leads to maximizing the efficiency of the human factor through proper performance of duties respecting the time schedule distributed and assigned to each occupation separately.

Thus, in conditions of socio-economic development, there is no doubt that computers have revolutionized the way we work, communicate, and participate in all forms of activities, including leisure. We have found new ways of collecting data, problem solving and decision making which generates the innovative ways in the production process, they still can not use the maximum capacity, unless that, as the introduction of technology and advanced technologies, the requirements to create conditions for qualitative recovery of human potential and to get the best economic results are growing (Neacşu Matei, P 2007),.

Meanwhile, the information society requires intensive use of information and communications technologies in all spheres of human existence activity with significant economic and social impact. Considered a key enabler of information society, but also a determinant of globalization, revolutionary strategies of human resources adds value and quality, promoting power materialized in obtaining competitive advantage of a larger economic specialty market.

In conclusion, the new benefits of compliance with ergonomic requirements within the virtual workplace is materialized in promoting human capital development strategies that focus on human capital resources dimensioning according to strategic and operational needs of national economy and ensuring efficient use of these resources. These will help in formulating strategies for economic development through the establishment of future human capital requirements, by identifying ways to top use of the capital, where available human capital will support implementation of plans for economic development.

The stochastic redesign of human resource management strategies (Mironescu, A., Popescu G.H., Nica. E, 2009) in the context of the digital environment leads to the final conclusion that materialized in the application of personnel policies, also involves a continuous surveillance from the managers and team leader side so that they can assess at any time the effectiveness of the strategy chosen in accordance with strategic planning and organization and to adapt it to economic requirements as needed.

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ADOPTION OF INTERNET BANKING BY FRENCH CONSUMERS. ADOPTION CHARACTERISTICS

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ABSTRACT

Internet banking has an important strategic role in the marketing of industrial banking. A previous study on a developing country (Mexico) was used as a model to show the similarities and differences with online banking in a developed country (France).This study, as in the Mexican example, examines the usage factors of online banking in France, using quantitative and qualitative methodology. Factorial Analysis suggests that there are a concrete number of common characteristics between Mexican users and French users, as well as certain distinctive characteristics between both samples. An interesting analysis was to compare if, in the Mexican case, human factor is a relevant factor in the usage or non-usage of internet banking and would it also be a weakness for French internet banking. Particular factors for French consumers were found, such as self-government (autonomy) and practical aspect.

INTRODUCTION

A previous study on the features of adopting internet banking in Mexico has shown eight separate factors of usage in the Mexican population. Said factors were: difficulty, trust, compatibility, third party concerns, human contact, reference group influence, security and pc skills. Of all these said factors, human contact was the distinguishing factor for Mexican users relative to factors present in similar studies in other societies.

In the current study the similarities and differences of the Mexican example and French example were studied. From samples with similar socio-economic characteristics, one of the most important particularities is the existence of a higher degree of collectivism in Mexican culture relative to French, which supposes that in the Mexican example that human factor is the most important element in the usage behavior of internet banking.

This article is organized as follows; section 2 analyses briefly the theoretical framework of internet banking. The methodology and instruments used in the development are exposed in section 3. The following section presents in résumé form analyses made as well as the principal findings. Section 5 is the conclusion.

LITERATURE REVIEW

In recent years there has been a growing interest in the study of internet banking both in terms of academic interest and in the banking industry. One of the first authors in the study of the motivational factors of the use of internet banking was Rogers (1995) who identified innovation, communication, availability and social structure as elements that motive or discourage the use of internet banking. Black, Lockett, Winklhofer and Ennew (2001) showed that innovation is a factor that increases the amount of users.

Previous studies, such as Gerrard and Cunningham (2003) show that internet banking users consider internet banking usage less complicated, more convenient and more compatible with their lifestyles. These findings are supported, also, by the studies of Waite and Harrison (2004).

Sathye (1999), Cooper (1997), White and Nteli (2004) analyzed perceived risk and security as significantly important aspects for users when deciding on internet banking usage.

Reference groups were analyzed by Fishbein and Ajzen (1975), Bagozzi (2000), Karjaluoto, Mattila and Pento (2002), they concluded that social influence is the most important factor that affects the take up of innovation, fundamentally by the degree of lack of knowledge and uncertainty. This provoked the need for the next groups to strengthen motivation toward new technologies and ideas, as in the case of internet banking.

DATA AND METHODOLOGY

In the present study two methodologies are used. Firstly, a qualitative methodology, through group meetings with individual representatives of the studied population. These group meetings took place in two phases. The first phase with an explorative nature held, as objective, to find the different factors which influence the usage or non-usage of internet banking. Some of the factors found were: security, computer skills, confidence in the system, compatibility with lifestyle, difficulty of use, the existence of third parties, the influence of social context, functionality sought, the possibility of doing it by themselves and cost.

All of these factors are common in the Mexican case, except for the factors "of doing it themselves" and cost. These two factors can change the behavior of usage of internet banking. In the case of "doing it by themselves" the subjects considered that this gave them a certain "freedom", it did not oblige them to "give explanations on transactions", "I don't have to wait in a queue at the bank" , "it affords me a greater number of transactions with total autonomy", "it gives me the facility to monitor my transactions". However the fact that internet banking has a cost puts off customers given that they consider that they already pay "sufficiently" for the services of a traditional bank, without having to add the costs of internet banking.

In the second phase of the qualitative study it was sought to confirm the factors which factor the usage of internet banking in relation to the factors which limit its use. This exercise enabled us to confirm that factors such as: simplicity, convenience, compatibility with lifestyle, privacy, autonomy, amongst others favorized the usage of online banking. And those as: doubts about security, the inability to complete all transactions, the lack of visibility as to who you are dealing with or computer error discouraged usage.

From the analysis of the qualitative section we were able to develop a questionnaire, as part of the quantitative methodology. This questionnaire was based on usage in the Mexican sample, with certain adjustments to the particularities encountered in the qualitative phase, such as autonomy and cost.

The questionnaire consisted of three parts. The first part analyzed 21 items against the perceptions of the subjects regarding internet banking, using a Likert scale directly with 4 categories with a neutral point. The second section questioned on 25 related items with aspects such as: technology, internet usage, confidence, etc. Finally, questions of a socio-demographic nature were posed which allowed us to analyze for groups in relation to age, sex, civil status, net monthly income and the usage and access of computers and internet.

The sample used was non-probabilistic by means of a filter question: "Are you working at the moment" with a total of 398 valid questionnaires. The sample gave the following socio-demographic characteristics, see Table 1.

Table 1:Respondents Profile

Gender	Frequency	Percent	Household income per month euro	Frequency	Percent
Female	168	42.53%	< 1350	116	30.29%
Male	227	57.47%	1351-2000	76	19.84%
Total	395		2001-2700	122	31.85%
			2701-3500	40	10.44%
Age			> 3500	29	7.57%
20-25	90	22.73%	Total	383	
26-30	47	11.87%	**Have computer at home**		94.20%
31-35	75	18.94%	**Have Internet at home**		92.40%
36-40	63	15.91%	**Have computer at work**		82.70%
41-45	47	11.87%	**Have Internet at work**		78.20%
46-50	22	5.56%	**Number of months using Internet**		
51-55	25	6.31%	Less than 6 months	18	4.63%
56-60	17	4.29%	6-12 months	10	2.57%
above 60	10	2.53%	1-3 years	54	13.88%
Total	396		4-6 years	89	22.88%
Marital Status			7 years or more	218	56.04%
Married	132	33.50%	Total	389	
Not married	262	66.50%	**Number of hours a week using Internet**		
Total	394		Less than 1 hour	40	10.28%
Education			1-5 hours	172	44.22%
Primary	11	2.84%	6-10 hours	70	17.99%
Secondary	94	24.29%	11-20 hours	40	10.28%
above secondary	282	72.87%	21-40 hours	40	10.28%
Total	387		Over 40 hours	27	6.94%
			Total	389	

This table shows the profile of respondents as socio-demographic variables

EMPIRICICAL RESULTS

The number of variables was reduced to 28 with the intention of maximizing reliability. The coefficient of Cronbach's alpha reliability is 0.726. Considering that this exploratory study covers a total of 28 variables it is considered that this coefficient is acceptable (Nunnally and Bersnstein (1994)).

Factor Analysis was used to explore the relationship between the 28 variables, to see if these variables could be summed up as definite explanatory factors. Analysis of Principle Components (ACP) extraction method was used by means of a Varimax rotation.

Table 2. KMO and Bartlett test.

Kaiser-Meyer-OlkinMeasure of Sampling Adequacy		0.680650041
Barlett's test of Sphericity	Approx. Chi-Square	7,367.338887
	df	378
	Sig.	.000

This table allows us to verify that the Bartlett's test as well as KMO permits us to accept the results of the AFE.

From Factor Analysis we found that the 28 variables could be reduced to 8 explanatory factors for internet banking use: difficulty, compatibility, self-government (autonomy), trust, security, third party concerns, practical aspect, and reference group influence. .

Table 3. Total Variance Explained

Factor	Initial Eigen values			
	Total	% of Variance	Cumulative %	
1	4.724851989	16.87447139	16.87447139	**Difficulty**
2	3.014733696	10.76690606	27.64137744	**Compatibility**
3	2.956594306	10.55926538	38.20064282	**Self-government (autonomy)**
4	2.085289942	7.447464077	45.6481069	**Trust**
5	1.992973948	7.117764098	52.765871	**Security**
6	1.694061249	6.050218745	58.81608974	**Third Party Concerns**
7	1.622384995	5.794232124	64.61032187	**Practical aspect**
8	1.501241972	5.36157847	69.97190034	**Reference Group Influence**

This table shows that all factors with an Eigen value> 1 make up approximately 70% of the variance

The Mexican case study, Mansumitrchai, Minor, Sánchez and Moska (2006), suggested that the explanatory factors for the adoption of Internet Banking were: difficulty, trust, compatibility, third party concerns, human contact, reference group influence, security and PC proficiency.

As we can see in the Table 4: the Mexican and French consumers share 6 common factors when using electronic banking. These factors are: difficulty, compatibility, trust, security, third party concerns, and reference group influence.

Table 4. A comparison of Mexican and French consumers on the characteristics of adoption

	French consumers	**Mexican consumers**
F1	Difficulty	Difficulty
F2	Compatibility	Trust
F3	Self-government (autonomy)	Compatibility
F4	Trust	Third Party Concerns
F5	Security	Human Contact
F6	Third Party Concerns	Reference Group Influence
F7	Practical aspect	Security
F8	Reference Group Influence	Pc Proficiency

This table shows the similarities and differences between French and Mexican consumers.

Despite the similarities found between Mexican and French consumers regarding usage factors, these factors do not hold the same importance. Difficulty is the most important factor for both consumers. However, French consumers favor compatibility to trust, probably due to the profile of French consumers. In the French case security is above third party concerns, and lastly reference group influence.

With differences, we find two factors that do not exist in the Mexican case that are particular to the French case, being self-government (autonomy) and practical aspect. By analyzing these two factors in depth, French consumers find the former factor very important and can perform online banking transactions for themselves, allowing them to do everything with full autonomy and without needing to explain themselves. As for the latter, French customers seek practicality aspect that is not offered by traditional banks, probably as a result of the timeless nature of the services offered by internet banking and the tradition of using online systems, as was the case with Minitel.

In this sense, the hypothesis to disprove in this article would be:

H1: French consumers present similar characteristics to Mexican users in the 8 factors that motivate or discourage internet banking use.
H2: Human factor is a factor which discourages the usage of internet banking by French customers.

Given the results described, neither hypothesis 1 nor hypothesis 2 can be accepted. Given that similarities appear in only 6 of 8 factors and that in addition, the same relevance does not exist in respect of these of these factors. With respect to hypothesis 2, human factor does not appear to be an aspect that concerns French consumers, which prevents us from accepting a discriminatory aspect to this study.

CONCLUSION

The exploratory nature of this current article has allowed us to corroborate that consumers with common characteristics and services with similar benefits, each has common factors for the usage of internet banking, but also distinctive factors as a result of socio-cultural aspects.

It is not unusual that societies with a high level of collectivism seek human contact as a factor which motivates their usage of internet banking or not. And those societies with a high level of individuality are not interested in human contact as a disadvantage in usage. Moreover, the tradition of online usage facilitates the easy integration of new services for internet banking.

The challenge for futures articles is to analyze in depth the differences that exist between users and non-users of internet banking in France and to compare them to users and non-users in Mexico.

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BIOGRAPHY

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THE EMPHASIS OF TECHNICAL PROGRESS THROUGH THE ENDORSEMENT OF ERGONOMICS CORE ELEMENTS

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ABSTRACT

The upward trend of technical progress evolution led to fundamental changes in human work, an important role in the development of productive forces being the evolution of human conception about work and life. Technical progress materialized in large-scale introduction of mechanization and automation of production processes led to changing the relation between physical and intellectual work, in the sense that the performer is increasingly becoming an operator and a leader of the production process. On the other hand, machines are becoming more complex, more expensive, quickly become worn on moral life and have a shorter production life than the executor. Therefore it becomes necessary to focus on human concerns, in the purposes of adapting to the demands of machines, in terms of professional knowledge and physiological and psychological requirements of an effective work process, and machines adaptation to biological and psychological characteristics of man, calling its minimum effort and to ensure their maximum efficiency and removal of any occupational injuries that could be quite costly. Therefore, the primary aim is to create work and living conditions for humans, so human capital should be used in the normal range of its biological possibilities avoiding unnecessary physical and intellectual effort, focusing on technical progress of organizations.

JEL: J24; J81; O15; O33.

KEYWORDS: technical progress, occupational accidents, maximum efficiency, working conditions, ergonomic core elements.

INTRODUCTION

The need for widening technical progress in terms of a market economy based on a fierce competitiveness directs the management of a working organization to develop new programs that increase labor productivity and reduce human capital costs (Mironescu, A., Popescu G.H., Nica. E, 2009).

Thus, based on these vital requirements, it is increasingly apparent the fact that in many industries, ergonomics is implemented as a means to reduce the high rate of accidents and higher insurance premiums. Premium for a construction worker, for example, may be about 15% of salary. This is because there are many disorders due to manipulation of materials: back and wrist arms, shoulders and neck disorders. In the recent years, there have been reported numerous injuries due to cumulative trauma disorders, carpal tunnel syndrome and tendon disorders. Meanwhile, the number of back injuries remains very high and is the main cause of diseases in the industry (Table 1).

Table 1: Table of Statistic Data on Labor Accidents

LABOR ACCIDENTS	2006	2007	2008
Total injured:	**5017**	**4863**	**4592**
Injured with ITM	4595	4391	4621
Fatal accidents	422	472	331
Total injured by the route	357	446	404
Fatal accidents in accident by the route	26	43	38
Frequency index for all injured	**0.85 $^0/_{00}$**	**0.84 $^0/_{00}$**	**0.80 $^0/_{00}$**
Frequency index for fatal accidents	**0.07 $^0/_{00}$**	**0.08 $^0/_{00}$**	**0.06 $^0/_{00}$**
Total collective accidents	47	45	27
Total casualties in collective accidents	204	240	175
Fatal accidents in collective accidents	50	48	22
Severity Index	**53.3 $^0/_{00}$**	**50.7 $^0/_{00}$**	**45.3 $^0/_{00}$**
Index of the average period	67.8	71.1	70.1
Total temporary disability	**4644**	**4111**	**3702**
Temporary disability concluded by going back to work	4406	3842	3468
Temporary disability concluded by disability	177	191	178
Temporary disability concluded by death	61	78	56

⊕ Frequency index = number of accidents at 1,000 employees;
⊕ Severity index = total number of days of incapacity for work, reported in 1000 employees;
⊕ Index of the average period = number of days lost, on average, by an accident employee.

This table shows the data published by the territorial work inspectorates. The table contains the evolution between 2006 and 2008 on various kinds of accidents. The data will be used to sustain the affirmation that companies are starting to take action in order to reduce accidents and temporary inability to work.

From the above table (http://www.inspectmun.ro/Statistici/statistici.html), we can observe a reduction in total accidents from 5017 to 4863 then to 4592, between 2006-2008, and the table also brings out a reduction of temporary inability to work from 4644 in 2006 to 4111 in 2007, and for the year 2008 be reduced to 3702, according to statistics published by the work inspectorates, which leads to the thought that companies began to put into practice the principles of ergonomics into the workplace and to protect health and safety at work.

While reducing illness and improving worker's health are important reasons for implementing ergonomics, for the management of companies it can be a negative issue. Organization's management is obliged to implement safety legislation and many managers see this as just another burden from the

government. The message is predominantly negative and industry leaders ignore one important factor leading to ergonomics - namely, increased productivity and satisfaction.

Ergonomic improvements of workstations, industrial processes and product design can lead to growth in labor productivity (Marinescu, C. 2008). Often managers do not understand how poor working conditions can lower productivity. Workers in factories and offices usually adapt and make no complaints, but the price is increasing production time, low quality and increasing accidents.

Thus, what emphasizes the technical progress is just optimal coordination between human factors and ergonomics, factors which are closely related to the security industry. If workers can perceive the danger, if there are adequate warning signs, if all controls are easy, if postures are acceptable, if noise and other environmental factors, stressors are reduced if there is cooperation between workers and management, based on understanding if there is a mutual and good management, then security will improve (Voinescu, G. V, 2008).

Therefore, ergonomics security measures are focused on the operator and are different from conventional approaches to industrial safety. Ergonomics can improve security by changing the attitude of workers towards perception, decision making and risk-taking behavior.

Pursuant to the mentioned statistics, from the labor inspectorates, the most common problems are: shoulder problems, being discovered the increased risk of shoulder disorders when it is bent more than 90 °, with risk increasing in proportion to the percentage of work cycle on the arm that was held in that position. The hours for these exposures are ranging from 1.5 to 6.5, but it were found that the risks are high if the bending took more than 10% of the work cycle. There is evidence for an effective combination between often repeated work and shoulder problems. Repeated or static shoulder positions also increase the risk of injury to shoulder. There is evidence that shoulder problems are increasing during long working hours and long days of work (Nica, E., Mironescu, A., Profiroiu, A.G.,2009),.

Working environment involving the use of upper limb requires a combination of static and repetitive tasks of the body which usually involves the shoulder. Not only the wrist of shoulder, but also the arm is linked to the joint and shoulder blade is connected to the body by joints also. Not surprisingly, the shoulder "joint" is the most mobile of the human body and with specific soft tissue is prone to be hurt in any activity in which arms are held above the horizontal level. Working with hands above the shoulder can be difficult and may increase the risk of "impact against syndrome" occurence. When the arm is held in front of the body, muscles around the joint shrink to fix the joint.

It is quite likely that the work that requires hands suspended above the elbow can cause short-term changes in time, which may ultimately lead to diseases of the shoulder's joint. Shoulder pain may also be caused by fatigue in the muscle location, especially if the arms must be kept above the shoulder for long periods of time.

These growing conditions in the work environment need to promote ways of correcting ergonomic posture in the course of their work. Likewise, the principles of anthropometric nature should be respected. Regarding the most frequent diseases of the human body, the notifications by labor inspectorates shows: **shoulder disorders**, so we must introduce several methods for referral organizations management to reduce shoulder stress, as they must be transmitted to human operators:

> ➢ If possible work with your hands close to the waist and close to the body;
> ➢ If hands should be positioned above the shoulder, their height above the shoulder should not be less than 35 °;

➢ Hands loads must not exceed more than 0.4 kg and their position should be changed every 20 seconds of work;
➢ Avoid bending shoulder more than 90 degrees for more than 10% of work cycle;
➢ Choose taller workers for jobs that can not be changed;
➢ Rest regularly;
➢ Diminishes carried weights;
➢ Make sure of external support for arms;
➢ Limit the objective of working in a enough convenient setting;
➢ Provides wrist rests keyboard.

What is yet to grasp is that in spite of automation and digitalization of work, musculoskeletal disorders are still prevalent in society. Repetitive work is common. Individual characteristics, including age and skill level, can interact with the requirements of specifications and tools design that lead to excessive demands being placed on the musculoskeletal system (Manolescu, A., Mironescu, A., Matei, I., 2008).

Therefore, beneficial effects are likely to be greater for older workers where the background prevalence is higher and symptoms are more, and which could be exacerbated by the task induced by stress. Valid and reliable instruments are available to conduct risk assessments in employment, consisting of simple physical tasks.

As we have stated above, there must be respected also the anthropometric characteristics of human capital in order to balance between minimum effort - maximum output. It is recognized that anthropometric information provides to working systems designers quantitative frameworks for sizing working areas. However, it takes a number of provisions for the area of data to be used correctly. What should always be respected, in order to increase labor productivity is found among those listed below:

➢ Defining the user population and use of data obtained from measurements made on that population;
➢ Consideration of factors that could interfere with the assumption of normal distribution of scores.
➢ Awareness that many anthropometric variables are measured using half nude subjects. Clothing permission is often necessary when designing for real users. Centimeter accuracy is suitable for most cases because the effect of clothing on anthropometric user expectations can never be predicted with precision. The clothing also depends on the climate – as the climate is colder the more thick clothing will be and even more important is its affordability design.

Meanwhile, the biological and social changes have caused lately artificial changes in population parameter values over a relatively short period. Values should be expected landslide in anthropometric parameters. In practical situations the design / redesign of work systems, the data required in a particular body size or population may not be available. But in support of systems working components designers exist a techniques available for estimating unknown anthropometric dimensions that can still be useful to designer in order to draw attention to the variable body size to be considered in design and types of human-machine mismatches that may arise. Anthropometry can provide the designer a very useful perspective of utility problem internships, still early, in the design process. Later, the designer can use an empirical approach and can test the prototype using a small sample of users of the anthropometric area extremes.

However, in view of gaining relevant results will be to frame the approach to identify workplaces with high levels of absenteeism, accidents and turnover of staff. Changes of ergonomic nature can be performed to workplaces, tools, equipment or labor organization, itself. The costs of these changes can be calculated taking into account the work load of materials and their implementation and any downtime

appeared to redesign. The benefits are in reduction of absenteeism, expressed as monetary values that consist of direct and indirect costs (Bridger, R. 2009):

➢ *Direct costs of salary* = salary + mandatory taxes for the employee+ personnel + salary administrative costs;
➢ *Indirect costs of salary* = cost of losing trained staff + cost of hiring and training new employees + cost of additional overtime + cost of workforce indwell (Florescu, D. 2008).

However, following completion of calculations and estimates highlight, a period of investment recovery in ergonomic improvements is calculated simply by sharing the cost of improvements to the monthly savings due to reduction of loss of work, plus any amount of productivity gain.

In this regard, it is easy to see how ergonomic improvements can be cost-effective when the approach justifies the changes within high risk workplaces.

Also, besides the above mentioned interventions, in order to increase the necessary technical progress in terms of ruthless competition on products and services market today, specialists in the field estimate the effectiveness of technological interventions up to 29.0%. They are focused on accident prevention in robotic and automated activity. Thus, automation and robotics bring new types of injuries at work.

From this perspective, professional experience proved that it must be created and implemented a new approach to security called *security behavior*. On the organization's management level, there is, however, a kind of awareness that effective security programs can be achieved if there is a consensus between workers and management. Security behavior is based on following core elements (Salvendy, G., 2006):

➢ Employee and leadership participation;
➢ Group activities - like quality circles;
➢ Use of group members to establish a list of dangerous behavior for security (safety critical behaviors - SCBs);
➢ Collection of statistical data on critical safety behaviors;
➢ Evaluation and validation of safety-critical behaviors list, removing old items and add new ones.

Certainly, from a concept already outlined, security behavior can be considered a participatory approach to security based on the consensus of the group and feedback.

Establishing a valid list of safety-critical behaviors can be difficult. Employees tend to choose behaviors that are easily observed, while many dangerous behaviors are actually dynamic and not easily observed. However it is being taken into consideration that the consensus group shows a real interest and motivation to tackle accidents and injuries. Due to frequent interactions between people with similar interests, it is observed not only the establishing consensus but also the effect of conditioning which is very useful in setting a good standard of security and safety attitudes.

These perspectives are considered a natural reaction to the new formulations of traditional functions, but also give rise to physical barriers such as fences, protective barriers, chains and curtains that are used to prevent access to the work area. Enclosures are used also to protect people from objects accidentally projected by a robot.

Depending on the desired installation, networks can be designed to allow retention of parts inside or outside work areas. Over the professional experience there have been highlighted these following common security devices (Table 2).

Table 2: Ergonomic Security Devices

Security devices	Description	Common applications and limitations
Enclosure (Network)	Barriers with locked gates	Handling heavy loads
Barrier protection	Signal barrier with locked gates	Light materials handling
Chains and holders	Passive barriers	Small ensembles; applications of easy tasks
Curtains	Flexible shields	Welding thermal protection and supplementing security
Photoelectric beam	Photo cell / optical	Often used in combination with other devices
Surfaces and pressure sensitive mats	On the ground or attached to the car: can detect motion or achieve	Frequently combined with other devices
Soil bookmarks	Warnings painted on the floor	Indicates area of the robot / machine

This table shows the methods used in protecting human capital from injuries. A description of the ergonomic security devices was being made in order to underline also the common application of them and their limitation.

Although it represents a different perspective on managing human capital it was found that psychosocial factors can, in their turn also, lead to disturbances of the muscles and the skeleton. Modern organizational behavior analysis associated these disorders with common medical treatment, absenteeism from work, job interference with activities of daily living. Psychosocial factors lead to the recognition of the state of stress, sadness, and feeling of being worthless, which amplifies the effects of these disorders. Factors that determine these impacts are the style of the individual to cope with this stress and social support program.

Although neck pain occurs in 60% of cases, ergonomic factors would precipitate back pain, their transition to a chronic level being influenced by psychosocial factors such as fear of the occurrence of such pain, lack of satisfaction and social support or simply a stress job, in mental terms. Although we often associate the pain with work, they are not always taken during work but also from the activities performed during leisure. Employees quickly associate work with this pain and so they ignore the true causes of it (Helander, M. 2006).

The solution, in the mentioned cases, would be to avoid activities that require effort in the spare time, the disposal of negativist faith and inform people with brochures and advice. Most consultations for back problems came from unsatisfied people, who worked in shifts and were lukewarm. It seems that psychosocial factors make people avoid activities that seem to require physical effort, although this is not the true cause.

However, psycho-social factors appear to most research, in particular developing their role as factors that mediate the success of biotechnological interventions.

In this context, it is necessary to sustain amplification of the ergonomic features, more than ever, biotechnology focusing on human-machine interface type (Manolescu, A., Mironescu, A., Matei, I., 2008) but applicable to many systems that are often complex. Biotechnology should be able to integrate its efforts with those of the designers, engineers, users, doctors and architects.

Disbursements of biotechnology are needed at all levels of the design process: from concept to specific requirements for evaluation after implementation and followers should be careful to type the macro issues that influence design decisions.

Literature summarizes the requirements for psycho-social working environment as follows:

➢ Work should be designed to allow workers to influence their work situations;
➢ Work should be designed to give workers an overview and understanding the entire process;
➢ Work should be designed to offer workers the chance to use and to develop human resources;
➢ Work should be designed to allow human contact and cooperation;
➢ Work should be designed to allow workers to satisfy the other demands of their time.

In conclusion, the foreseeable trends are embodied in promoting respect for evidence supporting the ergonomic deepening and technical progress under the sizing of the quality of man-machine-environment report. Thus, depending on the foundations on which we exercise the design / the redesign of work systems components we are pursuing: a general reduction in the duration of the production processes, with direct effects on decreasing labor on the product, growth of machines utilization indices and installations while reducing the cost of cost, both matters having provided the ergonomic design of jobs, both in the phase of putting into operation the new targets and the correction, to the ergonomic requirements level, of working conditions existing at a given time.

On the same line with the increase of labor productivity should be the design of machines and installations that, besides the worldwide characteristics of technology and degree of mechanization and automation required, must also respond to demands for convenience of operation and maintaining the health of performers, respectively to meet human capital needs of anthropometric nature. The enforcement of ergonomics ensures a higher product utility and being more requested and competitive on the international market.

Whilst, it tends to eliminate the causes of accidents and decrease morbidity, increasing the use of population, through employment according to the real possibilities of each, reducing time and cost of professional training, through adding value to the maximum of the skills and vocation of future executors. Operator performance in terms of those stated above tends to be a result of compatibility matching between individual human characteristics (capabilities and limitations) and technology and environment requirements.

Quality of life and performance of work are affected by positive and negative results matching complex relationship compatibility between human operators, technology and environment. To this end, in terms of widening the current level of need of technical progress by supporting the ergonomic features in all spheres of production, usability studies put into the headline the individual and social productive potential, by bio-physical, psycho-social and not last of all technical determining.

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ASSOCIATION BETWEEN DISCLOSURE, FINANCIAL DISTRESS AND GENDER DIVERSITY: FINNISH EVIDENCE

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ABSTRACT

The objective of this study is to analyze the relationships between disclosure, gender diversity in management, and financial distress. Three research hypotheses are presented. First, a negative relationship between annual statement information disclosure and financial distress is assumed. Second, it is assumed that there exists a negative relationship between gender diversity and financial distress. Third, a positive relationship between gender diversity and disclosure is assumed. The hypotheses are presented in a form of a structural equation model (SEM). The model is estimated by the MLE using AMOS 16. The sample is consisted of firms listed on the Helsinki Stock Exchange during the year 2008. The data include 208 firm-year observations. Financial distress is measured by the probability model of payment default estimated by a logistic regression analysis for a large sample of firms. The results show that disclosure is affected by board size and industry. It is also strongly negatively affected by financial distress. The female CEO dummy has a positive effect on distress probability, which contradicts with the research hypothesis but supports the female underperformance hypothesis. However, female members in board and female CFO have a positive effect on disclosure as hypothesized. In addition, female members in board diminish distress probability. Thus, what holds for a female CEO, may not hold for female participation in board.

KEYWORDS: disclosure, distress, gender diversity, SEM, Finnish firms

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BREAKING UP IS HARD TO DO: IDENTIFYING ALIMONY FOR TAX PURPOSES

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ABSTRACT

This work in progress will address many of the common tax issues encountered during divorce. Several tax cases will be discussed, examples presented, and planning opportunities covered. In addition, some recent statistical data related to payments pursuant to divorce will be presented. During divorce proceedings, the division of the marital assets will most certainly produce some tense discussions between the divorcing spouses and their attorneys. Payments pursuant to a divorce may not only involve intense negotiation but also will likely include a thorough consideration of the federal tax implications of those payments. The tax treatment of non-cash payments pursuant to divorce or legal separation, cash payments pursuant to divorce or legal separation, and planning opportunities should be considered as the divorce negotiations progress. This work in progress will also address the tax implications of payments to third-parties (i.e. indirect alimony), amounts fixed as child support (a three part test) and related contingencies (i.e. reductions at attainment of majority), front loading and payment of arrearages.

WITNESSING VIOLENCE: CHILD ABUSE WITHOUT BRUISES

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ABSTRACT

Domestic violence is a worldwide epidemic that is progressively fatal; it is also preventable and treatable. Also referred to as Intimate Partner Violence, Family Violence, and a variety of other terms, maltreatment and trauma typically begin in the home and can involve spouses, domestic partners, elders, and children. Such violence may include verbal, physical, and sexual abuse; there is also a growing body of research that suggests that witnessing violence is also a form of domestic violence. This research supports this view: children who witness domestic violence are significantly more likely to experience behavioral problems than children who do not witness violence. This research also finds that children who are physically harmed, as well as children who both witness violence and experience physical harm, are also significantly more likely to experience behavioral problems than children who are neither exposed to violence nor experience physical harm.

INTRODUCTION

The focus of public health experts, physicians, mental health, social service, criminal justice, and political leaders on the danger to women from domestic violence, and the acceptance by them that domestic violence is a national epidemic, have added to increased public awareness of this problem (Chez, 1988; Crowell & Burgess, 1996; Jones, 1993; Lauritsen, 2001; Marwick, 1994; Rosen & O'Sullivan, 2005; Woodtli, 2000). This is quite a positive change since historically, the issue of domestic violence was seen as a personal and private matter to be handled within the family networks without governmental or law enforcement involvement (Fagan, 1995).   The incidence and prevalence of violent victimization, the hospitalization of women who are victims of domestic violence, and the rapid growth of shelters for the victims of domestic violence further add to the evidence that domestic violence is an epidemic (Cardarelli, 1997; Chez, 1988; Glazer, 1993; Isaac & Sanchez, 1994; Jones, 1993; McLeer & Anwar, 1989; Randall, 1990).

For a large majority of people, trauma and maltreatment begin at home, especially by their own parents (Berry, 2000; Fagan & Browne, 1994). Complex trauma is the term used to describe the collective experiences and early-life onset of chronic and prolonged, developmentally adverse traumatic events. These events are interpersonal in nature and occur within the child's care giving system. Children are the main reason abused women continue to stay in the violent home driven by fears of financial problems (or economic shortages) (Berry, 2000; Ferraro & Johnson, 1983; van der Kolk, 2005; Wuest & Merritt-Gray, 1999).

The consequences of experiencing domestic violence are long lasting, ranging from mental health effects such as depression and related illnesses to physical effects, such as black eyes, fractured teeth, ruptured eardrums, and musculoskeletal injuries including sprains and fractures (Abbot, 1997; Jones, Hughes, & Unterstaller, 2001; Muelleman, Lenaghan, & Pakieser, 1996). The victims may present symptoms of post-traumatic stress disorder, gynecological problems, acute and chronic injuries, irritable bowel syndrome, unwanted pregnancy, alcohol and substance abuse, mental disorders, and abnormal personality traits. Health workers may not always recognize the patient as being a victim of domestic violence (Jasinski, 2001; Miller, 2005; Nelson, 2004; Tjaden & Thoennes, 2000).

Also of consideration is the impact of maternal victimization on the behavioral, social, emotional, and cognitive development of the child. Crisis of loyalty, accommodation, adaptation, and dealing with their helplessness with compliance or defiance are some additional coping strategies of traumatized children (Lyons-Ruth & Block, 1996; Morrel, Dubowitz, Kerr, & Black, 2003). Depression and stress during pregnancy is associated with postnatal depression (Thompson, 2004). There may be indirect harm to the fetuses, if the women are prevented by their violent partners from seeking or receiving proper antenatal medical care (Mezey & Bewley, 1997). Due to the lack of a valid diagnostic tool (that measures the pervasive effects of trauma on child development), such children receive co-morbid diagnoses. The possibility that mothers who are recipients of negative experiences in life might also view their children's behavior in the same light also looms large when dealing with domestic violence. One study concluded that mothers who had a history of victimization reported more externalizing and internalizing behaviors in their children, compared to mothers who had not been victimized (Morrel et al., 2003; Sternberg et al., 1993; van der Kolk, 2005).

Children encounter family violence both as victims and as witnesses (Rudo, Powell, & Dunlap, 1998). The children's exposure to domestic violence encapsulates a large range of experiences, from visualizing or hearing their parents engage in physical and verbal altercations, to objects being thrown or broken, to the aftermath of injuries (to parents and the children themselves) and to law enforcement interventions (Edleson, 1999; Kolko, Moser, & Weldy, 1988). The effects of an abusive, dysfunctional family with its fragmented attachment patterns, extend into adulthood as well, leading to relational problems. The disturbed attachment patterns predispose the child toward subsequent victimization and make the child susceptible to forming relationships with people who are like the abuser (Baron, 1997; Hindelang, Gottfredson, & Garofalo, 1978; Irwin, 1999).

Additionally, domestic violence has long-term effects on children who are witnesses. The home environment plays a role in an individual's mental health. Though there are many psychological effects of domestic violence, the foremost response is depression followed by suicide attempts. Other manifestations include Posttraumatic Stress Disorder (PTSD) (Berkowitz, 2005; Daniels, 2005). Symptoms of the PTSD profile include: re-experiencing the event in the form of intrusive thoughts, nightmares; dissociative flashbacks to elements of the original traumatic event; and psychophysiological reactivity to cues of the traumatic event and preoccupation with that event; avoidance of thoughts, people, and places that resemble the traumatic event; emotional numbing; an absence of emotional attachments; and an inability to feel the range of positive emotions. Also included are the symptoms of hyperarousal, heightened sensitivity, sleep problems, attentional difficulties, hypervigilance, and the presence of irritability, anger, or rage (Bogat, DeJonghe, Levendosky, Davidson, & von Eye, 2006; Otis, Keane, & Kerns, 2003). Children who are raised under stressful conditions such as domestic violence may also exhibit behavioral or emotional difficulties, aggression, withdrawal, somatic complaints, and symptoms of depression and anxiety. Depression, a common outcome of domestic violence, affects 6 percent to 16 percent of the American population, and has many manifestations on the sufferer (Berkowitz, 2005; Carlson, 2000; Carter, Weithorn, & Behrman, 1999; Cohen, 2005; Edleson, 1999; Whitney & Davis, 1999).

METHODOLOGY

This study involves secondary analysis of the data originally collected by Keilitz, Efkeman, and Hannaford. (2000). The purpose of the original study was to measure the benefits and limitations of civil protection orders on the sense of safety and security of the petitioners (victims of domestic violence). These data were aggregated and not reported as individual-level results. Among other results, the authors found that obtaining a protective order increased a majority of the victims' sense of well being and reduced the incidence of further violence. In their research, Keilitz et al. (2000) collected data on the changes that occurred in the behavioral problems of the children of the petitioner approximately one

month after the issuance of civil protection orders; however, the authors did not report on those aggregated data (i.e. they did not analyze the benefits and limitations of the civil protection orders on the children of the petitioners as they did with the petitioners).

The original research by Keilitz et al. (1996) measured 11 behavioral characteristics of children who lived in the homes of the petitioners. The dependent variables in this research reflect the existence of behavioral problems of the majority of children of the petitioners in Time 1; since the data are presented in aggregate form, it is not possible to measure the change in behavior for individual children between the two time periods. The 11 behavioral problems measured by interviewing the female parent (petitioner) of the child(ren) include: bedwetting, nightmares, aggression, verbal expression, eating problems, no friends, school problems, acting sad, getting counseling, needing attention, and other problems. Each of these variables were recorded as More, Same, Less, Never a Problem, Petitioner Has No Children, or Missing in Time 1 (approximately one month after the request for the restraining order). However, this project will not be utilizing any data drawn from Time 2 because of the differences in the way it was measured. Also, T2 had more missing data.

Variables: Independent Variables: This research will analyze the effects of three categories of independent variables, plus several demographic variables. The variables include the nature of domestic violence experienced by the child(ren), including: did not witness or experience domestic violence; witnessed domestic violence only; victim of domestic violence; and witness and victim of domestic violence.

RESULTS

The basic premise of this research is to replicate a variety of existing studies to demonstrate that living in violent homes significantly impacts children, whether they are the direct victims of violence or not. This research found that children who witness domestic violence (56.8% of the sample, 162 children) were significantly more likely to experience one or more of the eleven behavioral problems that were measured in the original study (Table 1). Among the children who lived in violent homes who were themselves physically harmed (54, 18.9%) were also significantly more likely to experience one or more problem (X^2 [1, N = 228] = 9.352, p = .002). This research also found that children who witnessed violence and who were physically harmed were more likely to have one or more behavioral problems (X^2 [3, N = 227] = 17.229, p = .001) than children who witnessed violence but who were not physically harmed, children who were physically harmed but who did not witness his or her mother being abused, or children who neither witnessed violence nor were physically harmed.

Table 1: Children Who Witness Abuse and One or More Behavioral Problems

Witnessed Abuse			*One or More Behavioral Problem*		
			No	**Yes**	**Total**
	No	Count	34	32	66
		Expected Count	23.4	42.6	66.0
	Yes	Count	47	115	162
		Expected Count	57.6	104.4	162.0
	Total	Count	81	147	*228
		Expected Count	*81.1*	*147.0*	*228.0*

This table shows the relationship between children who witnessed abuse at home and those who did not witness abuse, and whether those children experienced one or more behavioral problems. The 11 behavioral problems measured by interviewing the female parent (petitioner) of the child(ren) include: bedwetting, nightmares, aggression, verbal expression, eating problems, no friends, school problems, acting sad, getting counseling, needing attention, and other problems. Each of these variables were recorded as More, Same, Less, Never a Problem, or Petitioner Has No Children.
X^2 (1, N = 228) = 10.367. * p = .001.

Table 2: Children Who Experience Physical Harm and One or More Behavioral Problems

Physically Harmed			One or More Behavioral Problem		
			No	Yes	Total
	No	Count	72	102	174
		Expected Count	62.6	111.4	174.0
	Yes	Count	10	44	54
		Expected Count	19.4	34.6	54.0
	Total	Count	82	146	*228
		Expected Count	81.1	147.0	228.0

This table shows the relationship between children who were physically harmed at home and those who were not physically harmed, and whether those children experienced one or more behavioral problems. The 11 behavioral problems measured by interviewing the female parent (petitioner) of the child(ren) include: bedwetting, nightmares, aggression, verbal expression, eating problems, no friends, school problems, acting sad, getting counseling, needing attention, and other problems. Each of these variables were recorded as More, Same, Less, Never a Problem, or Petitioner Has No Children.
$X^2 (1, N = 228) = 9.352. * p = .002.$

Table 3: Witnessed and/or Experienced Physical Harm and One or More Problem

		One or More Behavioral Problem		
No Witness/No Hurt		No	Yes	Total
	Count	30	26	56
	Expected Count	20.0	36.0	56.0
Witness/No Hurt	Count	41	76	117
	Expected Count	41.7	75.3	117.0
No Witness/Hurt	Count	4	6	10
	Expected Count	3.6	6.4	10.0
Witness/Hurt	Count	6	38	44
	Expected Count	15.7	28.3	44.0
Total	Count	81	146	*227
	Expected Count	81.0	146.0	227.0

This table shows the relationship between four potential outcomes of abuse and whether those children experienced one or more behavioral problems. The 11 behavioral problems measured by interviewing the female parent (petitioner) of the child(ren) include: bedwetting, nightmares, aggression, verbal expression, eating problems, no friends, school problems, acting sad, getting counseling, needing attention, and other problems. Each of these variables were recorded as More, Same, Less, Never a Problem, or Petitioner Has No Children.
$X^2 (3, N = 227) = 17.229. * p = .001.$

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AUTHOR NOTE

ESTIMATION OF TECHNICAL PROGRESS IN ZIMBABWE MINING SECTOR (1977 – 1997): AN ECONOMIC PERSPECTIVE

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ABSTRACT

This paper estimates the Cobb-Douglas aggregate production function for the mining sector in Zimbabwe over the period 1977-1997. The function incorporates technology as an explicit function of time from which the technical progress rate is extracted. The production function exhibits a significantly negative rate of technical progress and slightly decreasing returns to scale. Increasing capital stocks did not translate into positive technical progress, implying that investment concentrated on older technologies. Other possible factors include a general slow international rate of technical progress in the 1980s and the difficulty of adopting new large-scale technology in a country where mining is characteristically small-scale. The results indicate that the positive growth in mining output over the period was attributable to changes in techniques of production towards greater capital intensity. The existence of slightly decreasing returns to scale implies that there would be greater production benefit to the industry from development and adoption of appropriate technological innovations coupled with further substitution of labor by capital than from the mere expansion of scales of operation. There is, therefore, need to induce greater technology transfer through encouraging importation of modern equipment as well as more foreign direct investment in the mining sector.

KEYWORDS: Technical progress, returns to scale, production function, mining

INTRODUCTION

Mining in Zimbabwe has played a major role in the development of industry for at least the past 1,000 years. The earliest minerals mined included gold, silver, copper, iron and tin. These minerals were actually worked before the arrival of the colonial settlers. Most of the subsequent workings by settlers, especially of gold, were located on these older workings (Roussos, 1988, p.95).

Both alluvial mining and deep level mining were undertaken by these primitive workers, with the depth of mines averaging 40 meters. Gold panning was done in rivers during times of river flow and stopped during the dry season. Gold ores were obtained by digging pits at the bottom or sides of the river beds. In underground mining, several shafts were sunk along the mineralized zone so that simultaneous extraction from these shafts could be undertaken. Necessary underground support was achieved through the use of hardwood or backfill. Implements used included iron hoes, picks, chisels, hammer stones and iron wedges, the last three being used at depth where the rocks became harder. The ore was brought up out of the shafts by hand using buckets. It was ground on site using rocks and then it was panned in wooden plates. They also used heating and rapid cooling using water to extract gold ores from the rocks and to further treat the ores to extract the gold. Though the methods used were slower as compared to those used elsewhere before 1890, they were effective (Roussos, 1988, p.95; Valliers, 1993, p.10). Exploration methods, especially with respect to gold, developed over the centuries before the coming of the British settlers. It is reported that the Shona people frequently panned termite hills to evaluate underground potential as well as using the presence of acacias and clover-shaped herbs as evidence of potential (Valliers, 1993). The primitive man had become skillful in identifying mineral potential.

Britain and the Commonwealth countries, and the United Nations imposed sanctions on Zimbabwe in 1965 and 1968 respectively. This, together with the subsequent political uncertainties and guerrilla

activities in the country, led to a reduction in foreign direct investment in the mining industry. New methods developed and used in Canada during the period of sanctions from 1965 to 1980 were, therefore, not adopted in Rhodesia (Vallieres, 1993).

After independence in 1980, there were some negative factors which made Zimbabwe fail to gain from the world mining boom which countries with similar geology like Canada and Australia experienced between 1980 and 1991. These two countries increased their gold production 3.12 and 12.8 times respectively over the period. Zimbabwe's production increased only 1.5 times over the same period. The mining sector was greatly affected by the flight of skilled manpower just before and after independence, and the reduction in foreign direct investment (FDI). Just before independence, many workers who could not accept the racist and destabilizing policies of the Rhodesian Government left the country. After independence those who could not accept the new political dispensation also left. FDI was affected adversely by the prevalent socialist rhetoric and restriction on profit repatriation to 50%, which restriction was maintained up to 1991. Though the rhetoric was not significantly implemented in the mining sector, it made investors feel insecure due to fears of controls and nationalization (Vallieres, 1993, p.11).

The development of mining technology in Zimbabwe has been influenced mainly by the rate of FDI inflows. Much has been written on the importance of FDI to technical progress in host countries. Two such reports are Mastromarco & Ghosh (2009), and Liu & Wang (2003). In both cases it was concluded that FDI is an effective way of achieving higher total factor productivity - that is, technical progress. In the case of Zimbabwe FDI is important for two reasons: (a) Zimbabwe does not have a developed technology industry of its own; and (b) locally financed investment in the mining sector is constrained by lack of debt finance from banks as well as underdeveloped stock markets. Therefore, the rate of technology transfer is a critical factor of technical progress. Technology transfer is not perfect because of the existence of cost and other socio-economic and political forms of restriction on international mobility of technology.

Holloway (1998, p.25) identifies the small-scale nature of mines as the most characteristic feature of mining in Zimbabwe. This is exemplified by the gold sector where the majority of the plus or minus 500 mines is small-scale. It is difficulty to introduce modern technology in a mining sector dominated by small-scale mines because certain machinery can only be employed economically at higher levels of production (Gocht *et al,* 1988). The scale of operation is, therefore, a critical factor in the question of large-scale technology transfer in Zimbabwe.

Adoption of better technology has also been affected by the reluctance of fiscal authorities in the 1980s to take a long-term view of mining technology development in Zimbabwe. Foreign currency allocations to the mining industry from the Ministry of Trade and Commerce were only enough to undertake minimal maintenance. This made Zimbabwe lag behind other major producers such as Australia. The reluctance is demonstrated by the fact that in 1989 it would have costed Zimbabwe less than US$3million to completely computerize the whole mining industry, a figure less than the value of two-day mineral production (Chamber of Mines Journal, 1989).

At the international level, the 1980s experienced slow technological innovation in the mining and metallurgical industry, partly due to the recession of the early and mid-1980s (Ericsson, 1991). Other important factors had to do with the characteristic features of the world mining industry and market (National Academy of Sciences, 1978, cited in Ericsson, 1991, p. 285). The minerals market demands conformity of product quality – products are standardized especially at the concentrate level, and this makes introduction of new products difficulty. Therefore, the technology producing the products is not likely to change at high rates. Mining is a very risk business because of several uncertainties related to prices, demand, reserves, development, production, politics and the regulatory environment (Gocht *et al,* 1988). This makes introduction of new technologies risky, which is compounded by the fact that mining

technologies have long pay off periods. Innovation is also stifled by the conservative culture in management philosophy and organizational structures, where people are just comfortable with what they are used to. Geological and exploratory knowledge are more important drivers of market competitiveness than production technology.

Ericsson (1991) also points out that there is, generally, limited development in small-scale technology. This is basically due to the fact that the transnational companies which develop new technology have not operated at the small-scale level. This lack of development in small-scale technology affects developing countries very seriously since most of their mining industries are small-scale.

RESEARCH OBJECTIVES AND SIGNIFICANCE OF THE STUDY

This study estimates the Cobb-Douglas aggregate production function for the mining sector in Zimbabwe over the period 1977-1997. From this exercise, estimates of technical progress and returns to scale are obtained. The Cobb-Douglas production function is tested for its validity as an appropriate model for the mining industry. The null hypothesis that technical progress in Zimbabwe mining industry over the period was not significantly different from zero is tested. A technical progress rate that is insignificantly different from zero and/or negative would imply that there existed significant factors limiting both innovative technology development and technology adoption or transfer in Zimbabwe.

The study is significant because of the importance that technical progress has assumed in mining policy discussions relating to sustainability. The very definitions of ore, deposit and reserves are not only based on economics but also on technical feasibility. Zimbabwe has a very rich and diverse mineral resource base. The question has been how to develop this mineral potential. The rate at which these resources are theoretically and practically converted into useful material depends on the technology level we have. Therefore, it would be important, given the composite nature of capital equipment with which technical progress comes, to attempt a single quantitative measure of changes in technology so that we can appreciate in general changes in technical feasibility of mineral exploitation.

The question of whether or not humankind should be worried about the exhaustible nature of mineral resources, and indeed, of all non-renewable natural resources has been extensively debated. The main precautionary argument is that minerals, being non-renewable, deplete with extraction. This brings to the fore questions of inter-generational equity. Calls for estimation of user costs, resource accounting and institution of appropriate measures on appropriation of proceeds from the mining sector are common elements of most natural resources policies in both developed and developing countries. The importance of a measure of technical progress in the calculation of user cost is that it affects the definition of reserves which, in turn, affects estimates of the life expectancies of mineral reserves, hence inter-temporal distributional results. Thus, the estimation of user costs in mineral extraction requires a prior estimation of some appropriate concept of technical progress, especially where data on reserves is not readily available. This is the case in Zimbabwe.

An extension of the above argument is that user costs have become very important in theoretical as well as practical discussions of natural resource accounting in the System of National Accounts (SNA) worldwide. The user cost is often used as a measure of depreciation of mineral resources. Depreciation in the case of minerals refers to the fact that the resource base as a whole is getting smaller and smaller and opportunities for value-added to be produced by its exploitation are getting narrower. Economic accounting requires that the value of the capital used up in production must be subtracted from gross output value. The major error in conventional measures of income in many countries including Zimbabwe is counting exploited mineral deposits, which is a capital component (El Serafy, 1989), as value-added. The importance of technical progress to questions of reserve measurement and to the subsequent calculation of mineral user costs has made it an important matter to the whole question of

natural resource accounting. This is especially important in Zimbabwe where national accounts are still to be greened.

In resource scarcity debates, most counter-arguments against the assertion that resources are scarce and there is need for precaution are based on technical progress. The contention is that technology will offset resource depletion, as typified by the following assertion by McDivitt and Manner (1974) (cited in Rudawsky, 1986, p. 33): "…so long as we have not dug up the backyard to extract the clay to produce aluminium, nor ground up the rocks in the neighboring park to recover their minor content of copper or iron, we have not run out of mineral-bearing material…". It is argued that, with technical progress utilization of lower-grade mineral deposits, both paramarginal and sub-marginal, will be feasible in future. According to McKelvey's mineral classification, paramarginal deposits are those which can be profitably recovered if the price increases 1.5 times its current level, while submarginal deposits are those that remain unprofitable even at 1.5 times the current price (Rudawsky, 1986, p. 8). Also as minerals become scarce substitutes to them will be developed, as well as more efficient and effective methods of utilizing both primary and secondary (that is, scrap) mineral sources.

The positive implications of technical progress on feasibility of exploration, production and processing efficiency, recycling, miniaturization and substitution are generally clear, as indicated in the above paragraphs. However, the technology factor is more pronounced in advanced countries than in less developed countries like Zimbabwe for the obvious reason that most technological innovations take place in the former, while the latter are recipients. There are two reasons why it cannot be assumed that the benefits of technical progress in the developed countries filter down to LDCs wholesomely. Firstly, technology comes with a cost (Scott, 1995), which is sometimes very prohibitive. Zimbabwe imports technical progress via the modern capital equipment imported, and there are extra costs associated with better technology. Therefore, it is important to maintain a distinction between the international rate of technical progress and the domestic rate, the latter reflecting basically the rate of transfer. Estimation from the point of view of actual production measures the actual available technology as a *factor* of production, not the potential international rate. The second reason is that not all technology is appropriate for Zimbabwe especially given the difficulty of introducing modern technology in small-scale mining sector. The small-scale mining sector is a significant part of the mining sector in Zimbabwe. Therefore, estimation from the production side measures the actual productive technology and avoids the error of assuming perfect technology transfer and appropriateness.

LITERATURE REVIEW

Pearce (1986, p.415) defines technical progress as "A central element in economic growth which enables more output to be produced for unchanged quantities of the inputs labor and capital to the production process". Pearce states that technical progress can be disembodied or embodied. The former refers to a situation where technical progress occurs independently of new capital accumulations, while the latter is progress that comes with new capital. For example, to realize the potential of the silicon chip, one would have to change from the obsolete capital to new capital that uses the silicon chip.

However, Maddala & Miller (2005) have a broader view and see technological change as including better methods of production, as well as better techniques of marketing, organization, and management, and improved methods of developing new products. The general effect of all technological change is to make it possible to produce more with the same amount of inputs as before leading to reduction in unit costs. Technological change can be labor saving, capital saving, or neutral. Neutral technological change leaves the optimal capital-labor (K/L) ratio the same, one that is labor saving increases the K/L ratio, and one that is capital saving reduces the K/L ratio at unchanged factor prices. Maddala & Miller (2005, p. 214) also introduce a very important distinction between technical progress and change in technique. A change

in technique is whereby a producer substitutes one factor for another when relative factor prices change. However, technical progress and change in technique can happen concurrently.

Therefore, technical progress in the mining sector is an improvement in methods of prospecting for minerals, mining or mineral processing which has the effect of increasing output without changing amount of labor and capital used. Technical progress implies change in reserves as it impacts on geological certainty; it also implies efficiency as it impacts on production unit costs, recovery costs as well as the possibility of recycling and increasing usage of scrap.

Charlotte du Toit *et al* (2004), in their paper: "*Estimating Technical Progress for South Africa*", used a simple Cobb-Douglas production function to estimate the Solow residual. The context of their approach is the supply-side economics which places importance on the need to understand the structure of production and the separate contribution of each factor of production to the output level. They contend that, with a production function, it is possible to isolate the effect of technical progress on output from the mere changes in or substitution between inputs.

The estimation was in two stages: 1) they estimated a Cobb-Douglas production function which assumed that technology was endogenous in accordance with new growth theories; and 2) they then used parameters from this estimation to weight the factor growth rates in the decomposition of output growth, from which technical progress comes out as residual growth. Under the assumption of constant returns to scale they found technological growth in the 1970s, 1980s and 1990s (up to 2000) for South Africa to be -1.41, 0.10, and 1.52 respectively. When they relaxed the assumption of constant returns to scale the Cobb-Douglas estimation showed that there were decreasing returns to scale during the period and the technology growths were -0.30, 0.62 and 1.73, showing that technological progress as a growth factor became even more significant.

In his study of "*Elasticity of substitution, technical progress and returns to scale in branches of Soviet Industry: A new CES production function approach*", Bairam (1991) concluded that the Cobb-Douglas production function was the appropriate function for all branches except Food Processing. In most cases it is the aggregate production function that is estimated. However, the use of aggregate production functions has been criticized on a number of issues: 1) a physical aggregate concept of capital does not exist or is meaningless (Pressman, 2005). It is not possible to combine units of chisels to units of computers, for example, so as to come up with one physical measure of capital stock to input into the production function. While with labor one may count the number of people, disregarding the issue of quality or skill (under the assumption that some average employee exists), it is not possible with capital. Fisher (1969) and Fisher (1971) (both cited in Felipe & Holz, 2001) argue that for successful aggregation of micro production functions into an aggregate production function to be achieved very incredible assumptions would have to be made. Felipe & McCombie (2001) note that because aggregation is only possible in terms of value data, the resulting estimates of the production function merely reflect the underlying accounting identity. Felipe & Adams (2005) actually proved mathematically that an income identity showing that income is split between total profits and wages can be transformed by differentiation and integration into a Cobb-Douglas production function, indicating that the Cobb-Douglas production function is a reflection of the income identity.

The defense for the use of the aggregate production function comes at an empirical level. Solow (1987, pp. 16-7), Solow (1974, p. 121) and Solow (2000) (all cited in Pressman, 2005) argue that besides facilitating our understanding of how more output is produced from inputs, the aggregate production function apparently works in practice as it consistently produces estimates which compare well with the distributional results that we find in the real world. That is, we get a good fit, and the marginal productivities that are found in empirical studies approximate the real world factor shares. Using a Cobb-Douglas production function and the assumption of a one-commodity world, Solow (1956) and Solow

(1970) (both cited in Pressman, 2005) analyzed aggregate output growth as stemming from growth in factors and technical progress.

The argument that an aggregate production function is only an algebraic reflection of the income identity does not seem to discredit the use of the function in analysis of growth behavior. The function reflects a structural relationship – how aggregate output reacts to changes in factors of production and technical progress, while the income identity is an accounting tool. The former is a determination tool which tells us how output comes to be at the level it is, while the latter is a measurement tool. Essentially, technical progress can be analyzed in the production function where a relative time trend can be incorporated, while an identity does not reflect a time trend and technology cannot be entered into it in some absolute form as is the case for labor and capital.

METHODOLOGY

This study seeks to estimate technical progress in the Zimbabwe mining sector directly from the output function of the mining sector, rather than as a residual from a growth accounting decomposition (for the latter approach see also Nicholson, 1995 and Romer, 2001). This is possible from the fact that the technology function (a function of time) can be specified in the total output function. Real mining GDP at factor cost shall be assumed to be a function of real capital stock (K), real labor (L) and technology (A) used in the mining sector.

Data on capital stocks are very difficult to obtain in Zimbabwe. This study uses cumulative investment adjusted for annual depreciation (CNI) as a proxy for capital stock. While some studies have used investment as a proxy for capital stock, for example, Falk and Seim (2001), this clearly would be inappropriate in the present case because mining investment for close years can fluctuate greatly. This fluctuation would be a misrepresentation of the trend in capital stock because, even though investment may fall, but as long as it is positive capital stock would be growing. Therefore, cumulative investment would appropriately capture that trend because it would also be growing as long as investment is positive no matter how small. The cumulative flow concept is a better approximation of the stock concept. It is assumed, for simplicity, that all components of capital depreciate at the rate of 10% per annum and that there is zero salvage value. That is, an average useful life of 10 years is assumed for capital and the straight-line method of depreciation applied. Labor in this study is represented by the annual average number of people employed in the mining sector. All monetary figures are at constant 1990 dollar terms.

The output relationship is represented by a simple Cobb-Douglas production function below given in a general form in equation (1) and in a more specific form in equation (2) (a useful reference on the Cobb-Douglas production function is Chiang, 1984, pp. 414-416):

$$Q = A(t)f(K,L) \tag{1}$$

$$Q = e^{\tau t} K^{\alpha} L^{\Psi} \tag{2}$$

The parameters α and Ψ are the partial elasticities of mining GDP with respect to capital and labor respectively, $e^{\tau t}$ represents technology as an exponential function of time (t) and τ is the growth rate of mining technology (Chiang, 1984, pp.278-279). The values of the time variable begin from 1 because the data are taken at the end of each year. Substituting cumulative net investment (CNI) for capital, the partial elasticities and technical progress rate can then be obtained by estimation of the log-log relationship below over the 21 years:

$$Q^* = \tau t + \alpha(CNI)^* + \Psi L^* + u_i \tag{3}$$

where * indicates that the variable is in natural logarithms and u_i is the stochastic term. The log-log model has no intercept. While we could put some constant, say B, before the e in equation (2), in the present case that would not make economic sense. That would mean mineral production is possible without labor and capital at time zero.

Equation (3) is run by OLS for the data in Table 1 below. Since the data are time-series the regression results are corrected for autocorrelation using the Cochrane-Orcutt method. All data are obtained from various issues of the Quarterly Digest of Statistics, a Central Statistics Office publication. The LimDep Version 7.0 package by William Greene, is used in running the regression. The classical OLS assumptions apply.

Standard F- and t- tests are used respectively, in testing for the validity of using the Cobb-Douglas aggregate production function to estimate technical progress, and in the test of significance of the technical progress estimate.

EMPIRICAL RESULTS

Regression by OLS gives the following estimates:

$$Q^* = 0.307L^* + 0.588CNI^* - 0.063t \quad R^2 = 0.84$$
$$(0.0588)\quad(0.1306)\quad(0.0220)\quad df = 18 \tag{4}$$
$$t = (5.222)\quad(4.500)\quad(-2.866)\quadF_{2,18} = 46.98$$

The partial elasticities of labor and capital from the uncorrected regression are 0.307 and 0.588 respectively. They are positive, which is consistent with production theory which states that an increase in either capital or labor will result in an increase in output. Their sum is equal to 0.9 showing that the mining output function over the 21-year period exhibited slightly decreasing returns to scale. After correcting for autocorrelation partial elasticities for labor and capital become 0.234 and 0.743 respectively, giving a sum of 0.98, which practically shows constant returns to scale. Based on uncorrected results, an F-test (using restricted and unrestricted regressions) shows that returns to scale conditions are not significantly different from constant. Technical progress in the uncorrected model was negative at - 0.063, while in the corrected one it was even more negative at -0.087.

The coefficient of determination in the above regression is 0.84, showing that 84% of the variability in mining GDP over the period was explained by changes in the factors of production (capital and labor) and a time trend capturing technology. Therefore, the model is a good explanation of changes in mining output over the period, which is further confirmed by the subsequent test of joint significance of the coefficients.

Figure 1 below shows the trend of aggregate mining output over the period. It shows that output was generally on an increasing trend though there were some decreases in some years such as 1981, 1986, and 1993. Employment over the same period was on a slightly decreasing trend as shown in Figure 2. In both figures a dotted line is used to roughly indicate the trend. Figure 3 shows that investment in the mining sector generally increased over the period, with the proxy for capital stock (cumulative net investment, CNI) monotonically rising below the cumulative gross investment.

Table1: Mining GDP, Labor and Investment

Year	Q	L	I	CI	CNI	t
1977	422	61,600	95	95	95	1
1978	447	58,100	75	170	161	2
1979	540	59,500	90	260	243	3
1980	755	66,200	82	342	316	4
1981	614	68,700	112	454	420	5
1982	804	63,700	71	525	480	6
1983	792	60,300	53	578	526	7
1984	823	54,500	42	620	562	8
1985	815	54,300	64	684	622	9
1986	775	54,900	94	778	710	10
1987	810	56,700	182	960	882	11
1988	810	57,700	269	1,229	1,133	12
1989	842	55,700	171	1,400	1,277	13
1990	845	51,400	166	1,566	1,426	14
1991	862	50,900	218	1,784	1,627	15
1992	846	50,200	298	2,082	1,904	16
1993	813	47,500	243	2,325	2,117	17
1994	923	52,500	313	2,638	2,406	18
1995	980	59,000	669	3,307	3,043	19
1996	941	59,800	671	3,978	3,647	20
1997	936	59,100	359	4,337	3,939	21

This table shows mining GDP at factor cost (GDPfc) at 1990 prices in Z$ million (Q); annual average number of employees (L); investment (I), cumulative investment (CI), and cumulative net investment (CNI) at 1990 prices in Z$ million; and the time variable (t). GDPfc is spliced around 1985. Gross Capital Formation is spliced around 1983. Source: Various issues of the Central Statistical Office's Quarterly Digest of Statistics.

Figure 1: Mining GDP at Factor Cost (Q
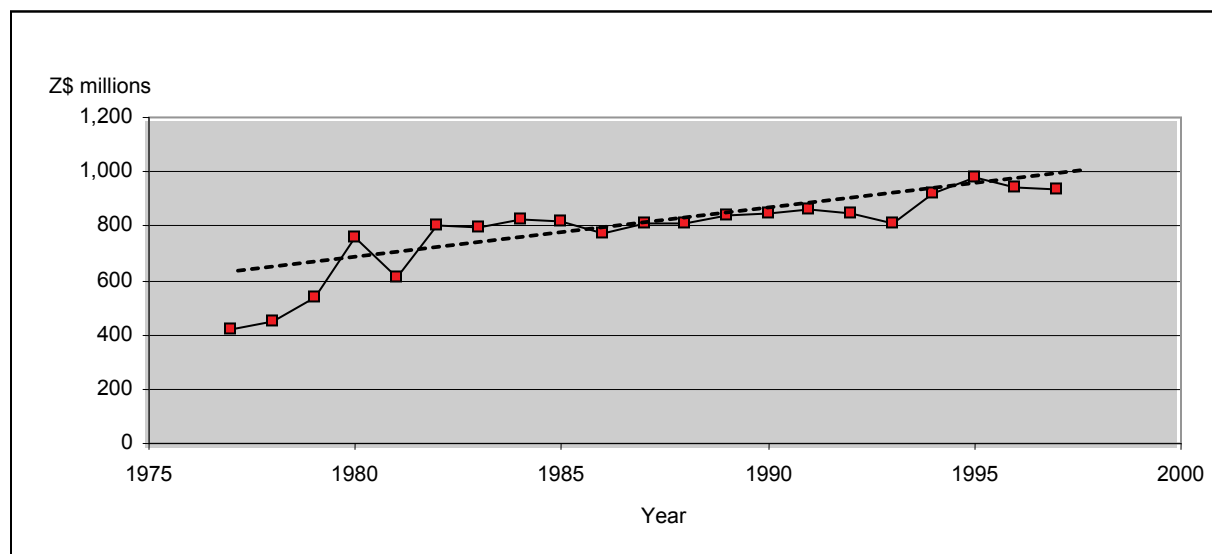
This figure shows the trend of mining GDP from 1977 to 1997.

The test for the overall significance of the Cobb-Douglas model at 0.05 significance level gives a computed F (= 47) which is greater than the critical F at degrees of freedom 2 and 18 (= 3.55). Therefore, the Cobb-Douglas model in the present case is valid. A two-tailed significance test of the estimated (uncorrected) technical progress rate gives a computed t value of -2.866, which is less than the critical value of -2.101, showing that technical progress was significantly negative over the period. Note that a one-tailed test with $H_1 : \tau < 0$ would also reject the zero null hypothesis since, in that case, critical t value equals -1.734. Technical progress was even more negative in the corrected model.

Figure 2: Employees in Zimbabwe Mining Sector (L)
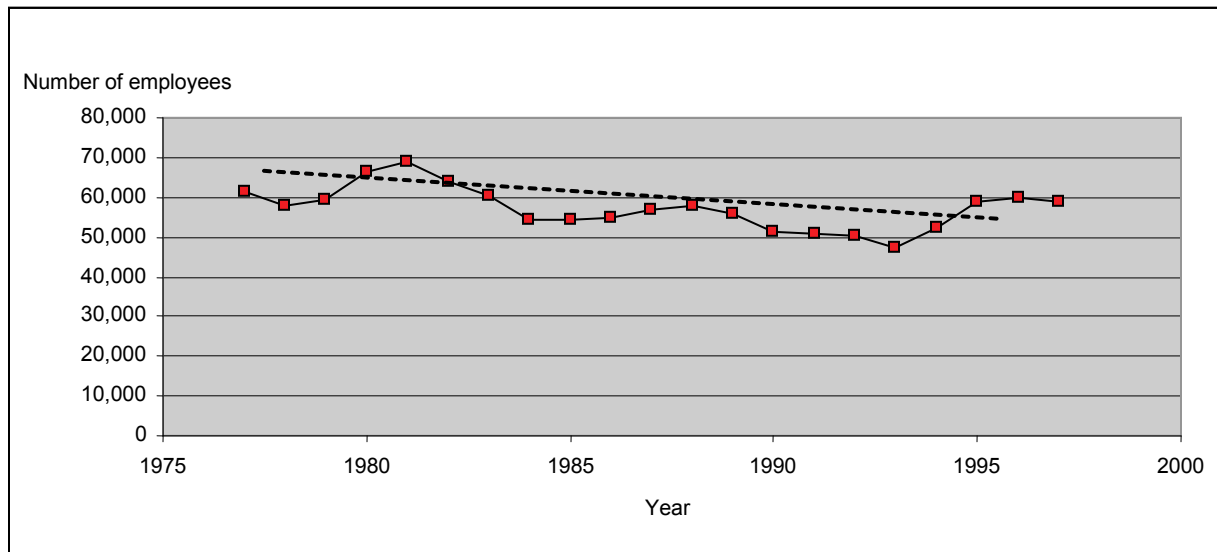
This figure shows the trend of average annual employment in the mining sector from 1977 to 1997.

Figure 3: Investment (I), Cumulative Investment (CI) and Cumulative Net Investment (CNI) in Zimbabwe Mining Sector
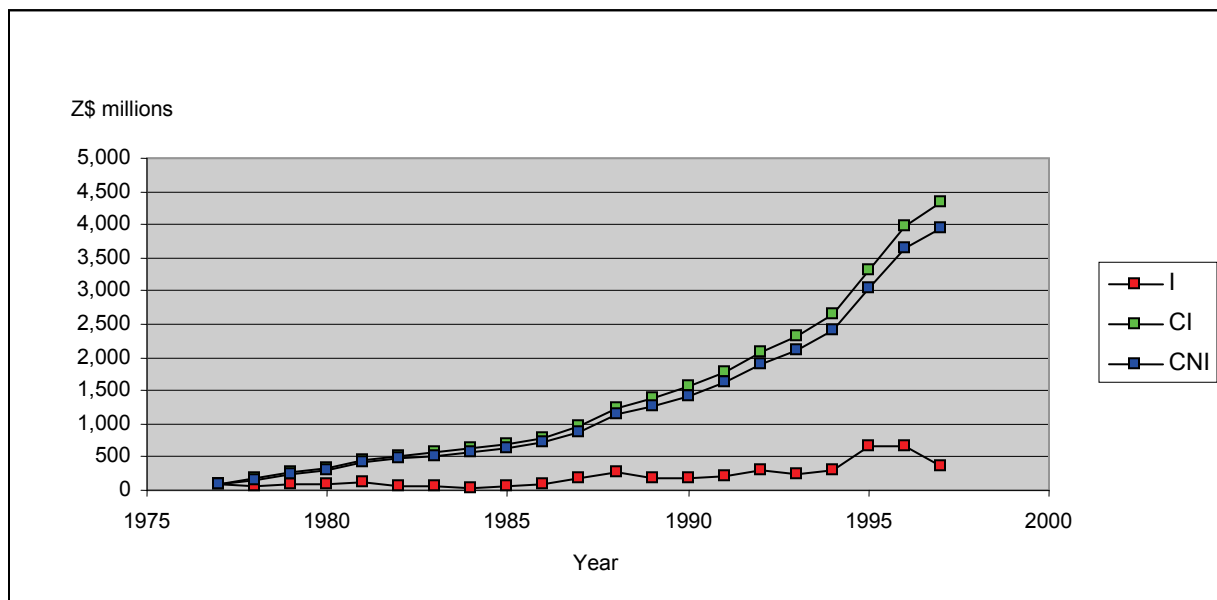
This figure shows the trend of investment in the mining sector from 1977 to 1997.

CONCLUSION

The results above present a paradox. While technical progress in less developed countries tends to be embodied, over this period, increasing capital stocks did not translate into positive technical progress. Apparently, capital accumulation over the period concentrated in older rather than new models of equipment.

The negative estimate of technical progress also reflects the slow rate of international technical progress in the mining sector in the 1980s due to recession, especially in the area of small-scale technology development. It also reflects the difficulty of adopting new large-scale mining technology in a country where the majority of the mines are small-scale. The lack of a long-term perspective by the fiscal authorities in Zimbabwe in the 1980s and 1990s on mining technology adoption and development is also reflected by the negative estimate.

The results indicate that the positive growth in mining output over the period was attributable to changes in techniques of production towards greater substitution of labor by capital, as the capital-labor ratio generally improved over the period. Clearly, factors inhibitive of innovative technology development and technology transfer had significant restrictive impact on growth.

The study indicates the need to directly encourage importation of modern equipment as well as more foreign direct investment in the mining sector through various fiscal and non-fiscal incentives. This would facilitate greater technology transfer into the country. The existence of slightly decreasing (practically constant) returns to scale implies that there would be greater benefit to the industry from development and adoption of appropriate technological innovations than from the mere expansion of scales   of   operation.

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THE CONSEQUENCES OF THE ENVIRONMENTAL DETERIORATION UPON THE EUROPEAN UNION'S ECONOMY

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ABSTRACT:

The phenomenon of environmental deterioration is one of the biggest problems of this beginning of century, having a strong impact on the world economy. The growing off-balance between the economy and environment has acquired a great importance at international level. The environment is deteriorating also in the European space, and the consequences of this phenomenon over the economy of the European Union are more and more visible. The negative effects of the environmental deterioration have repercussions over the development of EU economies, which imply consistent financial efforts from behalf of those states, for the environmental protection and the stopping of the deterioration process, and, at the same time, for the reducing of ecologic damages and their consequences over the present and future generations.

JEL: Q56; Q57

KEYWORDS: Deterioration, environment, environmental factors, European Union

INTRODUCTION

The history of human society demonstrates the indissoluble connections between the activities of man and his natural environment, highlighting thus the unity of the mutual relationship man-nature, as well as the historical contradiction from within. The environmental deterioration has no frontiers, as it manifests globally.   The progress and the economic and social performances have a direct impact over the quality of environment. The researches and studies on world level regarding the human society and the environment take into consideration the processes of irrational consumption of resources and of deterioration of the environment (water, air, soil). This is why, the states of the world need to focus upon the "economic governing", because, generally speaking, they neglect the environmental issues, many of these having a global character.

The relationship "economy – the neglecting of the quality of environment and the diminution of natural resources" is more accentuated and leads to tensions and resistance in applying or adopting the measures of environmental protection, at global level, but also in the European Union. The solution for the protection of the environment can be a perspective shift: those measures that limit the development of industry out of environmental reasons are at the same time stimulating the development of mechanisms and systems which make possible the cohabitation of the two – such as the advanced non-polluting technologies, the alternative sources of green energy (solar energy, wind energy) which lead to the development of a specialized market and implicitly, to economic development. Due to rapid changes in the European and world economy, but as well as due to the acceleration of the environmental deterioration phenomenon, new solutions and answers are always sought in order to stop and reduce it.

The remainder of the paper is organized as follows. Section 2 describes the environmental deterioration in the European space. The economy-environment conflict on the European Union level is discussed in Section 3. Section 4 provides the consequences of the environmental deterioration over the economy of the European Union and Section 5 concludes the paper.

THE ENVIRONMENTAL DETERIORATION IN THE EUROPEAN SPACE

By the development of the human activity, all elements of the environment are affected, yet, in different proportions. Among these elements, the most important are: the soil, the water, the air, the biodiversity. There are many areas of Europe which are affected by extreme phenomena: very high temperatures, draughts, rains and floods.

The climatic changes as main effect of the environmental deterioration have intensified their frequency and gravity during the last decades. Even if efforts are made in order to reduce the gas emissions, the presence of the accumulated greenhouse effect gases until the present time produces climatic changes. That is why the vulnerable points need to be evaluated in order to be able to act in order to limit the risks. The climatic changes manifested on the European continent have accentuated the problems related to water, and especially the lack of it. The draught phenomenon is accentuating each year as consequence of the higher and higher temperatures, and the water reserves, first of all from South Europe are considerably reducing. At the same time, the agriculture and tourism need the increase of water consumption, especially in the warm and dry areas. For example, Cyprus is facing a draught of catastrophic proportions. The water demand has had an accentuated tendency in the last 17 years, and now is over 100 million cubic meters of drinking water per year. As compared to this, in each of the last three years, this country has had available only 24, 39 and 19 million cubic meters of water. In order to ameliorate the "water crisis", in the summer of 2008, water was brought from Greece. Until September 2008, 29 ships with water were imported from Greece. But these transportations as well were delayed due to the fact that also Greece confronts with the lack of water. Under these circumstances, the Cypriot government had to apply certain emergency measures which included also the decrease of water consumption with 30%. In the summer of 2008, in Turkey, the level of waters decreased constantly. The tanks that provide drinking water for the city of Istanbul were filled at 28% of capacity. The tanks that provide for Ankara, a city with four million inhabitants were filled at only 1% of capacity (The European Environmental Agency, 2009).

The greenhouse effect gases contribute aggressively to the change of climate. There are estimations of specialists who foresee that the area from the South of Europe will become warmer and drier, while the North and North-West will be more temperate and humid. The member states of the European Union agree with respect to the fact that this growth of global temperature needs to be limited to 2ºC over the level from before the industrialization in order to avoid a severe change of climate. This is the main scope of the EU steps in order to reduce to minimum the effects. Because, those steps are focused especially on the decrease of the green house effect emissions, the limitation of the temperature growth to 2ºC means a decrease of gas emissions with 50%, at global level, until 2050 (The European Environmental Agency, 2009).

The biodiversity, the natural wealth of the planet we live in, disappears in an alarming rhythm, due to the climatic chances, due to pollution, as well as due to the manner in which the natural resources are excessively exploited in order to support the production, the consumption and the commerce in our globalized economy. The biodiversity may be looked as an insurance policy that the planet is giving us. Its value may be compared with the one of the financial markets in which the shares portfolio (species in this case) constitutes a guarantee against perturbations.

Due to the accelerated rhythm of the globe's population from 6.7 billion at present time to nine billions until 2050, the negative consequences over the biodiversity will increase, and the losses will grow. The marine life from the proximity of the discharge river mouths of the great European rivers is affected by the chemical industrial and the domestic wastes. This menace is even greater to species with already drastically reduced populations by the human activity, by the fragmentation of habitats, the illegal

hunting, the uncontrolled commerce and the non sustainable economical-social development (the polar bear, the marine species and so forth).

The pollution of the environmental factors (air, water, soil) does not take into consideration the national borders.   The biggest responsibility for the environmental pollution is represented by the social-economical activities of people. The progress and the economical and social performances have a direct impact over the quality of the environment. Thus, the industries great consumers of resources and energy, but as well producers of huge quantities of wastes and carbon dioxide, the use of pesticides and fertilizers in agriculture, the transports, as well as the discharge of domestic wastes into rivers, ocean rivers and oceans, have led to the accentuation of the phenomenon of polluting all environmental factors. "We have become so numerous, and our technologies, so powerful, that we are capable to influence significantly more aspects of the environment. The most vulnerable part of the ecologic system of Earth is the atmosphere" (Gore, 2007).

THE ECONOMY-ENVIRONMENT CONFLICT ON THE EUROPEAN UNION LEVEL

"In a moment when the monetary markets are searching for new directions, maybe the environment will show us the way "(The European Environmental Agency, 2009).

The process of the global development is closely linked to nature, having considerable implications over the environment. The global requirements of humanity have overcome the power of regeneration of the Earth's resources, and the environment is rapidly deteriorating.

The experts believe that the global economy growth over the past 50 years has been accompanied by accelerated environmental decline. From 1891 to 2005, the global Gross Domestic Product more than doubled, in contrast to the 60% of the world's ecosystems being degraded or used in an unsustainable manner. Only a fraction of the national income is spent on the environment. The global annual spending on the environment is estimated at best at US$ 10 billion per year. This is in contrast to the US $60-90 billion needed for those environmental investments that contribute directly to poverty reduction alone (United Nations Environment Programme, 2008).

The world economy, within the meaning of the Gross Internal Product (GIP), has grown in an unprecedented rhythm: in 1950 the world GIP amounted to €4 trillion, and in 2007 to over €42 trillion. This growth – of over ten times – was determined by a few key factors, especially by the circulation of the raw materials and goods – all coming from the environment. In contrast to this economic growth, the environment suffers and continues to suffer even now: the blocks of ice from the mountain chains of Europe are melting down; the glacier calotte from the Arctic Ocean is withdrawing during summer and is getting thicker than ever. In 2007, the surface of the glacier calotte was half of the one measured during the 50'. These tendencies may change our relation with the natural environment, but not also our dependence on these. The economic activities and the very cohesion between our companies are supported by the natural resources that the planet provides.

For all that, we do not pay the due attention to the economy-environment relationship of dependency, because there are no societies without natural environment, but there is a natural environment without societies. The fundament of the degradation that we notice around us, in our natural environment, is the lack of values awareness that counts in this relation. In 2006, Lord Nicholas Stern elaborated the "Report regarding the impact of climate changes over the economy". He estimated that the immediate stopping of the gas emissions with greenhouse effect would significantly reduce the costs of the impact of the climate changes. If we acted starting this very moment, the costs would be much reduced and the efficiency would be bigger, as compared to if we acted later. Thus, "the costs of measurements to fight the climatic changes, through the stabilization of the Carbon dioxides in the atmosphere would be of approx. 1% of

the world annual GIP, until 2050. But the lack of the measures would cost even more, and it could reach to 20% of the world wealth". The forecasts of the report have been bleak: "the climate warming will have an effect comparable to the two world wars, and the world economy could decrease up to a fifth" (Stern, 2006).

In the „The Scientists' Conference" from Copenhagen in March 2009, Lord Stern warned us that the underestimated the risks of the global warming and the damages that it provokes and that there were "severe risks" if the temperature would exceed with 4 to 7 degrees Celsius until 2100. The agriculture will be destroyed and life will become impossible on most parts of the planet. At the same time, the recent review of the estimations from the report published in 2006 has led to the appreciation of its author that the lack of action could cost 50% and even more than the maximum value previously appreciated, risking to reach a third of the world wealth, as well as the decrease of consumption per capita of the Planet (McCarthy, 2009).

In this context, the conflict between economy and environment is more acute than ever. There are opinions according to which the salvation of the planet and of the environment is in close interdependency: the economy cannot exist without a robust and healthy environment. At world level, it is assessed that the failure to take measures in order to diminish the effects of the climate changes over the environment will lead to costs of least 5% over the world economy, namely the annual decrease with 20% of the global product, without taking into consideration the loss of the ecosystems and the species that disappear forever by means of the alteration of the Earth's climate (Hardisty, 2008).

Nevertheless, the bleak estimations regarding the deterioration of the quality of the environmental factors represent a new warning signal which has the role of contributing to the understanding by the governments of the world's states of the potential effects on planetary level, if the current patterns of production, consumption, growth and life will not change. Better world "governance" is essential for the management of the economy-environment conflict, through the intervention of the states which need to manage the international system in such a way as to exceed in the shortest time possible the global economic crisis, without producing the accentuation of the environmental deterioration.

The Norwegian Research Institute "Point Carbon", based on recent studies, shows that the Carbon emissions in the European space have decreased with 6% on 2008 as compared to the year 2007, as effect of the economic crisis. The 27 countries participating to the European system of <Carbon quotas> have issued last year 2,111 billion tones of greenhouse effect gas as compared to 2,245 billion tones in 2007 (www.green-report.ro, 2009).

Even though the European Union got involved in the protection of the environment only in the 70', when this issue became of international interest, in the following decades have been taken important measures as to the improvement of the quality of life, the limitation of pollution, the introduction of the pollution prevention principle and the one of rationalization of the natural resources and also programs were adopted which represented financial instruments for the management of the projects regarding the protection of the environment from the Member States.

Presently, on international level, the European Union is playing a central role in the fight against the climate changes, through an integrated policy regarding the energy and the climatic changes having as main scope an economy which respects the climate, based on the combination of the technologies and the sources of energy with low Carbon emissions, on the protection of biodiversity, the solving of the desertification issue, the abusive forest clearings and of the impact of pollution over the public health.
The European bodies have the role to analyze as profound as possible the modalities to integrate the adaptation to the climatic changes in the external policies and in the present financing instruments and, if necessary, to elaborate new policies. European Union needs to share its experience in this field with the

developing countries and to offer them assistance for the elaboration of their own strategies as thorough as theirs. The existing partnerships, such as the one entered with China. India and Brazil constitute an adequate basis for the widening of the European Union cooperation with the developing countries on the climatic change theme.

The main mutation which needs to be produced in the current mentality would be the one of immediately replacing the economic interest with the notion of interest regarding the conservation of the patrimony of the future generation. On this line of thinking, an economic policy needs to be conceived which, instead of submit the biosphere to the limitations given by the logics of the immediate profit, to try to organize, first of all, the proper management of the natural resources, based on which to fundament realistic environmental policies.

In this context, the strategy with anticipative character from within the policy of environmental protection is based on the principle of precaution and on other principles which are favoring the preventive action, according to which any damage to the environment needs to be corrected from the source and the polluting source needs to pay (Manolescu, A., Mironescu, A., Matei, I., 2008). Such an example is that on January 18th 2006, the European Commission has proposed a directive that helps the member states to prevent and limit the effects of floods, as well as their effects over the human health, of environment, infrastructure and properties. During 1998-2006, the floods produced by the European Union caused 700 deaths, the evacuation of 500,000 persons and economic losses evaluated to over 25 billion Euros on the insurances market.

THE CONSEQUENCES OF THE ENVIRONMENTAL DETERIORATION OVER THE ECONOMY OF THE EUROPEAN UNION

The phenomenon of environmental deterioration has consequences over the economy of the European Union, with grave manifestations over industry, agriculture and services.

The industry and services are facing the necessity to adapt to the climatic changes. The climatic changes are affecting the constructions and tourism to great extend. For example, the decrease of the number of tourists may lead to restructuration and may cause damage to the industrial infrastructure. There are opportunities to introduce on the market new products and services, as well as the adopting of attenuation and adaptation measures to the new conditions offered by the environment. E.g. the investments in the insulations field are reducing, for one hand, the heating needs during the winter time and at the same time protect against the excessive heat, reducing thus the demand for air conditioning during the warmer summers.

The European agriculture is confronting during the last years with numerous challenges, due to the international competition, the continuation of liberalization of the commercial policy and the demographic negative growth. The climatic changes are aggravating these difficulties and are raising the complexity and costs of the measures which need to be taken in the European economy in what concerns the agricultural production, the management of the live stocks and the localization of the production facilities.

The consequences of the environmental deterioration over this field have manifested by the decrease of the agricultural incomes and the abandoning of lands in certain parts of Europe. In what concerns the alimentary production, this could be a real problem in certain parts of Europe, because the heat waves, the draught periods and the parasites may lead to a growing number of cases of deficient harvests. Given that the agricultural production is more and more vulnerable, the risks for the food supply at world and European level are more and more accentuated. Along with the climatic changes, the role of agriculture and silviculture of the European Union as suppliers of ecological services and ecosystems will have a

greater importance. The agricultural and silviculture management play an important role in what concerns the efficient use of water in the dry areas, the amelioration of the floods management, the maintenance and rehabilitation of the multifunctional landscapes, and so on.

The community support for agriculture, silviculture and rural development play an important role in what concerns the food production, the preservation of rural landscapes and the supply of environmental services. The recent reforms in the common agricultural policies have constituted a first step towards creating a frame for the sustainable development of European Union agriculture. The subsequent adaptations to the common agricultural policies and the check of their efficiency could offer the occasions to analyze the best modalities to integrate more efficiently the adaptation to the climatic changes in the support programs for agriculture.

A solution for the replacement of the conventional natural resources is constituted by the bioenergy which is a dominant renewable energy in Europe. The biofuels represent a useful method to make the transportation ecologic and to eliminate the oil importation. Nevertheless, on the other hand, the transfer to the production of biofuels on large scale has considerable ecologic risks, especially due to the change of land destination. The soil and the plants are the most important collectors of Carbon dioxide on Earth – containing twice as much Carbon then it exists in the atmosphere, and the mass transformation of forests, peat coal or pastures into cultures destined for the biofuels production could generate more Carbon Dioxide that it could save. There are opinions of specialists according to which, "the extension of the surfaces of agricultural surfaces in Europe in order to satisfy both the need of aliments as well as the need of fuels could have a major impact over the biodiversity of Europe and could affect the soil and the water resources. The biofuels obtain from wastes, from harvest or forest residues, offer advantages for the environment (The European Environmental Agency, 2009).

The European Community has suggested to the EU member states a compulsory objective which needs to be attained until 2020 and namely that 20% of the total of energy produced in Europe be originated from renewable sources (wind, sun, waves, etc., as well as bioenergy). Currently, only 6.7% from the total energy consumption in Europe comes from renewable sources. Two thirds from this percentage comes from the biomass (The European Environmental Agency, 2009). On the other side, the transportations contribute to the growing of the level of greenhouse effect gases, and cancel the savings of emissions obtained in other sectors. For this reason, the European Community has suggested that the biofuels should constitute 10% from the total of the fuels destined to transportation until 2020, if they prove as a sustainable solution. If in the year 2007 the biofuels constituted only 2.6% from the total of the fuels destined to the road transport in the European Union, in order to perform the mentioned objective, the production and the import of biofuels needs to grow in an accelerated rhythm. On the other hand, the growing rate of the food consumption at global level and the additional demand of biofuels leads to the extension of the surfaces of cultivated lands in to the prejudice of the surfaces of pastures and forests, which would have, as well, a major impact over the biodiversity, as well as on the quality and quantity of water.

CONCLUSION

The world economic crisis can be an opportunity in order to solve the problems of the environment, which must not represent an issue for the economy, but a solution.

The European Union needs to actively look for manners to produce bioenergy as much as possible within itself, maintaining the equilibrium between the production of food, fuel and fibers, but without compromising the services of the ecosystems. All possible ecologic impacts need to be taken into consideration, including the effects they have on the soil, the water and on the biodiversity, as well as the

greenhouse gas emissions. Thus, the EU may become a leader in the creation of a truly sustainable bioenergetic field.

In order to avoid the creation of negative impacts determined by the use of bioenergy, strict policies are needed at community and international level in order to prevent the change of destination of the lands, adding thus an ecologic issue to the existing one in the preoccupations related to this source of energy.

The solution for the reducing of the consequences of deteriorating the environment over the economy of the European Union is represented, in my opinion, by the "real investments" in the use of the renewable energies, including the use of the nuclear energy, but as well by recycling "the cleaning" of the coal (capture and storage of Carbon) by means of which electricity can be generated with minimum pollution.

The states of the world will be forced to continue their investments in the environment. The efforts made in other domains will be cancelled by the danger the planet is subject to, namely the continuous deterioration of people's lives, but also the deterioration of the biodiversity. The global efforts for the conservation and protection of the environment need to be treated with priority and made regardless of the economical situation, because in the past also other financial crises existed and will surely appear again in the future. The investments of the world states need to be made in physical assets, instead of promises on paper. And last but not least, the cooperation between the economy and environment which will be beneficial for our future, of all, thus succeeding to leave the generations to come a planet where they can actually live in.

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THE ENTRANCE OF COURT MANAGEMENT IN THE COURTS THROUGH THE USE OF THE SOCIAL BALANCE: THE ITALIAN EXPERIENCE

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ABSTRACT

Social Balance is a voluntary instrument of accountability that allows businesses and public administrations to set up a widespread and transparent communication strategy in order to promote the consent and social legitimization that are the premise for the achievement of any other objective, including those the income and competitive types. It is a document to attach to those already in existence, in order to provide, to different subjects interested, information on the social and environmental effects that derive from the choices made. The recipients of the document are defined as stakeholders and are identified not only in the interlocutors run by the business or corporation, but also in all those who are indirectly affected by their actions. The practice of social accountability in Italy has spread in the public sector during the last decade, turning to instruments geared to involve the various interlocutors in the activity of the organization and attempting to satisfy the relative needs, creating value for the entire community. Social Balance of the courts represents a phenomenon that is still not widespread and is experimental. It is easy to predict that in the next few years, many judicial offices will equip themselves with this instrument that is easily adapted to an institution that has such an important social value. The aim of this paper is to demonstrate that even a judicial office can no longer avoid the responsibility typical of every public institution to refer the results it has attained, conciliating the business approach with the provisions, regulations and the guidelines that regulate its daily judicial activities.

INTRODUCTION

Social Balance is a voluntary instrument of accountability that allows businesses and public administrations to set up a widespread and transparent communication strategy, in order to promote the consent and social legitimization that are the premise for the achievement of any other objective, including both income and competitive types (Bandettini A., 1987). It is a document to attach to those already in existence, in order to provide information on the social and environmental effects that derive from the choices made to the different subjects interested. The recipients of the document are defined as stakeholders and are identified not only in the interlocutors run by the business or corporation, but also in all those who are indirectly affected by their actions (Terzani S., 2002). Only during the last decade has the practice of social accountability in Italy spread in the public sector. The last few years have been characterized by substantive transformations that have invested in various fields, pertaining in particular to the political, economic and above all public spheres. Relating to the local situation at hand, the principal symptom of the spirit of reform refers to the figure of the citizen, who is the main interlocutor of the organization. He is no longer a subject that passively assists the decisions made by the Administration, but rather is called upon to participate actively in the life of the Corporation. Consequently, public Corporations, turn to instruments geared to involve the various interlocutors in the activities of the organization and attempt to satisfy relative needs, creating value for the entire community.

It is exactly in this context that public administrations, later in respect to private ones, have ventured into the drafting of a Social Balance, a document that integrates the traditional one, focusing, with particular attention, on the aspects of a qualitative nature, focalizing its attention on the methods through which wellness for the community are created (Giusepponi K., 2004).

ANALOGIES AND DIFFERENCES BETWEEN A PUBLIC SOCIAL BALANCE AND THAT OF AN ENTERPRISE

Social balance presents specific peculiarities in the public sector, although some analogies with the private sector remain (Hinna L., 2004). The similarities refer to 2 concepts:
- Social balance as a response to the limitations of a traditional balance: the financial statement for the accounting period demonstrates, in fact, major limitations in the accountability of the dimensions not decidedly economic-financial.
- The necessity of the recovery of the ethical and social dimensions: Public Administration, like enterprises, are aware that they owe accountability even in relation to the context in which they operate, and not only in the presentation of their own results.

There nevertheless remain some important differences:
- The relevance of the economic-financial dimension: in the private enterprise it is an element based in the representation of the company's results, while it is less representative in the value of the performance of a public administration.
- The role of the Social Balance: while in an enterprise it has residual relevance, representing added information, in a public Corporation an original interpretation key of the performance is recovered
- The aim of social accountability: in private enterprises, it deals with accounting for the social and environmental relapses of the operator itself. In public administration, the aim coincides with the mission of the Corporation itself. In the private it is therefore the value of the external relapses of its activities, in the public the entire process through which the Corporation interprets and satisfies the needs and requirements of the community in question are restored.

Social balance represents, therefore, the attempt to offer an instrument capable of overcoming the informative and structural deficit of public accountability . That is (Manni F., 2006):
- A deficit of clarification in the finality, policies, and strategies: they should be at the base of the objectives and of intervention programs, but in reality, they are not the fruit of a systematic and thought out process of strategic formulation and of individualization of the priorities.
- A deficit of transparency: the classic instruments of accountability do not allow citizens to evaluate the performance in relation to the objectives.
- A deficit in the measurement of results: The orientation towards the correct surveying of accounting phenomena is stronger than that of the evaluation of the quality of services and of the policies carried out
- A deficit in communication: the information, even if available, is often difficult to access by the citizens, and in some cases, not very comprehensible.

Such deficits in the systems of accountability hide and, at the same time, generate other flaws that go deeper into the public sector (Vermiglio F., 2000):
- A deficit in governance that makes it possible for the evaluation of the actions of one government that are based on decisively economic-financial criteria whose actions will translate principally into a reduction of the expenses
- A deficit of legitimization and trust on the part of the citizens and the enterprises towards Public Institutions that can bring into discussion on behalf of the citizen the social use of the corporation itself.

THE INVOLVEMENT OF THE OLIGARCHIC COMMITMENT AND THE STAKEHOLDER ENGAGEMENT

The first step necessary is that of receiving full commitment from the part of the organization leaders. One of the more critical variables in the process of social accountability concerns the involvement of the stakeholders (Bertocchi M., 2005). A social balance arises as an instrument that is directed towards the

multiplicity of the stakeholders relative to the effective operation of the organization (Pezzani F., 2003). If this is an enterprise, the stakeholders are titular subjects of relative interests in the life of the enterprise (first of all with those who bring in human and financial) and as such they have the right to be informed and involved with reference to the activities carried out. The debate of the last decade on social responsibility of enterprises has expanded this right to information (social and ethical reporting) to a deeper level of accountability (Sacconi, 2008).

In recent theoretical models (Hinna L., 2002; Mitchell R.K., Angle B.R., Wood D.J., 1997; Atkinson T.N., Gilleland D.S., 2006), the way in which the stakeholders should be involved early on in the sharing of the road to accountability, participating in the definition of the objectives, of the useful indicators to measure them, in the process of evaluation, in the corrective actions and betterment plans at the end of each road of accountability, are underlined. In reality, a process of engagement structure as such matures progressively.
It is difficult, therefore, to consider the social balance as a simple document without considering the whole of the activity that legitimizes, supports and gives it value. In this perspective, the accountability, management and communication of social responsibility constitutes three macro processes that are closely integrated.
The evolution of integrated management can then render desirable the structuring of an out-and-out system of management(Bertocchi M., Bisio L., 2005).

<u>The Experience of Social Balance in the Public Prosecutor's Office at the Tribunal of Bolzano</u>

It is always bigger and more evident the ruts that have come to create (be it right or wrong) in the last few years among those who administer justice and those who in their names justice is administered. It is visible to all and its motives have been the subject of continual analysis, reflection and discussion.
It is necessary to underline here that social accountability is a complex process that allows the influence on the entire system of internal reports and external to the administration. (Borgonovi E., 2004).
Its value develops in different applicable spheres and can be mentioned in this seat only by resorting to a forcedly simplified outline (Figure1).

Two operational units were activated on the Social Balance project: (1) a managerial and coordinating group, in charge of the elaboration of the objectives, the allocation of tasks, the analysis and validation of the results in the various phases of the project. Of this, the Public Prosecutor, the administrative director, a Deputy Public Prosecutor, the coordinator of the project internally in the administration, the project manager of the consulting firm, and other representatives of the administrative personnel and from the Criminal Investigation Department of different administrations; (2) several operational sub-groups made up of administrative personnel and personnel from the Criminal Investigation Department selected from time to time internally from the different accounting spheres, supported by experts from the consulting firm.

The first task was to clarify the commitments of the administration, to become aware of their own mandate and to single out the *stakeholders*.

The process of accountability is a dialogical one: the objective is to account for what it is and does and to do so requires awareness of its own purpose, and to know who its stakeholders are; that is, the subjects that interact with the Tribunal in the capacity of Stakeholders. The act of singling out the stakeholders does not end with a simple list of subjects:

it is necessary to describe relationships, define the frequency, acknowledge the "key" subjects like those who actually allow the Office to function, that is, that are the source of its "social legitimization".

In the end, recalculating in an outline that is not hierarchical, but rather of proximity/distance, interests/influence, those who have an interest in the activity from those who instead influence behaviours have been distinguished, finally arriving at defining those who have both interest and influence.

Figure 1: Initial Expectations Source: Personal Elaboration

Accounting Sector

Obtaining a clear reading instrument of the costs sustained by the Office, supplying a global statement of the activities carried out

Communication sector

Enhancing and bettering the dialogic relationship with all its beneficiary subjects or service or functionals to the development of the institutional activities.

Social sector

Highlighting the lapses and the social results of the choices made towards the citizens and the institutions

Internal governance

Rendering the organization and all its member operators in the management in the resources assigned

Strategic –organizational sector

Equipping themselves with reading instruments of the organizational efficiency of the structure, individualizing possibilities of targeted interventions

Professional sector

Acquiring an in-depth knowledge of the Office and a complete mapping of the services carried out rendering the information accessible to all

Below is the map of the stakeholders of the Public Prosecutor's Office illustrated in a figurative and schematic form as they have been individualized and designed during the course of the work aimed at social accountability (Figure 2).

It is at this point that the commitment for establishing a bi-directional dialogue is inserted: learning to listen to their point of view with the dual outcome of acknowledging the language of the values to which each stakeholder is sensitive (defining the criteria to measure their own performances) and of obtaining useful indications to redefine the strategies and objectives.

Only the work of discussing and gathering the data has developed personal relationships and consolidated an organizational identity, before only perceived at the single occupational human recourses level (Figure 3).

Figure 2: the stakeholders of the Public Prosecutor's Office of Bolzano. Source: personal elaboration
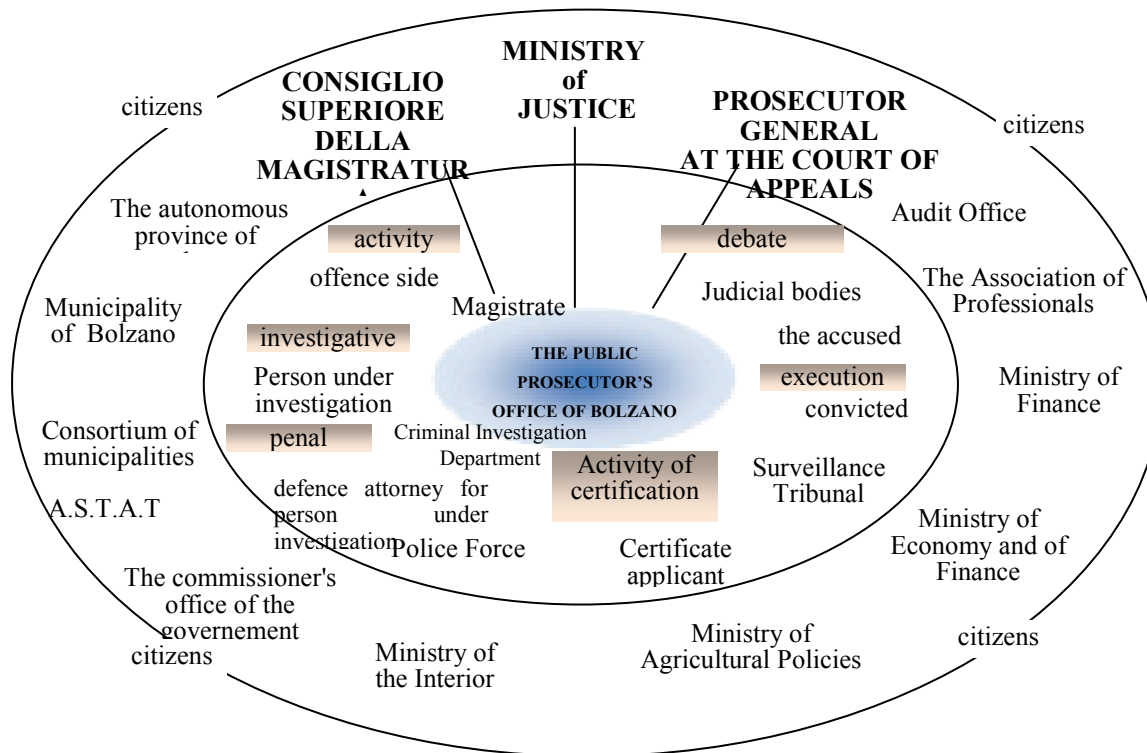
THE GATHERING OF ECONOMIC DATA

The reconstruction of economic competence has represented a more complex aspect of work, given the absence of effective models specific to the judicial sector.

The Public Prosecutor's Office does not have its own balance, nor is it able to elaborate a profit and loss account that, as noted, highlights the balance between the revenue and the costs derived from the financial year of the internal activity in the reference period. It also:

1. has an accountability of a financial character that renders it very difficult to single out the costs of competence of a determined period, that is, of the costs attributable to a year of activity (Judicial Year);
2. directly manages only a minimal part of the costs it generates;

3. invests resources whose cost is sustained by various administrations, that is, it avails itself to the carrying out of its own activity of resources that do not depend in an exclusive mode on the Ministry of Justice.

In absence of a revenue entry in the strict sense of the word, the identification of the most exact and reliable method all the *costs* sustained for the distribution of the service, and on the other hand, all the *revenue of a financial nature* in which the State was able to make use of thanks to the "Justice Service" furnished by the Public Prosecutor of Bolzano, was considered.

These have therefore been grouped internally in different macro-categories, singled out according to the criteria of economic relevance (incidence) and typology.
The attempt was also made to bring back, where possible, the flow of expenses generated to a final output, a product, or rather, a service generated (Table 1).

Figure 3: the timeline of the social balance   Source: personal elaboration

N.	Phases	Objectives	December	January	February	March	April	May	June	July
1	Elaboration on the structure of SB	General explanation on the instrument of accountability	▪							
		Mapping the stakeholders	▪	▪						
		Sharing the objectives and the "mission" of the Social Balance	▪							
2	Development of proposal	Identifying the priority stakeholders (hereafter STH) and sharing the procedures to prospect their informative expectations			15					
		Gathering informative expectations of the STH (Focus Group and/or interviews)			▪	▪				
		· External STH: "what do they want to know thanks to the SB?"			▪	▪				
		· Internal STH: "what do we want to communicate with the SB?"			▪	▪				
		Conceptual work on the material gathered				▪				
3	First validation of proposal	Explanation of results of focus group/interview, proposal on possible contents of the SB, research of measures/indices of measurement				28				
		Identifying the significant and consistent measures/indices with the contents of the shared SB				▪	▪			
4	In-depth analysis and development of the informative framework	Analysis of the Informative System and verification of the coverage in respect to the indices identified					▪			
		Comparison of the feasibility of the calculation of the indices in light of the existing, selection and construction of a plan of interaction with the informative framework					12			
		In-depth informative analysis with ad hoc analysis or research					▪			
5	Elaboration of first draft and sharing of results	Elaboration of the indices/measures						▪		
		Sharing of the indices and graphic aspects						5		
6	Feedback on Prosecutor profile and on instruments of accountability elaborated upon	Internal comparison of the contents of the SB, the value of the indices and the performance profile drawn for this, expected gathering of improvement (in the profile of the Prosecutor and the SB) Sharing of procedure in comparison with the STH before the publication of the SB						27		
		Comparison with external STH pre-publication and expected gathering of improvement(on the profile of Prosecutor and the SB)							10	
		Elaboration of final draft							▪	
		Definition of improvement plans of the performance profile and the Informative System in support of its monitorage							21	
7	Diffusion plan external to the SB	Definition of an internal diffusion plan							▪	
		Definition of a plan of publication/publicity							▪	
8	Road to standardization	Standard procedure editing for the drawing up, analysis and diffusion of the SB. Development of hypothesis of plan of competence development internally in the Prosecutor's Office for the drawing up of the SB								12

Table 1. The Macro-Categories of Costs and Revenue of a Financial Nature Source: Personal Elaboration

The articulation of costs	Revenue of a financial nature
Activity costs Personnel costs Management costs Structural costs Levy and tax costs Criminal Investigation Department personnel costs	1. Revenue from confiscated measures 2. Revenue as penalties, sanctions and judicial expenses 3. Revenue from the issue of certificates

In the sphere of costs, particular emphasis was given to the entry "Activity costs". This gathers the costs of the typical activity of the Public Prosecutor's Office, that is, those sustained in carrying out penal investigations.

The analysis has allowed the highlighting of the costs of higher incidence that, internal to the investigative activity, are represented by the *Lawful Interception* (telephone or area tapping, acquisition of telephone call records and rental of equipment from private companies external from the Administration) and of compensation paid out to *technical consultants*, whose job is to support, from a technical point of view, the Magistrate in respect to the activity of investigation.

It is opportune to remember that a peculiarity of these costs is represented by their "repeatability"; this means that if the criminal proceedings in which they originated recognizes certain definitions (for example, a conviction sentence, dissolution due to out-of-court settlement, extended plea-bargaining) they can be charged to the accused. The management costs are instead distinct from the costs of the activity. Even these are tied to the management of the activity of the Public Prosecutor's Office but are not directly attributable to the activity itself.

On the methodological plan we must remember that the entry "personnel costs of the Criminal Investigation Department" was kept broken up from the total cost: This defines the costs sustained by the personnel that operate internally in the Criminal Investigation Department of the Prosecutor's Office in Bolzano and do not include, inasmuch as it is difficult to quantify, the cost sustained by the State for the Law Enforcement Agencies (Carabinieri, State Police, Guardia di Finanza [Translator's note: Guardia di Finanza: a body of police officers responsible for border patrol and investigating fraud]) when the same carry out activities of the Criminal Investigation Department.

A specificity of the Public Prosecutor's Office of Bolzano is represented by another entry. The *Cost of bilingualism*: enforcement of an anticipated law contained internally in the Statue of Autonomy for Trentino-Alto Adige, recognizes that citizens residing in the province of Bolzano have the right to use their mother-tongue (Italian or German) in their dealings with the Public Administration, in both a written and oral nature. The enforcement of such a law translates into a cost represented by the obligation, on the part of the magistrates and the administrative personnel of the Public Prosecutor's Office of Bolzano, to have a certifiable knowledge of the two languages with consequent acknowledgment, from the State, of an appropriate allowance. The cost of bilingualism was thus determined, considering, on one hand, the total amount of the allowances paid out and, on the other hand, the cost of the personnel hired in the translation Office, of which the Prosecutor was provided with in the enforcement of said law. From the analysis, it has resulted that such an entry is 7% on the total cost of the personnel.

- *Revenue of a financial nature.* Even if to the entry costs there cannot be contrasting entries of revenue in the strict sense of the word, it is considered useful to identify and highlight all the revenue of a financial nature diverted to the State from the services furnished by the Public Prosecutor's Office.

If the revenue from confiscation measures results as immediate comprehension (sums of money and goods transferred to State assets through judicial measures of confiscation originating from investigations and requests from the Public Prosecutor's Office of Bolzano), the composition of the entry *revenue as penalties, sanctions and expenses of justice* are more articulated, in which are included the sums obtained by the Treasury as:
- pecuniary penalties (fines and amends) following conviction sentences and of penal decrees of definite and executable convictions;

- pecuniary proceeding sanctions following a judicial conviction sentence (for example, in the case of a "bold" appeal in the Court of Appeals);
- other pecuniary sanction of any claim imposed with the act of conviction in the sphere of penal proceedings;
- judicial expenses sustained in the sphere of the penal proceedings (including fixed lump-sum, procedural expenses, custody expenses and the transportation of sequestered vehicles) charged to the person convicted.

The entry *revenue from the issue of certificate* gathers the total amount of money collected by the State through the sale of tax stamps and the rights of certifications for certificates issued by the Office of Court Records. This can be considered the only certain source of revenue. The production of certificates by the Office of Court Records and Pending Charges represents, in fact, the only (voluntary) "exchange" activity in which, in view of a payment on the part of the petitioner (executed moreover externally to the Public Prosecutor's Office), corresponds with the distribution of a product, constituted of the certificate in its diverse typologies.
- *The composition of the economic resources.* The resources of which the Public Prosecutor's Office of Bolzano avails itself have been broken down in reference to their origin. They are not, as a matter of fact, exclusively derived from the Ministry of Justice (71%), but originate from the Municipality of Bolzano (10%), the Ministry of Economy and Finance (6%), the Ministry of Defence (6%), the Ministry of the Interior (5%) and the Ministry of Agricultural Policies (2%). The Municipality sustains by law ordinary maintenance taxes and by contract those of the extraordinary administration of the Courthouse, which is State property, which houses the Public Prosecutor's Office of Bolzano.
The costs sustained by Ministries other than that of the Justice, are costs belonging to the Criminal Investigation Department that, according to the different aliquots, depend upon the different Ministries.
Since the personnel of the Criminal Investigation Department intervenes compensating staff shortages in the administration of the Prosecutor's Office, thus carrying out administrative duties that are not its own, one should take note of how the ministries who belong to the single aliquots of the Criminal Investigation Department end up in part contributing to supporting the ordinary management taxes of the Public Prosecutor's Office.

THE ECONOMIC DATUM AND THE SAVINGS GOALS REACHED WITH REFERENCE TO JUDICIAL EXPENSES

For a correct, but overall, complete analysis of the operation of a Public Prosecutor's Office, it is absolutely not possible to stop at the numerical and temporal data (intended to mean times of definition) of the procedures discussed.In other words, it is not possible on one hand, to state a simplistic relationship of direct proportionality between the number and the velocity of definition of the procedures discussed, and on the other hand, the validity and efficiency of the actions of the Office. Reasoning in these terms makes one certainly guilty of superficiality, as one must necessarily consider the qualitative and economic data in the analysis.

Even so, in the "Judicial System", the analysis has always stopped at the numerical datum and the temporal one. The actions of a Public Prosecutor's Office are considered with more merit when the number of proceedings defined in the course of a determined Judicial Year are higher, above all if the number of "settled" proceedings exceed the "arisen" proceedings. In this way, the "load" of pending proceedings is reduced and consequently the Office results as less "overloaded" with work in respects to the preceding year.

This valuational approach extracts, from the reports concerned, not only the ministerial inspections from which the singular Judicial Offices are periodically subjected to, but also the Annual Reports compiled in occasion of the inauguration of the Judicial Year in the different Districts of the Court of Appeals.

The Public Prosecutor's Office of Bolzano, instead, thanks to the experience of the Social Balance that it has begun to do, has noticed the unavoidable necessity to amplify the analysis framework of their own actions, taking into consideration, other than the numerical and temporal data, even the qualitative and economic data.

In regards to the qualitative datum, the analysis the type of requests put forward in the different phases has begun, related to both the preliminary inquiries and at the time of the proceedings, of the various procedures that have found a home in the different judging bodies.

This parameter of evaluation, even if it cannot be considered completely reliable, deducting in particular the errors and incompleteness of the decisions of the Judging Bodies, but also the malleability of the General Register that although containing much data, does not consent an easy use and for different means than that for which it was thought up for, appears however to be significant, even determining the assumption of responsibility of the single public prosecutors' offices that are thus compared with the concrete results produced from their requests. However, as far as the economic datum in the sphere of the Social Balance is concerned, as has been said, an entire chapter in the "Economic Accounts" has been dedicated to it.

It dealt with an experiment that was absolutely innovative and unique in its kind for a Judicial Office.

Those who operate within the Office of the Public Prosecutor have, in fact, a mental legacy of scarce inclination to take care of not only the quality, but above all the problem of the "cost" of the service, as if the responsibility for the economic aspect of the service means debasing the prestige and importance of the service itself

The traditional Public Prosecutor, following the accepted concept that *ministerium* is not divisible, tends to think that *the job or office that is socially and morally elevated developed towards an advantage of the community* must not be subject to contamination derived from the evaluation of an economic nature.

On the contrary, even Judicial Offices, like every public administration, as titulars of a function that protect public interests and satisfy the needs of the citizens, must consider themselves subject to the duty of accounting for, other than that of the *quantum*, also of the *quomodo* that have used the economic-financial resources available to them.

That analysis of the data relative to the quality and quantity of the services rendered must necessarily be correlated with the relative costs sustained, so as to have an exact framework of the relationship of the services rendered and their costs which can no longer be put into discussion. The knowledge of the information acquired through the drawing up of the economic account contained in the Social Balance has represented an important starting point for the Office from which to develop a plan aimed at trying to at least reduce the costs while maintaining invariable the quantity and quality of the service, or better still, improving it.

Naturally, the areas in which it was possible to intervene have been greatly reduced, mainly dealing with fixed costs or rather at least the costs on which the modalities of organization of the Office do not influence, or rather can influence minimally (one thinks of salaries or rents).

The sector in which it was possible to intervene with the most efficiency was the so-called "Judicial Expenses", falling in chapter 1360, that is to say, those expense entries that are produced with the actions of the Public Prosecutor's Office and on which the choices in the organization and management have an immediate effect on. The most important results, entered under *Activity Costs,* that were obtained concerned the entries of "lawful interception", "compensation for consultants", " Drafter and Certifier Expenses" and a residual entry that goes under the name of "other entries" and includes all the expense entries that, authorised from time to time by the magistrate, concern material activities that are predominantly carried out by assistants of the Criminal Investigation Department, or expenses for various material and that are paid after the submission of a fiscal document.

In particular, in regards to the *Lawful Interception*, as soon as the broken-down datum relative to the service, and therefore of a known cost detail, was analysed, it was ascertained how the relative expense was totally out of control, immediately identifying the motives of the multiplicity of companies that were offering their services to the various law enforcement agencies on the base of estimates that were completely rampant and uncontrollable, which then generated exorbitant invoices, overall for the rental of equipment. Once three companies were individualized and the technical material offered was subjected to precise experimentation, the company that seemed to offer the best guarantees in relation to reliability/quality/price was chosen.
A closed, private negotiation was started with this company, obtaining the guarantees of the free implementation in the *server* of each technological development derived from the research and experimentation itself, the furniture supply for small rooms and numerous other services. All this is exchange for an exclusive relationship that is only binding to a limited extent for the Public Prosecutor's Office, and can free itself from the contract bond, if, in the future, it is able to identify a different counterpart capable of furnishing the same service at a lower cost. The results are evident: a qualitatively optimal service in view of the falling costs of interception that were knocked down by 60.3% passing from €1,127, 284 in total as at 31/12/2003 to €447,478 as at 31/12/2005. It is significant that in this context the expense for "equipment rental" in the same period passed from €862,168 to a shocking €136,558 with a structural savings and as such consolidated not only for the financial year in question, but also for the successive financial years, of €725,611. It is worth reporting that such a significant savings was realized even though the expenses for Lawful Interception and the Lawful Interception of areas were considerably augmented in the same period. This means that even the savings was accomplished without any way interfering with the quality and quality (which actually increased) of the service rendered, and therefore to the investigative activity.

The savings in respect to the "telephone call records" passing in the period in question from €79,341 to €32,933 was essentially accomplished by raising awareness to the criminal investigators and magistrates who were urged not to resort to such investigative instruments in an indiscriminate and explorative manner, but rather only after submitting the respective notice of a crime to a serious preliminary grounding examination and after having evaluated the unsuitability for investigative purposes of every other less expensive means of investigation. But not only that. Numerous requests to the criminal investigation department to acquire telephone records as regards to cellular telephone theft reports were dismissed on the presumption that it is not possible to find the criminal based on only telephone call records, but also for being a technical activity economically by far more onerous than the value of the object stolen.

The entry **"*compensation for consultants*"** was more than halved, passing from €392,034 in 2003 to €188,596 in 2005. This result was accomplished by starting a system of re-assessment of the mechanism of remuneration of consultants, not following, when possible, the logic of " expert's fees" (which generally results as not very satisfying even in terms of efficacy and efficiency), but defining "prior to" the objectives to pursue on the part of the consultant, from whose effective attainment was made dependant the *quantum* of the fee (with an absolutely admissible operation given the lawfully expected

"cuts" for the consultant's fee), and determining a "flat rate" from time to time due to the amount of work actually performed for the completion of the work.

Even the entry *"judiciary transfers expenses"* underwent a perceptible reduction, passing from €126,049.71 to € 68,345.90 in the two-year period of 2003-3005 looked upon. This substantial halving was obtained simply by continually raising awareness to the criminal investigators and magistrates that were asked to carry out judicial transfers only in cases in which the result was absolutely indispensible for the purpose of the investigation, taking care in each case that to each transfer the least possible amount of personnel participated and delegating when possible the criminal investigative department and judicial authorities territorially competent.

In relation to the *"other justice expenses"*, in which the more disparate expense entries are found (from technical assistance of various genres to the rental of various goods, etc.) the entry relative to *"transportation of corpses"* is curious. In 2004 it accounted for €26,651 and in 2005 it was lowered to only €9.221, a reduction in expense of two-thirds within a single year. This was possible by calling attention to the criminal investigators and magistrates on the circumstances, in which, in the event of death, the transport expense of the corpse from the place of discovery to the municipal mortuary fall upon the Municipality, while only in the case of transport of a corpse at a hospital facility does the expense fall upon the Public Prosecutor's Office. The criminal investigators and the magistrates were also asked not to arrange the transport of the corpse at a health facility in an indifferent manner, but only after having evaluated the actual need to proceed with an autopsy. To sum up, for the **"***justice expenses***"**, the total savings in the arc of two years was equal to
€1,028,977, that is, 52.34%, as better shown in the table that compares the expense balances of three years, and that should be read bearing in mind that work on the project, and therefore the analysis and influence where possible on the costs, was begun in the second half of the year 2004 (table 2).

These are the economic results that the work on the Social Balance has allowed to be carried out, heading out understand and therefore accounting for the expense entries, considering the money used to pay the justice expense, as a resource of the community

FINAL REMARKS

The problems tied to a social balance, before being problems of method and accounting techniques, are problems that concern the way of governing and of managing productive institutions and the relationships with their multiple interlocutors (Borgonovi E., 2005).

The social balance is an instrument that, for being created in a way to have significant fallbacks on the organization, costs in both economic and organizational terms. One of the more relevant problems for many Public Administrations is that the majority of them do not have the resources available to start and manage a complete cycle of a social balance over time. Only few public administrations are therefore capable of managing the drawing up process of the instrument. Moreover, it deals with a problem that is not new but that is present even in the *for profit* sector where the so-called small and medium sized businesses draw attention to a great difficulty in sustaining the necessary costs of construction and implementation of complex instruments of social accountability, if compared to businesses of big dimensions (Brondoni S., 2000).

The most frequent outcome is that of the construction of approximation of the instrument rather than the out-and-out social balance. In this way, though, many of the crucial passages of drawing up and use of the instrument are either underestimated or not even completed. The result risks being that for which the

cycles of generations and maintenance of trust, reputation and social capital are managed in a dysfunctional manner producing more negative effects than positive results.

Time and consistency are necessary to generate a social balance: the increase of trust with shares that can be functional at the moment is not favoured, but if not repeated and protected, risk reducing the credibility of the organization instead of augmenting it. The fact that this is the passage that is less protected on the part of many organizations risks to significantly weaken the performance of the instrument. Resulting as not very protected are, nevertheless, also the other passages crucial for the building of trust, reputation and social capital: those relative to the networking of relationships with the stakeholders and to their involvement in the elaboration and use of the instrument of social accountability (Barzaghi P.M, 2003).

Table 2: Economic Results Attained in the Three-Year Period Of 2003-2005 Following the Adoption of the Social Balance.

YEAR	2003	2004	2005
EXPENSES AND SERVICES			
JUDICIAL TRANSFERS	**€ 126,049.71**	**€ 77,648.16**	**€ 68,345.90**
Travel expenses	€ 31,861.81	€ 25,872.41	€ 31,214.53
Travel allowance	€ 23,855.96	€ 43,234.93	€ 19,889.53
International drafters and certifiers	€ 70,331.94	€ 8,540.82	€ 17,241.84
EXTRAORDINARY EXPENSES FOR LAWFUL INTERCEPTION	**€ 1,127,284.28**	**€ 782,256.42**	**€ 447,478.35**
Telephone	€ 168,782.54	€ 138,815.50	€ 217,233.06
Area	€ 16,991.79	€ 13,972.24	€ 60,754.53
Call records	€ 79,341.08	€ 57,452.45	€ 32,932.89
Rental of technical equipment	€ 862,168.87	€ 572,016.23	€ 136,557.87
of which for procedures of particular relevance	€ 265,261.05	€ 579,301.16	€ 131,004.56
year 2003 proc.pen n. 4956/6714/6866/408/5755/3948/2928/3145/4905/6428/2928			
year 2004 proc.pen n. 7456/6834/408/5755/2928			
year 2005 proc.pen n. 3166/7736/5815/408			
OTHER EXPENSES IN CRIMINAL PROCEEDINGS	**€ 78,651.97**	**€ 79,572.90**	**€ 36,019.48**
Rental/acquisition of material	€ 8,527.26	€ 6,197.87	€ 2,307.58
Technical intervention/assistance	€ 10,369.38	€ 13,280.45	€ 1,509.25
Transport of corpse and autopsies	€ 54,791.55	€ 56,268.41	€ 31,499.48
Other (photo development, duplication of keys, etc.)	€ 4,963.78	€ 3,826.17	€ 703.17
FEES FOR TECHINCAL CONSULTANTS OF THE PROSECUTING ATTORNEY	**€ 392,034.09**	**€ 403,988.06**	**€ 188,596.18**
In accounts, fiscal, corporate and social security material	€ 86,095.14	€ 109,821.49	€ 7,438.54
In building material	€ 68,475.52	€ 26,932.21	€ 8,349.30
In industrial accident material	€ 60,630.06	€ 13,724.31	€ 7,408.45
In computing material	€ 20,230.41	€ 50,713.83	€ 31,503.90
In psychological material	€ 36,547.32	€ 29,428.45	€ 11,316.94
Interpreters/translators	€ 38,793.66	€ 52,022.08	€ 36,094.93
Other fees	€ 55,360.46	€ 109,277.08	€ 66,548.46
Total expenses delivered to the CC.TT. of the Prosecuting Attorney	€ 25,901.52	€ 22,068.61	€ 19,945.66
of which for procedures of particular relevance	€ 109,999.33	€ 103,476.14	€ 46,525.36
anno 2003 proc.pen. nn. 8510/2928/4956			
anno 2004 proc.pen. nn. 5458/7736/4956 + other for paedophilia via Internet			
anno 2005 proc.pen. nn. 7736/4075			
CUSTODY DI SEQUESTERED GOODS	**€ 14,216.57**	**€ 21,660.65**	**€ 46,477.07**
Removal/retrieval and transport expenses	€ 4,481.91	€ 5,465.71	€ 11,468.52
Custody allowance	€ 9,734.66	€ 16,194.94	€ 35,008.55
IMPORTS LIQUIDATED FOR OTHER ENTRIES	**€ 9,822.00**	**€ 24,467.80**	**€ 16,160.22**
Publication of the measures of the A.G.	€ 7,368.75	€ 15,734.23	€ 6,936.00
Allowance owed to the honorary vice prosecutors	€ 2,453.25	€ 8,733.57	€ 9,224.22
TAXES WITHHELD			
Value added tax	€ 217,882.98	€ 216,992.08	€ 130,931.99
Social security taxes	€ -	€ 4,203.41	€ 2,955.30
DEDUCTIONS CARRIED OUT			
Income tax deductions and other	€ 123,796.87	€ 104,121.25	€ 45,855.10
Social security deductions	€ 828.59	€ 251.68	€ 328.27
Tax stamps	€ 385.71	€ 388.29	€ 458.43

Source: Reorganization and optimization pilot project of the Public Prosecutor's Office of Bolzano.

The introduction of the social balance internally to the public administration is often accompanied by some recurring criticality among which the limited support internal to the social balance project, the lack of comprehension of the sense and finality of the social balance, and the hurried drawing up of the document with a lack of participation.

To overcome such problems, it is important that the social balance project has the support of all the management. Without this back up it is impossible to develop an effective process that increases the awareness of the entire organization. Furthermore, it is necessary that the value and significance of such a document are made fully understood, otherwise the social balance risks becoming a container of facts and figures, drawn up by the few elected, and risking, therefore, of becoming an instrument that is of little use, if not counterproductive. As a matter of fact, the process of building the social balance must be open, participated in, and must involve the internal and external interlocutors (Frey M., Melis M., Vagnoni E., 2008).

If this does not occur, there is the risk of losing the big advantage of the relationship and the possibility of having, in real time, the measurement of the attention of the stakeholders. In conclusion, accountability, without a doubt, creates value not only for a civil society, but also for the same organization, on the condition that it is carried out correctly, as implementing it for imitation or without conviction has no use. The risk is not only that of creating less value, but that of sustaining a cost instead of actualizing an investment. Responsible accounting is in fact itself an element of social responsibility.

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MANAGING BUSINESS UNCERTAINTIES THROUGH SENSITIVITY ANALYSIS

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ABSTRACT

Economic environment is more than ever subject of uncertainties. The firm management can reduce this uncertainness by using the sensitivity analysis. In an international business, investment, financing, and money management decisions are complicated by different currencies, tax regimes, regulations concerning the flow of capital across borders, norms regarding the financing of business activities, levels of economic and political risk. Financial managers must consider all these factors when deciding which activities to finance, how best to finance those activities, how best to manage the firm's financial resources, and how best to protect the firm from political and economic risk and from uncertainness.
This paper tries to determinate how sensitive the net present value and payback period are, in optimist scenario and pessimist scenario, to the variation of sales and variable costs, as factors that influence the business and the investments.

INTRODUCTION

Financial management is concerned with the decisions taken by a firm's executive officer, which relate to cash flows. In general, depending upon the level and nature of its business activities a firms cash flow may represent the sales revenue which the firm receives from the sales of its products or services; it may constitute the capital it raises on foreign and domestic capital markets to finance its current activities or support its plans for expansion; or it may involve the funds held by the firm as a hedge against possible fluctuations in international exchange rates and interest rates.

An executive must consider all the aspects of international financial management when taking the decision to invest abroad. First, a firm needs to consider the financial feasibility of the investment (also known as capital budgeting). Second, an executive must assess the balance of debt capital and equity capital, which will be required for the funding of the investment (i.e. the capital structure). Thirdly, the executive must consider methods of raising long-term capital and its sources. Finally, an executive should determine the method of managing its cash flows during the period of the investment. In assessing the risks faced by a firm when embarking upon international activities, difficulties associated with fluctuations in exchange rates are probably the most serious problem to resolve (See Chandra Sekhar Yalamanchili, Hitesh Shah, Madhuri Ananth, Ina Susatya, Venkata Seshayya Vallabhaneni, *Key Focus Areas for Executives in Globalization of Business*, Jason Hill, Texas A&M University-Commerce).

Sensitivity analysis – as a method to reduce risk management at the firm level – is used to determine how "sensitive" a model is to changes in the value of the parameters of the model and to changes in the structure of the model. Parameter sensitivity is usually performed as a series of tests in which the modeler sets different parameter values to see how a change in the parameter causes a change in the dynamic behavior of the stocks. By showing how the model behavior responds to changes in parameter values, sensitivity analysis is a useful tool in model building as well as in model evaluation (See *An introduction to sensitivity analysis*, Lucia Breierova, Mark Choudhari, Massachusetts Institute of Technology, 2001).

RESULTS

Many decision makers feel more uncomfortable about the necessary to guess probabilities for unfamiliar political and foreign exchange events than they do about guessing their own more familiar business or

financial risks. Therefore it is more common to test sensitivity to political and foreign exchange risk by simulating what would happened to net present value and payback period under optimists/pessimists scenarios (See Eiteman, David, Stonehill, Arthur, Moffett, Michael, *Multinational Business Finance*, Pearson Education, 2007, pp. 593).

In these scenarios we will take in consideration many factors that influenced the business risk of the firm, like (See Moyer, Charles, McGuigan, James, Rao, Ramesh, *Fundamentals of Contemporary Financial Management*, Thomson South-Western, 2007, pp. 392):

- ➢ The variability of sales volumes over the business cycle;
- ➢ The variability of variable costs;
- ➢ Fixed costs;
- ➢ Depreciation;
- ➢ Earning before tax;
- ➢ Net earning;
- ➢ Net cash flows;
- ➢ Actualized cash flows;

How can the firm get the net present value technique to live up its potential? One approach is even *sensitivity analysis*, which examines how sensitive a particular NPV calculation is to changes in underlying assumptions. Sensitivity analysis is also known as what-if analysis and bop (best, optimistic, and pessimistic) analysis (See Ross, Stephan, Westerfield, Randolph, Jaffe, Jeffrey, Jordan, Bradford, *Modern Financial Management*, McGraw-Hill Irwin, 2008, pp. 229).

For example:

In the *basic scenario,* net present value (NPV) is 41656 dollars, payback period (PP) is 2 years and 186 days (906 days) without actualization and payback period is 3 years and 14 days (1094 days) with actualization.

The Variability of Sales Volumes Over the Business Cycle

In the optimist scenario *sales will increase with 10% up comparative to basic scenario and in* pessimist scenario *sales will decrease with 10% up comparative to basic scenario.*

Taking into consideration the level of sales in optimist scenario, *we obtain:*
- ✓ a NPV that is 53329 dollars;
- ✓ a PP without actualization of 2 years and 108 days (828 days);
- ✓ a PP with actualization of 2 years and 268 days (988 days).

In order to analyze the sensitivity we calculate the elasticity coefficient, using the formula:

$e_{NPV/Sales} = (\Delta NPV/NPV_{bs}) / (\Delta S/S_{bs})$

ΔNPV – *NPV in optimist scenario (NPV_{os})* – *NPV in basic scenario (NPV_{bs})*
ΔS – *Sales in optimist scenario (S_{os})* – *Sales in basic scenario (S_{bs})*

$e_{NPV/Sales} = ((53329-41656)/41656)) / 10\% = 2.80$

In conclusion, a 1% increase in sales drives to a 2.80% increase of the NPV.

$e_{PP/Sales} = - (\Delta PP/PP_{bs}) / (\Delta S/S_{bs})$

ΔPP – PP in optimist scenario (PP$_{os}$) – PP in basic scenario (PP$_{bs}$)
ΔS – Sales in optimist scenario (S$_{os}$) – Sales in basic scenario (S$_{bs}$)

e$_{PP/Sales}$ = - ((828-906)/906)) / 10% = 0.86

In conclusion, a 1% increase in sales drives to a 0.86% decrease of PP.

e$_{PP/Sales}$ = - (ΔPP/PP$_{bs}$) / (ΔS/S$_{sb}$)

e$_{PP/Sales}$ = - ((988-1094)/1094)) / 10% = 0.96

In conclusion, a 1% increase in sales drives to 0.96% decrease of actualized PP.

Taking into consideration the level of sales in pessimist scenario, *we obtain:*
a NPV that is 29983 dollars**;**
a PP without actualization of 2 years and 281 days (1001 days);
a PP with actualization of 3 years and 151 days (1231 days).

So, ***e$_{NPV/Sales}$ = (ΔNPV/NPV$_{bs}$) / (ΔS/S$_{bs}$)***

ΔNPV – NPV in pessimist scenario (NPV$_{ps}$) – NPV in basic scenario (NPV$_{bs}$)
ΔS – Sales in pessimist scenario (S$_{ps}$) – Sales in basic scenario (S$_{bs}$)

e$_{NPV/Sales}$ = ((29983-41656)/41656)) / (-10%) = 2.80

e$_{PP/Sales}$ = - (ΔPP/PP$_{bs}$) / (ΔS/S$_{bs}$)

ΔPP – PP in pessimist scenario (PP$_{ps}$) – PP in basic scenario (PP$_{bs}$)
ΔS – Sales in pessimist scenario (S$_{ps}$) – Sales in basic scenario (S$_{bs}$)

e$_{PP/Sales}$ = - ((1001-906)/906)) / (-10%) = 1.048

e$_{PP/Sales}$ = - (ΔPP/PP$_{bs}$) / (ΔS/Sb$_{bs}$)

e$_{PP/Sales}$ = - ((1231-1094)/1094)) / (-10%) = 1.25

In conclusion:
A 1% decrease of sales drives to 2.80% decrease of NPV.
A 1% decrease of sales drives to 1.048% increase of PP.
A 1% decrease of sales drives to 1.25% increase of actualized PP.

The variability of Variable Costs

In the optimist scenario *variable costs will decrease with 10% up comparative to the basic scenario and in* pessimist scenario *variable costs will increase with 10% up comparative to the basic scenario.*

Taking into consideration the level of variable costs (VC) in optimist scenario, *we obtain:*
a 67596 dollars NPV;
a 2 years and 28 days (748 days) PP without actualization;
a 2 years and 163 days (883 days) PP with actualization.

In order to analyze the sensitivity of net present value to the variable costs decreasing is necessary to calculate the elasticity coefficient, using the formula:

$e_{NPV/VC} = - (\Delta NPV/NPV_{bs}) / (\Delta VC/VC_{bs})$

The minus sign (-) in the formula of elasticity coefficient is used for emphasizing the inverse relationship between variable costs and net present value.

ΔNPV – NPV in optimist scenario (NPV_{os}) – NPV in basic scenario (NPV_{bs})
ΔCV – Variable costs in optimist scenario (VC_{os}) – Variable costs in basic scenario (VC_{bs})

$e_{NPV/VC} = - ((67596-41656)/41656)) / (-10\%) = 6.22$

$e_{PP/VC} = (\Delta PP/PP_{bs}) / (\Delta VC/VC_{bs})$

ΔPP – PP in optimist scenario (PP_{os}) – PP in basic scenario (PP_{bs})
ΔVC – Variable costs in optimist scenario (VC_{os}) – Variable costs in basic scenario (VC_{bs})

$e_{PP/VC} = ((748-906)/906)) / (10\%) = 1.74$

$e_{PP/VC} = (\Delta PP/PP_{bs}) / (\Delta VC/VC_{bs})$

$e_{PP/Sales} = ((883-1094)/1094)) / (-10\%) = 1.92$

In conclusion:
A 1% decrease of variable costs drives to 6.22% increase of NPV.
A 1% decrease of variable costs drives to 1.74% decrease of PP.
A 1% decrease of variable costs drives to 1.92% decrease of actualized PP.

The 10% increasing of variable costs in pessimist scenario *comparative to the basic scenario drives to:*
a 15717dollars NPV**;**
a 3 years and 68 days (1148 days) PP without actualization;
a 4 years and 7 days (1447 days) PP with actualization.

So,
$e_{NPV/Sales} = (\Delta NPV/NPV_{bs}) / (\Delta VC/VC_{bc})$

$e_{NPV/Sales} = ((15717-41656)/41656)) / (10\%) = 6.22$

$e_{PP/VC} = (\Delta PP/PP_{bs}) / (\Delta VC/VC_{bs})$

$e_{PP/VC} = ((1148-906)/906)) / (10\%) = 2.67$

$e_{PP/VC} = ((1447-1094)/1094)) / (10\%) = 3.22$

In conclusion:
A 1% increase of variable costs drives to 6.22% decrease of NPV.
A 1% increase of variable costs drives to 2.67% increase of PP.
A 1% decrease of variable cots drives to 3.22% increase of actualized PP.

CONCLUSIONS

In conclusion, can be observed that the variability of sales and variable costs influences the net present value, by increasing or decreasing, in the same percentage (2.8% or 6.22%). Obviously, the variable costs have a higher impact on net present value that the level of sales. The payback period is more sensitive to the variability of sales and variable costs; increasing or decreasing of variables has a different impact: if sales increase with 1 % the PP will decrease with 0.86% or 0.96%; if sales decrease with 1% the PP will increase with 1.048% or 1.25%; if variable costs decrease with 1% the PP will decrease with 1.74% or 1.92%; if variable costs increase with 1% the PP increase with 2.67% or 3.22%.

Sensitivity analysis considers each variable in isolation when, in reality, the different variables are likely to be related. If ineffective management allows costs to get out of control, it is likely that variable costs, fixed costs, and investment will all rise above expectation at the same time. Managers frequently perform scenario analysis in order to minimize this problem.

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THE EFFECTIVE TAX RATE OF NATURAL PERSON INCOME IN THE CZECH REPUBLIC AND ITS DEVELOPMENT

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ABSTRACT

The paper describes the development of the effective tax rate of the enterprise income and the income from so-called other independently gainful activities of natural persons in the Czech Republic. The analysis covers the period from 1993 to 2009, which makes it possible to draw relevant conclusions about the development in taxation of this income type. Two categories of taxpayers are compared – the first being a single childless taxpayer, the other a family with two children, where only one spouse attains incomes. The results of the analysis that has been carried through clearly show a gradual decrease in effective tax rate for both categories of taxpayers, which, however, cannot be considered steady in the time period in focus. In connection to the first category of taxpayers it can be stated that, judged by the difference between its level in the year 1993 and in the year 2009, the amount of effective tax rate decrease is in direct proportion with the amount of tax base. In connection with the second one it can be observed that the effective tax rate decrease can be considered relatively steady.

JEL: H24; K34

KEYWORDS: Czech Republic, effective tax rate, natural person, taxation

INTRODUCTION

The Czech Republic, being a relatively small European country, has been classified as a so-called transformation economy. At the beginning of the 1990s, the Czech Republic – still as a part of the Czech and Slovak Federative Republic, and since 1993 as an autonomous country – went through a number of significant social and economic changes, the scope of which resulted, to a great extent, from the transformation from centrally planned economy to free market economy. Even though Žídek (2006, p. 4) points out the existence of a division in opinions on the classification of the previous economic system as a centrally planned economy, which should be, according to some authors, rather classified as biased free market economy; the extent, importance, and impact these changes had on the Czech economy was, and remains, fundamental and indisputable. It was necessary to adapt to the new situation, requirements, and opportunities in every aspect of all-society life.

Let us focus on natural persons. In the context of the abovementioned changes, new opportunities opened for natural persons in the field of free practice of economic activities in the form of enterprise and practice of other independently gainful activities. Naturally, frequent and crucial changes took place during the development, not only in the categorization of these incomes for the purposes of the Trades Licensing Act (see Act No. 455/1991 Coll., on Trade Licensing), but also in the follow-up financial law fields, particularly in the Act No. 586/1992 Coll., on Income Taxes (hereinafter Act on Income Taxes). A typical feature of the latter act, which represents the basic material norm laying down the rights and obligations of taxpayers concerning the income taxes of natural persons and legal entities, is its high frequency of changes including changes in nominal tax rates, nontaxable parts of the tax base and tax abatements.

This paper is concerned with the development of the effective tax rate, which represents the factual impact of relevant legislative regulation on a taxpayer. It is an undisputable fact that a taxpayer primarily perceives the nominal tax rates most dramatically. However, due to other factors such as nontaxable parts of the tax base or eventual tax abatements, nominal tax rates say very little about the amount of the real tax burden.

The paper is divided into several parts. The first section gives a brief introduction. Section 2 contains the findings from the literature research that has been carried out regarding the so-called effective tax rate and other related questions. In connection to this, Section 3 lists starting points for the constructed mathematical models, on the base of which the amount of effective tax rate for the taxable periods and the defined categories of taxpayers in focus has been determined. Section 4 focuses on the presentation of graphical outputs of the mathematical models and on the analyses of acquired results. The last part of the paper, Section 5, includes conclusion, and also emphasizes certain relevant questions.

LITERATURE OVERVIEW

The coefficient of the effective tax rate, which is in principle a way of expressing the relative tax burden, can be used to determine the portion of payments from the total income as provided by law. This coefficient has many advantages compared to simple coefficients of the nominal tax rate type, as it also takes other factors into consideration (nontaxable parts of the tax base, tax abatements, etc.), wherefore it proves to be more objective from this point of view.

The basic classification of the indicators for the effective tax burden are listed for example in Schratzenstaller (2005, p. 91 et seq.). This author identifies two basic conceptions of tax burden comparing, namely:

- calculation of fictitious measures *(estimation of the tax burden based on tax codes and tax rates)*; and
- determination of factual tax rates using statistical data on tax payments.

Schratzenstaller (2005, p. 93) presents a number of generally valid conclusions regarding both the corporate effective tax rate and the personal income effective tax rate. This author emphasizes that the amount of tax duty is determined partly by tax rate as provided by law and furthermore by taxable income, the latter showing considerable differences in the individual countries (various exemptions for certain income types, nontaxable parts of the tax base and tax abatements play a role in that). It is therefore safe to say that diverse statutory tax rates do not necessarily have to mean a different tax burden, and vice versa, that identical statutory tax rates necessarily lead to the same level of effective taxation. Široký also highlights this fact (2009, p. 61 – 62), however, from a slightly different point of view. Substantial variety in the manner of determining the taxable income in the individual national legal regulations and a large number of variables having influence on the final tax base is probably one of the reasons why so relatively little attention is paid to international comparison of the effecting tax rate for natural person´s income from employment and from enterprise and other independently gainful activities.

With respect to the effective tax rate itself, it can be said that the findings of the literature research focused mainly on articles in scientific journals, show that the effective tax rate generally receives considerable attention, however, not in connection with the aforementioned types of incomes of natural persons. Topics such as the effective tax rate in the case of corporate taxation, determination of the effective tax rates for investments, or the US tax system and its individual taxes, are being widely discussed. Bell and Kirschner (2009) even deal with the problems of the property tax effective rate. In relation to the effective tax rate, attention is paid also to strongly specific fields such as, for example, bilateral effective tax rate. Loretz (2007) amplifies the findings of Devereux and Griffith on this topic and

identifies, among others, the variables that have influence on the amount of bilateral effective tax rate. In connection with the assessments of the tax burden of the taxpayers, and with the trends of its reduction, questions regarding the assessment of competition of the individual countries tax systems come into focus. In this respect, the question of coordination and cooperation in the field of taxes in the European Union is being widely discussed (Cnossen, 2003); (Zodrow, 2003).

DATA AND METHODOLOGY

This paper aims to take a closer look at the development of the effective rate of natural person income tax for incomes attained through enterprise and other independently gainful activities in the Czech Republic since 1993, while emphasizing the implication of the impact and changes in the basic nontaxable parts of the tax base and tax abatements (see Appendix 1). Deductible items of the tax base, other nontaxable parts of the tax base and other tax abatements were not considered in the mathematical models as such. For this reason, the final effective tax rate magnitudes can be perceived as being at the top limit, because exercising any further item listed in the preceding sentence would lead to its decrease.

The basis for the analysis that has been carried out is the formulation of the effective tax rate by means of discrete functions, where the amount of gross tax base (that is tax base before claiming the above specified nontaxable parts of the tax base), and the amount of nominal tax rate and the amount of nontaxable parts of the tax base (or tax abatements) are the independent variables. The form of the mathematical model itself naturally reflects the respective legal regulation, which is determining from the view of particular content and the form of the function (for closer explanation see below).

Two categories of taxpayers have been analyzed. These can be understood as those taxpayers who bear the highest and the lowest relative tax burden (that is, they are subject to the highest and the lowest effective tax rate for the given tax base amount) under the chosen circumstances. The first group, representing taxpayers with the highest effective tax rate (or relative burden), are single childless taxpayers. The second group is made up by a family with two dependent children, where only one spouse attains incomes. The choice of exactly two children in the family has been made with respect to the fact that this number can be perceived as representative with regard to the demographic development in the Czech Republic (according to the data provided by the Czech Statistical Office, since 1985 the natality coefficient has not been exceeding the magnitude of two children. For the sake of completeness, it is appropriate to add that the amount of the taxpayer's tax burden decreases in indirect proportion to the number of children in the household. However, for reasons stated in the preceding sentence, a family with two children has been chosen.

The constructed mathematical models come out of the following starting points and simplifications:
- The taxpayer is a tax resident of the Czech Republic.
- The enterprise incomes and other independently gainful activities are the only income of the taxpayer.
- The lowest considered tax base is the amount of CZK 96,000, which equals the minimum monthly wage amounting to CZK 8,000 (the presented minimum wage amount has been valid since 2007); according to the exchange rate as of 30.09.2009 (CZK 17.178 for 1 USD), this represents the yearly tax base amount of USD 5,589.
- A step-by-step change for the purposes of discrete tax burden function is the change of the tax base by CZK 12,000 a year, which equals the amount of USD 699 according to the exchange rate as of 30.09.2009.
- The highest tax base considered is the amount of CZK 1,200,000 (according to the exchange rate as of 30.09.2009, this represents the amount of USD 69,857).

- The performance of the activity is being realized during the entire taxation period (the taxation period for natural persons is a calendar year).
- Taxpayers claim the following basic nontaxable (or tax abatements):
    1. for taxpayer;
    2. for incomeless spouse;
    3. for dependent children.
- The tax burden amount for the year 1993 was determined according to the state as of 31.12.1993, and for the year 2009 according to the state relevant and effective as of 30.09.2009.

The effective tax rate as seen in this paper corresponds to the relative tax burden, which is defined as the amount of tax duty as provided for in the Act on Income Taxes (see § 16) against the tax base before the deduction of nontaxable parts of the tax base. Thus it corresponds to the concept presented by Široký (2008, p. 3) and it can be sorted into the "fictitious tax burden" category, which assesses the tax burden indirectly based on the tax law analysis (see Schratzenstaller, 2005, p. 92). The effective tax rate can be mathematically expressed as follows:

$$ETR = \frac{T}{TB} \times 100\% \,, \tag{1}$$

where T (*Tax*) is the final tax duty [in CZK] determined according to § 16 of the Act on Income Taxes after the deduction of possible abatements and allowances (will be specified further) and TB [in CZK] is the tax base before the nontaxable parts have been claimed (so it represents a form of *Gross Tax Base*). This choice of the form of the tax base is not random. It aims to remove potential distortion resulting from the fact that the basic nontaxable parts of the tax base related to the person of the taxpayer have been relatively recently transformed into the form of tax abatements (see further). For the sake of completeness, it is appropriate to add that social and health insurance are sometimes also included in the coefficient T for the purpose of determining the effective tax rate. However, this is not considered here as this paper aims to describe purely the changes laid down in the Act on Income Taxes. Enterprise incomes of natural persons and incomes from other independently gainful activities are one of the five basic income types distinguished in the Act on Income Taxes ever since it became effective (that is 01.01.1993). The basic income categories are:

a) incomes from employment and function benefits (§ 6);
b) enterprise incomes and incomes from other independently gainful activities (§ 7);
c) incomes from capital assets (§ 8);
d) lease incomes (§ 9);
e) other incomes (§ 10).

In connection with the abovementioned income categories, we recognize the so-called partial tax bases. With regard to the terms provided above, the analysis was based on the premise that the only income of the taxpayer are the forms of income provided for in § 7 of the Act on Income Taxes, wherefore this partial tax base forms the total tax base of the income tax of natural persons.

Frequent and often fundamental changes in the nominal tax rates (see Appendix 2), incomes included in the partial tax base, tax acknowledgeable expenses and changes in the nontaxable parts of the tax base amount or in abatements notwithstanding, conceptual changes were made in the years 2005, 2006 and 2008. In 2005, the nontaxable part for children was abolished and transformed into the so-called tax allowance (provision § 35c of the Act on Income Taxes). This tax allowance can be, in compliance with the terms provided by law, claimed in the form of tax abatement, tax bonus, or tax abatement and tax bonus. A tax bonus is in principle an amount that can be rightfully requested by the taxpayer from state, if the amount of their tax duty before claiming the tax allowance for a child (children) is lower than the tax

allowance amount for a child (children). In contrast with the previous state, when the taxpayers could only reduce their partial tax base, a major change took place, because quite high claims often accrued for families with low income and several children (the maximum accruable amount made CZK 30,000 in the years 2005 – 2007; while it makes CZK 52,200 in 2008 – 2009).

In 2006, transformation of nontaxable parts of the tax base pertaining to the personal status of a taxpayer took place (e.g. nontaxable part for taxpayer, nontaxable part for incomeless spouse, nontaxable part due to disability of the taxpayer or due to the student status of the taxpayer). These nontaxable parts of the tax base were transformed into the form of tax abatements and transformed from § 15 of the Act on Income Taxes into the newly stipulated § 35ba of the Act on Income Taxes. A number of nontaxable parts of the tax base, however, remained laid down in § 15 of the Act on Income Taxes (the data in brackets represent the year of their stipulation in the Act on the Income Taxes). These are namely the payments regarding:

1. gifts (since 1993);
2. interests on credit from building saving and on mortgage credit (since 1998);
3. pension additional insurance (since 1999);
4. private life insurance (since 2001);
5. remunerations of tests verifying the results of further education (since 2007).

A completely fundamental change in the field of income taxation of natural persons became effective on 01.01.2008, when, among others, the flat tax rate amounting to 15% was introduced, and taxpayers with the respective income type had to face the removal of social and health insurance payments as provided by law from tax effective expenses.

Based on the abovementioned, with regard to the defined solution terms, four basic model groups can be identified. They were decisive for the construction of the mathematical models themselves:

a) model valid from 1993 to 2004:
   - difference between incomes and expenses forms the tax base;
   - tax base is reduced by nontaxable part (nontaxable parts) of the tax base;
   - tax duty is determined according to the tax base reduced by the nontaxable part of the tax base in compliance with § 16 of the Act on Income Taxes (progressive tax rate).

b) model valid in 2005:
   - difference between incomes and expenses forms the tax base;
   - tax base is reduced by nontaxable part (nontaxable parts) of the tax base;
   - tax duty is determined according to the tax base reduced by the nontaxable part of the tax base in compliance with § 16 of the Act on Income Taxes (progressive tax rate);
   - in case of taxpayer with dependent children, tax allowance for children will be claimed.

c) model valid from 2006 to 2007:
   - difference between incomes and expenses forms the tax base,
   - tax duty is determined based on the tax base in compliance with § 16 of the Act on Income Taxes (progressive tax rate);
   - the calculated tax is reduced by tax abatement (abatements) and tax allowance for children.

d) model valid from 2008 to 30. 09. 2009:
   - difference between incomes and expenses forms the tax base,
   - tax duty is determined based on the tax base in compliance with § 16 of the Act on Income Taxes (flat-rate tax);
   - the calculated tax is reduced by tax abatement (abatements) and tax allowance for children.

Although the methods of calculating the final tax duty in the last two models (c) and d)) are practically identical, the author thought it would be appropriate to divide them, pointing out the difference in the tax conception in § 16 of the Act on Income Taxes, drafted as a flat tax rate since 2008. It would be possible to perform another division within the existing models regarding the second category of taxpayers (family with two dependent children and only one gainful spouse), namely due to the application of § 13a of the Act on Income taxes, which contained the institute of tax calculation from the joint tax base of the spouses. The author of the paper does not mention these, he merely notes that while constructing the mathematical models for the years 2005 – 2007, the application of § 13a of the Act on Income Taxes has been considered (some of the aspects occur in the following text).

EMPIRICAL RESULTS

The results of analysis that has been carried out are presented in the form of figures and relevant comments. Attention has been given to the step-by-step comparison of the effective tax burden and to the identification of the reason for its changes.

Effective Tax Rate of Single Childless Taxpayers

The development in the taxation of natural persons of enterprise incomes and other independently gainful activities for single childless taxpayers has been analyzed as the first one. The time period between the years 1993 and 2009 has been for clarity reasons analyzed step-by-step in the following time intervals:
6. 1993 – 1999
7. 1999 – 2009

With respect to the chosen intervals, the distribution cannot seem to be well balanced at first sight. However, the presented categorization considers the fact that there were no changes in the Act on Income Taxes in the magnitudes in focus (independent variables) during some years in the category of single childless taxpayers.

Figure 1: Effective Tax Rate of Single Childless Taxpayers (years 1993 – 1999)
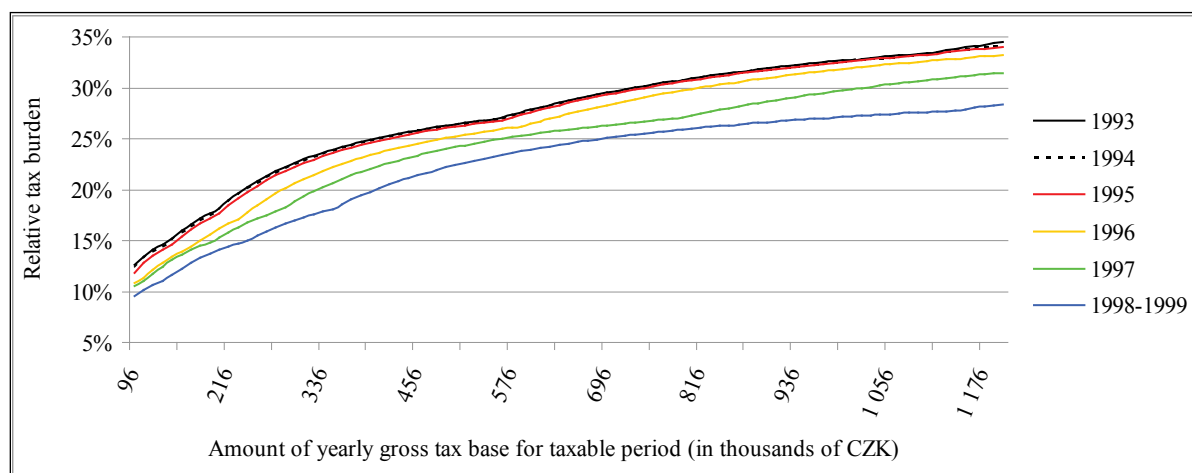
Development in the years 1993 – 1999 shows gradual decline of the effective tax rate in the scope of the entire yearly tax base interval in focus. The effective tax rate (or relative tax burden) in the years 1994 and 1995 displays an almost negligible change in comparison with the year 1993. The aforementioned results from the fact that there has been only a very slight increase of the basic nontaxable part of the tax base for taxpayer in 1994 (from CZK 20,400 to CZK 21,600) while only the nominal tax rate in the highest brackets has decreased (by 3 %). In the years 1996, 1997 and 1998 changes in both the nominal tax rates and the nontaxable part of the tax base for taxpayer took place (it is clear that in favor of taxpayers).

Figure 2: Effective Tax Rate of Single Childless Taxpayers (years 1999 – 2009)
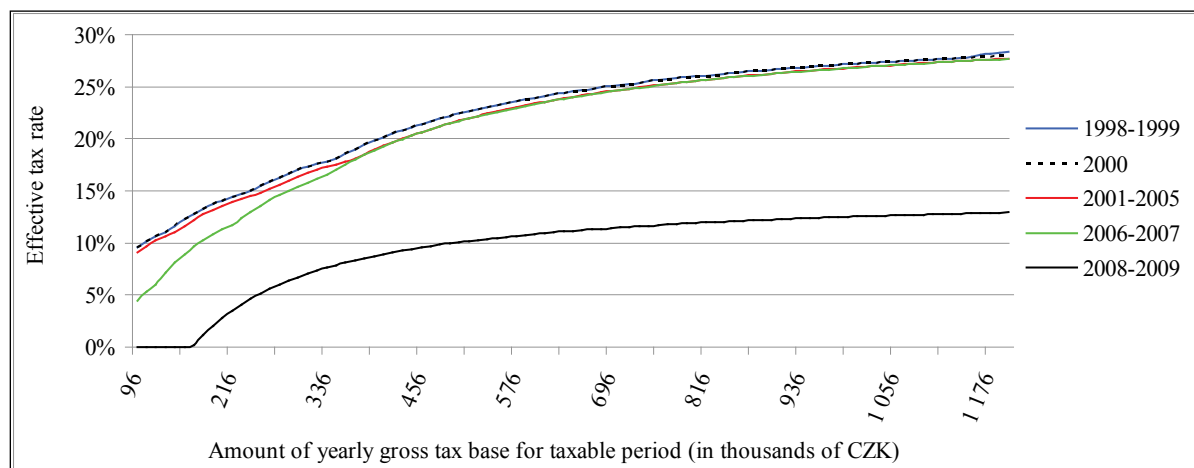
The development in the years 1999 – 2009 shows a decrease in the effective tax rate. A radical change took place in connection with the amendment to the Act on Income Taxes, which came into effect on 01.01.2008. Due to the high tax abatement on taxpayer (CZK 24,840) for the taxation period in the years 2008 and 2009, there is a zero tax duty to a certain tax base amount (tax abatement for taxpayer made the amount of CZK 7,200 in 2007). With effect from 2008, the progressive tax rate has been replaced by a flat tax rate amounting to 15%. Yet from a certain base amount, the effective tax burden has a purely progressive character. The aforementioned is caused by the tax abatement for taxpayer. The difference in the effective tax rate between the years 1999 and 2000 only happens as a result of the abolishment of the 5th tax bracket with the effect from 2000 (namely the bracket for tax base exceeding CZK 1,140,000). With the effect from 2006, apart from the changes in nominal tax rates, a transformation of some nontaxable parts of the tax base into the form o tax abatements took place, which affected also the nontaxable part of the tax for taxpayer. Together with the decrease in nominal tax rates, this had a favorable effect on taxpayers.

Figure 3: Relative Tax Savings for Single Childless Taxpayer (year 1993 compared with year 2009)
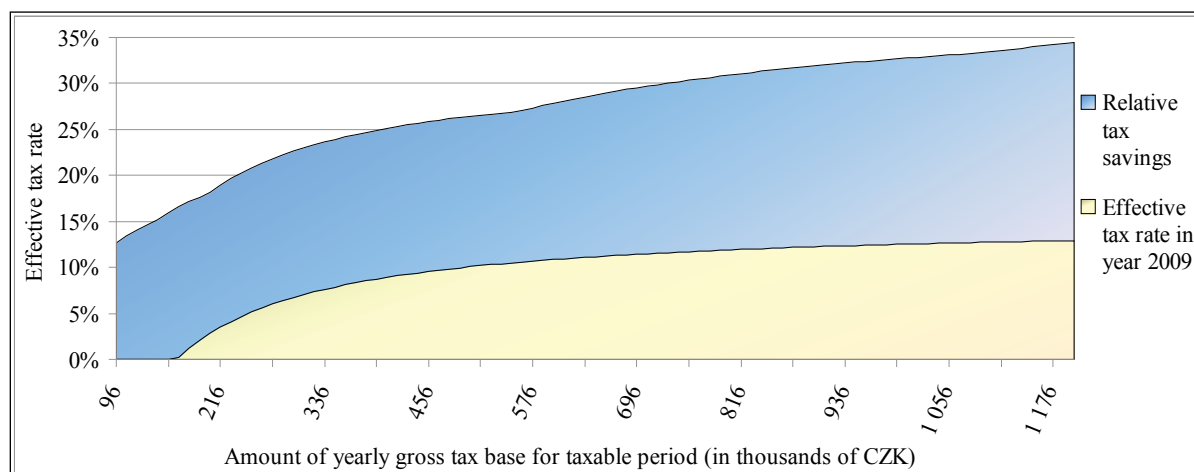
The above figure presents the relative tax savings of a single childless taxpayer comparing the effective tax rate in 1993 with the one in 2009. The resulting figure, which compares two marginal years of the period in focus, clearly shows that there was a significant decrease in the effective tax rate in the scope of the entire attained taxable income period assessed. On the other hand, it is necessary to state that the decrease was not equal for the taxpayers from all income groups, and the tax base amount and the amount of the tax savings were more or less in direct proportion.

<u>Families with Two Children and only One Gainful Spouse</u>

A range of legal institutions which serve to support families with children can be traced in the entire system of law of the Czech Republic. Among the most visible, it is the social benefits system (e.g. child allowance, parental allowance, maternity benefits, etc.) which frequently is the subject of discussions, among others, within the context of the dismal condition of public finances in the Czech Republic and the

economic crisis. However, tax concessions for children do not fall behind in significance (they took the form of a nontaxable part of the tax base until 2004, and since 2005, they have been taking the form of a tax allowance).

Besides that, the Act on Income Taxes also comprises concessions for families with spouses in case that the other spouse is not gainfully active or, to be more correct in accordance with law, in case that the other spouse only attained a certain maximum amount of income types as provided by law. Next to this, the Act on Income Taxes included the institute of *Tax calculation from the joint tax base of the spouses* (one of the terms on which this institute could be claimed was, next to the existence of the marriage as such, one dependent child in the family) in the years 2005 to 2007. Of course, this institute was very advantageous in the case when one spouse was attaining high incomes, while the other was attaining none. The basic principle was the division of the joint tax base between the spouses. These divided tax bases were consequently, as a result of the existence of the progressive tax, subject to lower tax rate than the original tax base would have been (by the end of 2007, the tax used to be progressive in accordance with § 16 of the Act on Income Taxes). Mathematical models naturally calculated with this institute, having regard on the determined solution terms, and the final tax duty of the spouses for the taxable period of the years 2005 – 2007 was calculated according to § 13a, which stipulated tax calculation from the joint tax base of the spouses.

Compared with the previous category of taxpayers, the scope of changes was larger in this case. More frequent changes of nontaxable parts can be identified, and we can say that the institute of tax calculation from the joint tax base of the spouses had a radical impact on the amount of the effective tax base. With regard to relevant changes and in attempt to reach relative clarity, the time period has been divided into the two following periods:
8. 1993 – 2000
9. 2000 – 2009

Figure 4: Effective Tax Rate of Family with One Gainful Spouse and Two Children (years 1993 – 2000)
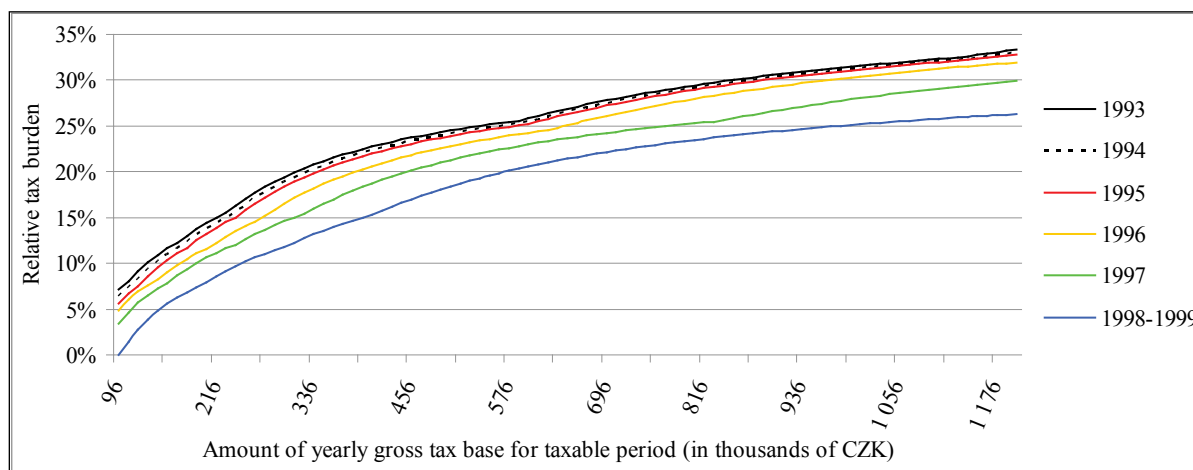
The second category of taxpayers shows a gradual decrease in the effective tax rate in the time period of 1993 – 2000. Not only the reduction of nominal tax rates had a positive effect, but also the increase in nontaxable parts of the tax base for dependent child (the amount of CZK 9,000 in 1993; the amount of CZK 21,600 in 2000) had a relatively strong impact. In the time period in focus there was an increase in the nontaxable part for spouse not attaining a maximum amount of income as provided by law (in 1993 it was the amount of CZK 12,000; in 2000 as much as CZK 19,884). The only change in the year 2000 consisted in the abolishment of the 5th tax bracket (tax base exceeding CZK 1,104,000). Other tax brackets were retained. Due to nontaxable parts of the tax base claims, this base amount was not fully attained, which resulted in the correspondence of the effective tax rate in the years 1999 and 2000.

Figure 5: Effective Tax Rate of Family with One Gainful Spouse and Two Children (years 2000 – 2009)
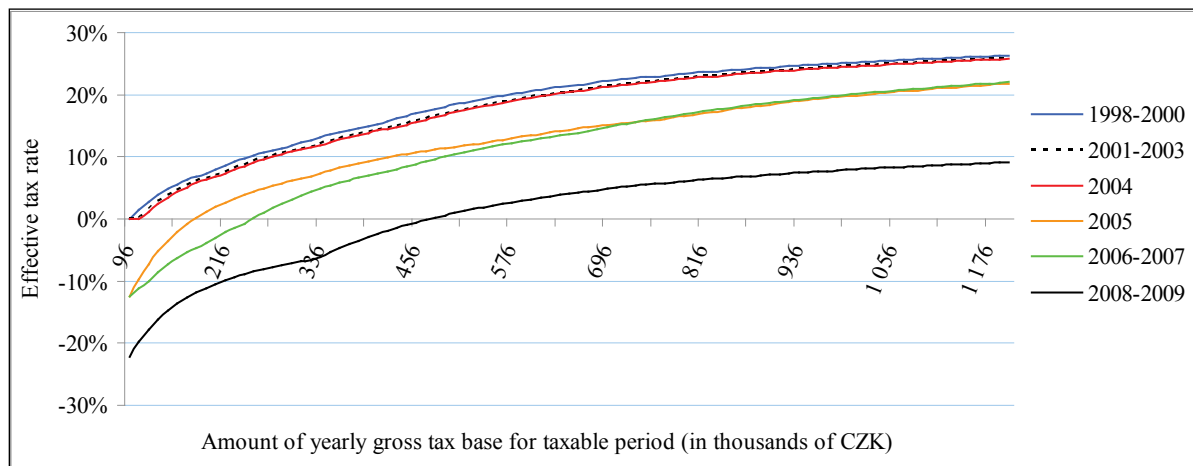
In the time period of the years 2000 – 2009, a gradual decrease in the effective tax rate for the aforesaid category of taxpayers can be traced. Relatively negligible changes in the years 2000 – 2004 were caused by slight changes in nominal tax rates and in the amount of nontaxable parts of the tax base. A relatively significant shift in the effective tax rate (relative tax burden) decrease originated in the changes that came into effect in 2005, 2006 and 2008. In 2005 the taxpayers were able to apply the institute of tax calculation from the joint tax base in their tax return for the first time, furthermore the transformation of the nontaxable part of the tax base for dependent child into the tax allowance for child took place. With effect from 2008, the tax abatement for taxpayer significantly increased (in the years 2008 and 2009 this abatement amounts to CZK 24,840 as compared with CZK 7,200 in the years 2006 and 2007), as well there was an increase in the abatement for incomeless spouse (the abatement amount for the years 2008 and 2009 is CZK 24,840, while in the years 2006 and 2007 it amounted only to CZK 7,200) and finally, there was a change in the tax allowance for child (rose to CZK 10,680 for the taxable period of the years 2008 and 2009; in the previous two taxable periods, the tax allowance amount for child was CZK 6,000). The minus in effective tax rate also deserves a commentary. The aforementioned phenomenon occurred as a result of claiming the so called tax allowance for a child (see § 35c of the Act on Income Taxes). It could take the form of tax abatement or a tax bonus, or both. If the taxpayer's claim for tax allowance for a child is higher than their tax duty calculated in compliance with the Act on Income Taxes for the respective taxable period, the incurred difference is a tax bonus. It is de facto an amount which can, in compliance with the terms provided by law, be rightfully claimed by the taxpayer from the national budget. Using the term "effective tax rate" is not entirely appropriate in this case, however it was necessary from the view of mathematical models conception and integration of the commentary and graphical data.

Figure 6: Relative Tax Savings for Family with One Gainful Spouse and Two Children (year 1993 compared with year 2009)
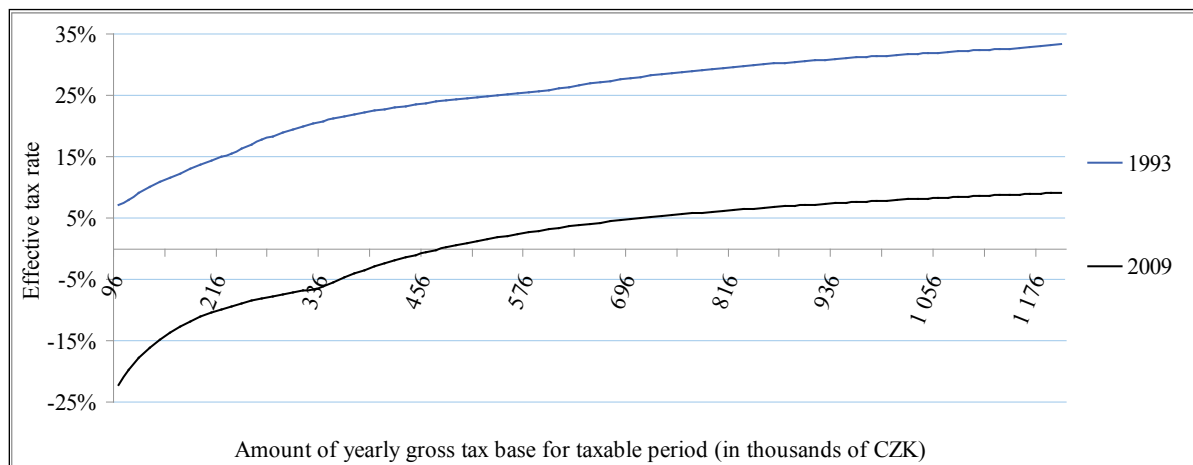
When comparing the effective tax rate in marginal years, the relatively steady decrease in the effective tax rate will probably be of interest. For taxation of this category of taxpayers, measurements aiming to provide support for families with children (above all for socially disadvantaged families) have influenced significantly the effective tax rate.   The final results of such measurements can be seen in the figure.

CONCLUSION

In conclusion, we can say that during the assessed time period the effective tax rate showed gradual decrease in both groups of taxpayers. However, in case of the category of single childless taxpayers, the decrease has by no means been steady. When comparing the effective tax rate in the years 1993 and 2009, the amount of relative – and therefore also absolute – savings is practically in direct proportion with the amount of the tax base. The decrease during the time period in focus can be deemed significant. In the second category of taxpayers, represented by a family with two children where only one spouse attains taxable income, the trend of gradual decrease in the effective tax rate can also be clearly traced. The decrease during the time period in focus for the second category of taxpayers can be also deemed significant. However, comparing the years 1993 and 2009, the effective tax rate decrease can be considered relatively steady.

From the taxpayers' point of view, the decrease in the effective tax rate is undisputedly a welcome effect. It remains uncertain to what extent the changes occur as a reaction to competition pressure. Owens (1993, p. 31) states that competitive considerations have not had a great influence on governments in determining their personal income tax schedule. This convergence is, according to this author's opinion, connected with political fashions which may however be related to competitive pressures. In connection with the income taxation of natural persons, Pechman (1990, p. 1) points out the decreasing tax progressivity. These conclusions partially overlap with those presented by Lee and McKenzie (1989, p. 79), who point out the trend of marginal tax rates reducing and tax base broadening.

On the basis of results presented in this paper one can observe that aforementioned trends are apparent also in the Czech tax law for the sphere of taxation of natural person incomes. The trend of tax base broadening is apparent mainly in relation to changes which became effective since 01.01.2008. In a certain respect, it can therefore be stated that the significant decrease in the effective tax rate in the year 2008 as compared with the preceding year has been compensated for by tax base broadening.

APPENDIX

Appendix 1

Development in the amount of basic nontaxable parts of the tax base, tax abatements and child tax allowance [in CZK]

Nontaxable part of the tax base	Year						
	1993	1994	1995	1996	1997	1998	1999
For taxpayer	20,400	21,600	24,000	26,400	28,800	34,920	34,920
For dependent child	9,000	10,800	12,000	13,200	14,400	21,600	21,600
For incomeless spouse	12,000	12,000	12,000	12,000	16,800	19,884	19,884

Nontaxable part of the tax base	Year					
	2000	2001	2002	2003	2004	2005
For taxpayer	34,920	38,040	38,040	38,040	38,040	38,040
For dependent child	21,600	23,520	23,520	23,520	25,560	
For incomeless spouse	19,884	21,720	21,720	21,720	21,720	21,720

Abatements for taxpayer (§ 35ba of the Act on Income Taxes) and tax allowance (§ 35c of the Act on Income Taxes)	Year				
	2005	2006	2007	2008	2009
For taxpayer		7,200	7,200	24,840	24,840
For incomeless spouse		4,200	4,200	24,840	24,840
Tax allowance for 1 child	6,000	6,000	6,000	10,680	10,680

Appendix 2

Nominal tax rates for income taxes of natural persons in the Czech Republic since 1993

Year 1993

Tax base		Tax		
from	to	fix amount	tax rate	for a base over
	60,000		15%	
60,000	120,000	9,000 +	20%	60,000
120,000	180,000	21,000 +	25%	120,000
180,000	540,000	36,000 +	32%	180,000
540,000	1 080,000	151,200 +	40%	540,000
1.080,000		367,200 +	47%	1.080,000

Year 1994

Tax base		Tax		
from	to	fix amount	tax rate	for a base over
	60,000		15%	
60,000	120,000	9,000 +	20%	60,000
120,000	180,000	21,000 +	25%	120,000
180,000	540,000	36,000 +	32%	180,000
540,000	1 080,000	151,200 +	40%	540,000
1.080,000		367,200 +	44%	1.080,000

Year 1995

Tax base		Tax		
from	to	fix amount	tax rate	for a base over
	60,000		15%	
60,000	120,000	9,000 +	20%	60,000
120,000	180,000	21,000 +	25%	120,000
180,000	540,000	36,000 +	32%	180,000
540,000	1.080,000	151,200 +	40%	540,000
1.080,000		367,200 +	43%	1.080,000

Year 1996

Tax base		Tax		
from	to	fix amount	tax rate	for a base over
	84,000		15%	
84,000	144,000	12,600 +	20%	84,000
144,000	204,000	24,600 +	25%	144,000
204,000	564,000	39,600 +	32%	204,000
564,000		154,800 +	40%	564,000

Year 1997

Tax base		Tax		
from	to	fix amount	tax rate	for a base over
	84,000		15%	
84,000	168,000	12,600 +	20%	84,000
168,000	252,000	29,400 +	25%	168,000
252,000	756,000	50,400 +	32%	252,000
756,000		211,680 +	40%	756,000

Years 1998 and 1999

Tax base		Tax		
from	to	fix amount	tax rate	for a base over
	102,000		15%	
102,000	204,000	15,300 +	20%	102,000
204,000	312,000	35,700 +	25%	204,000
312,000	1.104,000	62,700 +	32%	312,000
1.104,000		316,140 +	40%	1.104,000

Year 2000

Tax base		Tax		
from	to	fix amount	tax rate	for a base over
	102,000		15%	
102,000	204,000	15,300 +	20%	102,000
204,000	312,000	35,700 +	25%	204,000
312,000		62,700 +	32%	312,000

Years 2001 - 2005

Tax base		Tax		
from	to	fix amount	tax rate	for a base over
	109,200		15%	
109,200	218,400	16,380 +	20%	109,200
218,400	331,200	38,220 +	25%	218,400
331,200		66,420 +	32%	331,200

Years 2006 and 2007

Tax base		Tax		
from	to	fix amount	tax rate	for a base over
	121,200		12%	
121,200	218,400	14,544 +	19%	121,200
218,400	331,200	33,012 +	25%	218,400
331,200		61,212 +	32%	331,200

Years 2008 and 2009

Flat tax rate
15%

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BIOGRAPHY

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FLAT-RATE EXPENSES UNDER THE CZECH ACT ON INCOME TAXES

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ABSTRACT

This paper deals with the issue of flat-rate expenses in the Czech Act on Income Taxes. Particular attention is paid to the development of rates applicable to flat-rate expenses, as well as to the identification of incomes for which expenses can be claimed this way. The analysis covers the period of time from 1993 to 2010 and it is based on a comparison of legislative regulation of flat-rate expenses for categories of incomes making up partial tax bases. Based on the comparison, it was concluded that in the area of flat-rate expenses that can be at present claimed only in relation to enterprise incomes and lease incomes, there existed (until 2009) a gradual and significant increase in the rates of flat-rate expenses as well as the process of rate unification. Flat-rate expenses are generally perceived as an instrument of tax optimization in cases when the actual expenses claimed pursuant to Act on Income Taxes do not reach the amount of flat-rate expenses. With respect to the aforesaid, we can say that the claiming of flat-rate expenses will most definitely become a significant instrument of tax burden optimization for the taxable period of 2009. A model example is introduced for this category of incomes to compare the effective tax rate and its marginal change for the years 2008 and 2009.

JEL: H24; H25; K34; P29

KEYWORDS: Czech Republic, flat-rate expenses, natural persons, tax expenses, taxation

INTRODUCTION

In relation to the issue of eliminating obstacles to the free movement of persons (including for the purpose of performance of economic activities) and capital we are seeing many taxpayers make more efforts in considering the location and the extent of their economic activities. The extent of tax burden naturally plays a significant part in this decision-making process. From the point of view of taxpayers, tax burden optimization was, is and always will be a hot issue.

Generally speaking, all taxpayers strive to maximize their benefit. In this regard, we can base our theory on the assumptions coined by Wilson (1999, p. 273) who (despite the fact that he was not concerned particularly with the issue of utility in relation to tax issues for natural persons) presents a generally valid function of utility $U(C, G)$, where C represents private consumption and G represents consumption of public goods. Private consumption of the taxpayer, if we consider it to be the taxpayer's disposable income, is affected by numerous factors and aspects, some of which might be specific to a selected category of incomes (special legislative regulation) or the taxpayer as such. However, if we leave aside savings and the possibility to use them and if we accede to other simplifications, we can say that two basic factors of consumption are the amount of one's income and the amount of expenses that include (among other things) compulsory payments defined by law (i.e. taxes, compulsory payments on social and health insurance, etc.).

The amount of private consumption (or disposable income as such) is affected by numerous factors, but if we focus on compulsory payments pursuant to the applicable law, namely on personal income tax, we must say that one of the most significant variables affecting the said amount are tax expenses (see the simplified causal chain below).

Figure 1: Simplified causal chain with an emphasis on tax expenses
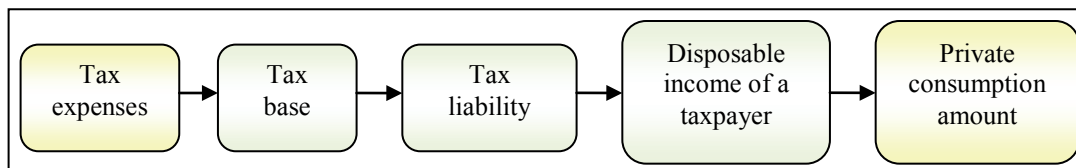
Even though the aforementioned causal chain is relatively abstract, it does show the elementary causal relations and the significance of tax expenses for the optimization of the tax burden of a taxpayer (not necessarily just a natural person). Therefore we can accept the argument that a taxpayer who takes a broader spectrum of factors into consideration will also take into account which expenses are considered as tax-effective pursuant to the applicable law, or which concepts of tax expense assessment exist, etc. The author of this paper proposes that the latter will have an increasing effect on the kind and extent of one's activities, as well as on the place of performance. Even though the human factor is generally thought to be immobile (unlike capital), we should not ignore the fact that on the other hand there do exist (as mentioned by Owens (1993, p. 29)) certain groups of highly mobile taxpayers (businesspersons, scientists, experts in particular fields, etc.).

There are two possible forms of tax expenses defined by Czech tax-related legislation: one, claiming actual expenses; two, claiming flat-rate expenses. The latter consists of the determination of tax expenses as a percentage of actual taxable incomes (i.e. the tax base is assessed irrespective of actually incurred expenses that are acceptable for the purposes of taxation). The subject of interest of this paper is the issue of flat-rate expenses in the Czech Act on Income Taxes over the period of 1993-2010.

The structure of this article is as follows: The general introduction provided above is followed by a chapter that provides a basic description of the act on income taxes and the process of assessment of the tax liability related to personal person incomes. The purpose of the chapter is to present a general introduction for the main part of the article, which presents a comparative analysis of legislative regulation of flat-rate expenses via the said act. The following chapter explains the methodology employed by the author of this article, i.e. the definition of points of departure reflected in the elaborated mathematical models and the concept used for determination of the effective tax rate. A separate chapter that follows presents the results of the comparison, along with the applicable commentary. The final chapter provides a summary of selected findings.

ACT ON INCOME TAXES REVIEW

Act No. 586/1992 Coll., on Income Taxes, as amended (hereinafter referred to as "AIT") is a fundamental legal norm, belonging to the category of higher authority legal norms, that regulates the issue of taxation of incomes of natural and legal persons. This act has always been subject to numerous amendments. On the other hand, it should be noted that some elementary provisions of this act remain unchanged, as did its systematics. There have been almost no changes with respect to the regulation of determination of the tax base in the case of incomes of natural persons and the definition of what is considered subject to tax (on the other hand, the same does not apply to the legal regulation of what is NOT subject to tax).

In terms of taxation of a particular income, the key aspect is the assessment whether the income is subject to tax. Relevant definitions have been given by the act since 1993, when the said act became effective, namely in Section 3, according to which the following are subject to tax:
    a) incomes from employment and function benefits (Section 6),
    b) enterprise incomes and incomes from other independently gainful activities (Section 7),
    c) incomes from capital assets (Section 8),
    d) lease incomes (Section 9),
    e) other incomes (Section 10).

The fact that a certain form of income is subject to tax is an essential prerequisite for us. Where the income in question is subject to tax, it is also necessary to assess whether it is exempt from tax, or not. With respect to the aforesaid, AIT includes special provisions, namely Section 4, and some forms of tax

exemptions are regulated also by provisions related to individual types of income, namely Sections 6 and 10.

Individual provisions of AIT (i.e. Sections 6 to 10) provide detailed specification of the contents of individual types of incomes and at the same time the way of determination of so-called partial tax bases. The total tax base is, naturally, the sum of individual partial tax bases related to individual types of incomes. When assessing the total tax base, one must take into consideration the numerous conditions defined by law. What is important is that only some of the partial tax bases can be negative numbers, while others cannot (in the case of some partial tax bases only a non-negative value can be shown). Besides, it is necessary to consider the special status of incomes from employment and function benefits (Section 6 of AIT), which in the first place cannot be negative, as logic dictates, but also, according to the applicable law, losses incurred from other forms of incomes cannot be subtracted from these incomes – in other words, unlike in the case of partial tax bases pursuant to Sections 8 and 10 of AIT no losses from partial tax bases pursuant to Sections 7 and 9 of AIT can be claimed with respect to this form of income.

The algorithm of total tax base determination provided below is based on the following point of departure and simplification:
- the taxpayer reaches all kinds of incomes;
- there are no losses carried forward from previous years (note: *tax loss or a part thereof that cannot be claimed within the taxation of incomes during the taxable period in which it was incurred, can be subtracted from the sum of partial tax bases for the individual forms of income referred to under Sections 7 to 10 in the following taxable periods*).

Algorithm of total tax base determination:

Partial tax base sum pursuant to Sections 7 to 10:
PTB(Sections 7 to 10) = PTB(Section 7) + PTB(Section 8) + PTB(Section 9) + PTB(Section 10),   (1)

whereas the values of PTB (Section 7) and PTB (Section 9) can be negative, PTB (Section 8) and PTB (Section 9) can only be non-negative.

Total tax base:
    If PTB (Sections 7 to 10) $\geq$ 0, *then* TTB = PTB (Section 6) + PTB (Sections 7 to 10),   (2)

    if PTB (Sections 7 to 10) < 0, *then* TTB = PTB (Section 6).   (3)

Explanatory notes:
PTB (Partial Tax Base) = Taxable incomes – tax expenses
TTB – Total Tax Base

The resulting tax liability is a function of numerous variables, the basic one of which is definitely the tax base, but there are also other important variables, such as non-taxable parts of the tax base (see Section 15 of AIT), tax abatements (see Section 35ba of AIT) and tax allowance per child (see Section 35c of AIT). Naturally, tax optimization begins with the tax base, which is determined by two variables: the amount of incomes and the amount of tax expenses. With respect to the latter, AIT has offered (and still does) taxpayers (in relation to a certain category of incomes) the chance to choose between two methods of claiming tax expenses. One, the actual expenses incurred can be claimed, and two, flat-rate expenses can be claimed (i.e. the amount of expenses is defined by law as a certain percentage of incomes).

DATA AND METHODOLOGY

The purpose of this paper is to explain the development of legislative regulation governing the issue of flat-rate expenses by AIT over the period between 1993 and 2010, which is a period covering the entire time that AIT has been in effect, and the valid legal situation for the upcoming year within the provisions of the amendment by Act No. 362/2009 Coll. A comparative analysis has been conducted with respect to the applicable provisions regulating the partial tax bases of natural persons, i.e. Sections 6 to 10 of AIT. The decisive legal state was the legal situation in force and effective as of December 31 of the particular year (note: the calendar year corresponds to the taxable period in the case of natural persons), in case of the still unexpired year of 2009 the decisive situation was the situation in force and effective as at of December 31, 2009, in compliance with the Collection of Laws within the meaning of Act No. 362/2009 Coll. As for the upcoming period of assessment, i.e. the year 2010, the legal situation valid as at of January 1, 2010 was taken into consideration. The results of the comparison are presented in a form of tables, which should enable the reader to see the development trend better. The comparison itself, however, is not carried out only for the rates of flat-rate expenses and their development over time, but also in relation to particular incomes for which flat-rate expenses are claimed.

With respect to material changes in ITA that became effective on January 1, 2008, an in-depth analysis was carried out for the taxable periods of 2008 and 2009, namely for enterprise incomes and incomes from other independently gainful activities. The said model example includes an assessment of the development of the effective tax rate for taxpayers with incomes pursuant to section 7 of AIT during for these taxable periods.

Model Example Points of Departure

In the process of creating mathematical models to serve as a base for the graphic outputs, the representative individual (natural person) is a single taxpayer with no children, who claims only the basic tax abatement – i.e. tax abatement for a taxpayer (i.e. the abatement pursuant to the provisions of Section 35ba Para 1 Letter a) amounting to CZK 24,840). Further points of departure and simplifications are listed below:

- The taxpayer is a tax resident in the Czech Republic.
- Enterprise incomes and incomes from other independently gainful activities represent the taxpayer's sole sources of income.
- The taxpayer has incomes from craft trade.
- The lowest level of income that is taken into consideration is the amount corresponding to the equivalent of the annual minimum wage amounting to CZK 96,000, i.e. $5,589 according to the exchange rate valid on September 30, 2009 ($1 = CZK 17.178).
- The step change concerned in the case of the discrete function of tax burden is a change in the tax base by CZK 12,000 per year, it corresponds to the amount of $699 (using the September 30, 2009 exchange rate).
- The highest level of taxable income that is taken into consideration is the amount of CZK 2,004,000 (i.e. $116,661 according to the exchange rate valid on September 30, 2009).
- The taxpayer claims flat-rate expenses.
- The activities concerned are carried out throughout the entire taxable period (in the case of natural persons the taxable period corresponds to the calendar year).
- The personal income tax rate (Section 16 of AIT) is the same for both periods of assessment – 15 % – it is a flat-tax rate.
- The taxpayer claims only the basic tax abatement – i.e. the tax abatement for taxpayer.

Note: As of January 1, 2007 the minimum wage in the Czech Republic is CZK 8,000 and the amount has not been changed yet.

Effective Tax Rate

The effective tax rate is conceived as a discrete function in consideration of the aforementioned step change, where the independent variable is the amount of taxable income, the type of the income (on which the rate for the flat-rate expenses is based) and the amount of tax abatement for the taxpayer. Naturally, the graphic outputs display the discrete functions using joins of points making up the function. For the purpose of this paper, the effective tax rate corresponds to the relative tax burden that is calculated as follows:

$$ETR = \frac{T}{TI} \times 100 \, [\%],$$ (4)

where *T* corresponds to the overall tax liability assessed pursuant to the provisions of Section 16 of AIT after the tax abatement for taxpayer has been subtracted (see below), *TI* stands for the total gross annual income. Considering the fact that the flat-rate expenses are a dependent variable of the latter, i.e. the overall amount of taxable incomes, the effective tax rate indicator, if defined as a quotient of the overall tax liability and the tax base (defined as a difference between incomes and expenses) would not be sufficiently informative. However, the tax base as such must be calculated, as it is necessary to assess the resulting tax liability.

The tax base can be expressed, provided we take into consideration enterprise incomes and incomes from other independently gainful activities, as the sole type of income of the particular taxpayer (see the points of departure above), as follows:

TTB = PTB (Section 7) = Incomes (Section 7) - Expenses (Section 7) =
Incomes (Section 7) – r $_{Flat\text{-}rate\ Expenses}$ (Section 7) * Incomes (Section 7). (5)

Then, the resulting tax liability is:

 (PTB (Section 7) * r $_{Tax}$) – TA. (6)

Explanatory notes:
TTB – Total Tax Base [CZK]
PTB (Section 7) - Partial Tax Base with respect to enterprise incomes and incomes from independently gainful activities [CZK]
Incomes (Section 7) – taxable enterprise incomes and incomes from other independently gainful activities [CZK]
Expenses (Section 7) – tax expenses related to incomes pursuant to Section 7 of AIT [CZK]
r $_{Flat\text{-}rate\ Expenses}$ (Section 7) – rate of flat-rate expenses claimed with respect to the particular form of income pursuant to Section 7 ZDP [in %]
r $_{Tax}$ – personal income tax rate pursuant to Section 16 of AIT [in %]
TA – tax abatement for taxpayer (CZK 24,840 for the years 2008 and 2009)

Naturally, the decision-making process with respect to the selection between actual expenses or flat-rate expenses is determined by the comparison of actual expenses and expenses that can be claimed as flat-rate expenses. However, numerous factors play their part in relation to the selection of the former or the latter method of assessment of tax expenses (e.g. in the case of claiming flat-rate expenses the principles of legal fiction are applied, according to which the amount of flat-rate expenses includes all expenses, i.e. also depreciation of tangible and intangible assets – therefore, when depreciating in the next taxable

periods (even when a taxpayer claims their actual expenses) the calculation of depreciation will be based on the assumption that during the year when flat-rate expenses were claimed, the tax depreciation was claimed in the full extent permitted by AIT).

EMPIRICAL RESULTS

According to the comparison, the claiming of flat-rate expenses (i.e. a percentage of taxable incomes) has been related to enterprise incomes and incomes from other independently gainful activities (Section 7 of AIT) and lease incomes (Section 9 of AIT) ever since the act became effective (January 1, 1993). During the first years after AIT came into effect, the possibility to claim flat-rate expenses also applied to incomes from employment, but only to a select category of taxpayers. Sections 8 and 10 of AIT have not provided the possibility to claim flat-rate expenses.

Flat-Rate Expenses for Incomes from Employment

This category of taxpayers who had incomes from employment and function benefits (Section 6 of AIT) and who could claim flat-rate expenses included foreign experts who were concerned with the provision of professional consultancy services to Czech legal entities or legal entities conducting business activities on the territory of the Czech Republic. Aside from "standard" expenses, represented in the case of taxpayers within this category by compulsory social and health insurance premiums (or contributions for foreign insurance in the case of employees who were obliged to have the same kind of insurance abroad), taxpayers who belonged to this category could also claim flat-rate expenses – i.e. expenses the amount of which was based on the actual income.

Table 1: Flat-rate expenses claimed with respect to incomes pursuant to Section 6 of AIT

Year	Select group of taxpayers	Flat-rate expenses
1993 - 1995	Foreign experts deployed in the Czech	30%
1996	Republic	25%
1997 - 2009	-	-

The aforementioned regulation represented a sort of preferential treatment enjoyed by these employees and it can be perceived as a form of benevolence of the lawmaker in order to support this particular category of taxpayers. It should be noted that due to the withdrawal from the centrally planned economy and the transition to the market economy, the Czech Republic and its subjects found themselves in a completely new position for which they lacked any experience.

Flat-Rate Expenses for Enterprise Incomes and Incomes from Other Independently Gainful Activities

Since AIT came into effect, the expenses that have been particularly important are flat-rate expenses for enterprise incomes and incomes from other independently gainful activities, as shown in the table below. The line chart below shows the results of mathematical models created to compare effective tax rates for incomes of a natural person who has income from craft trades in 2008 and 2009. In 2008 the rate of flat-rate expenses was 60 %, while in 2009 it is 80 %. The values appearing on the X-axis denote the amount of the overall gross annual income, while the values along the Y-axis refer to the effective tax rate figures [in %] defined as a quotient of the resulting tax liability and the amount of gross annual income. Considering the fact that the 80-percent rate for this category of income should remain unchanged, as should the basic tax abatement for the taxpayer, we can conclude that the 2009 results correspond to the 2010 results.

The results referred to in the commentary to the below stated chart correspond with the results of the equation for determination of the amount of income for which a taxpayer will start generating tax liability (However, it is necessary to point out that the models were elaborated on discrete function, not continuous

function, which is why minor deviations exist. These deviations can, nonetheless, be considered negligible). The said function has the following form:

$$\text{Income amount} = \frac{TA}{(100 - r_{\text{Flat-rate Expenses}}) * r_{\text{Tax}}}, \tag{7}$$

where the meaning of the terms used is identical to their previous usage. To keep the article brief, the author refers to above stated explanatory notes.

Table 2: Flat-Rate Expenses Claimed with Respect to Incomes Pursuant to Section 7 of AIT

Natural person (businessperson) income category	Year							
	1993-1995	1996-1997	1998-2000	2001-2005	2006-2007	2008	2009	2010
Agricultural production, forest and water mgmt.			50%			80%		
Craft trades			25%		60%		80%	
Other trades					50%		60%	
Business activity pursuant to special regulations			25%			40%	60%	40%
Incomes from the use or granting of rights related to industrial property or other intellectual property, incomes from copyright, including rights related to copyright, including incomes from publishing, copying and distribution of literary works at one's own expense			30%			40%	60%	40%
Incomes from independent professions that are not trades and business activities as stipulated by special statutory regulations			25%			40%	60%	40%
Incomes of authorized experts	-		25%			40%	60%	40%
Incomes of interpreters	-		25%			40%	60%	40%
Incomes of mediators of collective disputes	-	-	25%			40%	60%	40%
Incomes of mediators of collective agreements pursuant to the Copyright Act	-	-	-	25%		40%	60%	40%
Incomes of arbiters	-	-	25%			40%	60%	40%
Incomes of official receivers	-	-	-	25%	40%	-	-	-
Incomes from the activities of interim insolvency administrators, special representative of administrator and composition adjustment administrator	-	-	-	25%	40%	-	-	-
Incomes from the activities of bankruptcy administrators, including incomes from the activities of interim bankruptcy administrators, special representatives of administrator, independent bankruptcy administrators and special bankruptcy administrators that are neither trades nor business activities pursuant to a special statutory regulation	-	-	-	-	-	40%	60%	40%

As we can see from the above table, the rates of the flat-rate expense increased over time until 2009. The symbol "-" is used for situations in which the particular income pursuant to Section 7 of AIT was not included among those specifically referred to by the particular provisions (Section 7 Para 7 of AIT) regulating the possibility to claim flat-rate expenses for the selected types of incomes. The absence of the possibility to claim flat-rate expenses in the case of some types of incomes (marked by "-") is basically caused by the fact that some types of incomes evolved with time. Some categories of income were replaced by new ones pursuant to statutory amendments (this is the case of incomes of official receivers, which now belong to the category of incomes of bankruptcy administrators – the Bankruptcy Act was replaced by the Insolvency Act). With respect to the unfavorable situation of public budgets, a "package of measures" was adopted that should play its part in the elimination of further deepening of public budgets deficit. With effect from January 1, 2010, the lawmaker reduced the amount of flat-rate expenses to be claimed by most income categories from 60 % to 40%. The rates of flat-rate expenses remained unchanged in the case of incomes from agricultural production, forest and water management and trades.

Figure 1: Effective Tax Rate for Incomes from Craft Trades in 2008 and 2009
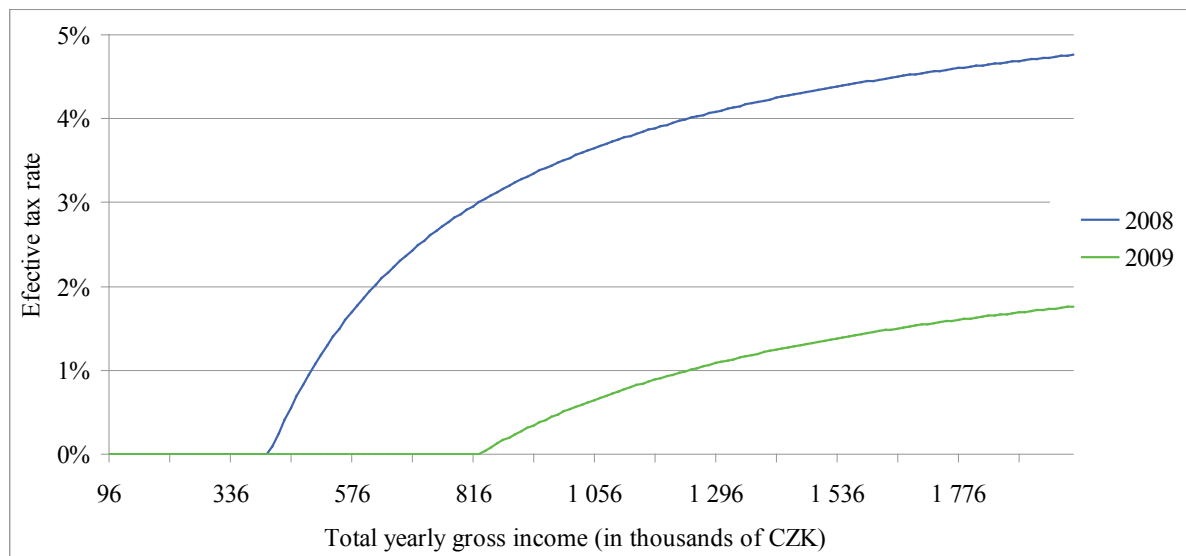
The increase in flat-rate expenses by 20 %, with the tax abatement for taxpayer unchanged, resulted in significant decrease in the effective tax rate. In the case of the selected concept for the construction of effective tax rate, the chart above basically defines the percentage of incomes which will represent tax liability if flat-rate expenses are claimed. The discrete function describing the development of the effective rate shows that in the case of 2008 the tax liability arises once a taxpayer's gross annual income has reached CZK 420,000 (0.15 * (420,000 – 0.60*420,000,--) – 24,840 = CZK 360). In 2009 the amount is CZK 840,000 (0.15 * (840,000 – 0.8 * 840,000) – 24,840 = CZK 360). We should point out the fact that the income amount from which the taxpayer who claims flat-rate expenses has a tax liability represents 52.5 times of the minimum wage (2008), or even 105 times the minimum wage (2009).

Figure 2: Marginal Change of The Effective Tax Rate in 2008 and 2009
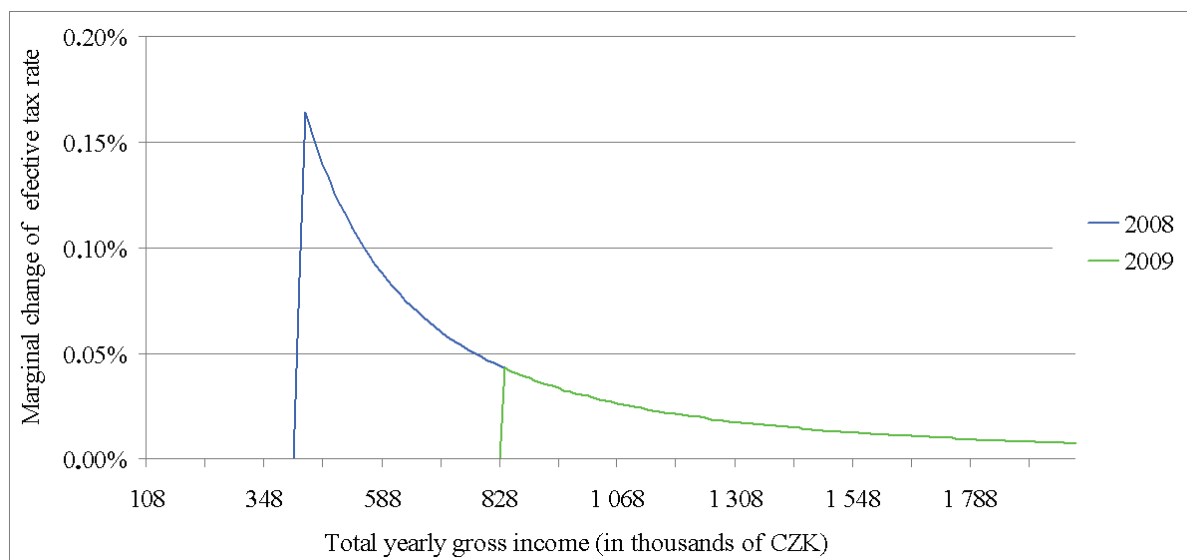
As we can see from the line chart, the marginal changes of effective tax rate are very small (around tenths of percents). From an income of CZK 840,000, the marginal change of effective tax rate is identical in both years, which is basically a result of an identical nominal tax rate and tax abatement (the impact of the nominal tax rate and of the tax abatement on the tax liability and as well as on the change of tax liability is the same). The chart clearly shows the dependence of the level of progression on the amount of total gross income. If we ignore the significant increase in exceeding the amount of income for which the tax liability arises, and the interval of incomes for which there is zero tax liability, we can talk about a negative correlation between the marginal change of effective tax rate and the total amount of income. This means that the level of progression decreases as the amount of income increases.

We can see from the above chart that despite the existing flat tax rate, the relative tax burden develops progressively. This is caused by tax abatement for the taxpayer, which decreases the amount of tax liability pursuant to Section 16 of AIT and its relative contribution to tax savings decreases as income increases.

Flat-Rate Expenses for Lease Incomes

Flat-rate incomes are also taken into consideration in the case of lease incomes pursuant to the provisions of Section 9 of AIT, namely with respect to the lease of:
   a)   real estate, apartments or parts thereof,
   b)   movable assets, with the exception of an occasional lease pursuant to Section 10 Para 1 Letter a) of AIT (e.g. occasional lease of a car, tools, etc.).

This provision has also undergone numerous changes. However, most of these changes were related to the increasing demands for recording incomes and assets in relation to this type of income.

Table 3: Flat-rate expenses pursuant to Section 9 of AIT

Year	Rate of flat-rate expenses
1993 - 2005	20%
2006 - 2010	30%

The rate of flat-rate expenses was changed only once: the increase by 10 % as of 2006. This increase is in fact not that high, but if we take into consideration the high amount of tax abatement for the taxpayer for the taxable period of the year 2008 and the year 2009 (CZK 24,840), the improvement of the position of the taxpayer becomes evident. If we were to consider that lease income is the sole income of the particular taxpayer who claims flat-rate expenses and not actual expenses, then his/her tax liability with respect to personal income tax for income up to about CZK 236,570 is zero. This amount is almost 29.6 times the amount of the minimum wage, which is CZK 8,000 (since the year 2007).

CONCLUSION

If we evaluate 1993-2009 developments based on the development of the rates of flat-rate expenses claimed with respect to incomes pursuant to Section 7 of AIT, we can observe a significant gradual increase. This trend strengthens the generally observed trends in the taxation of incomes of natural persons, such as the decrease in effective tax rates. Throughout the period in question, we can also partly see certain tendencies towards the unification of tax rates (instead of the original four rates in Section 7, for the taxable period of 2009 there are two rates currently referred to in AIT).

In relation to the aforementioned provision, i.e. Section 7 of AIT, we can talk about gradual increase in the number of incomes that could be subject to a regime of flat-rate expenses. However, the aforesaid should not be attributed to the continuous inclusion of these types of income into this category, but rather to the process of establishment of new types of incomes and their reflection in the particular provision of AIT.

As far as the amounts of flat-rate expenses are concerned, it can be supported the view that vis-à-vis flat-rate expenses some "preferential treatment" is enjoyed by those who have incomes from agricultural production, forest and water management. Particular provisions, the purpose of which is to give preferential treatment to this category of incomes, can be found elsewhere in the text of AIT, as well as in other tax-related acts (e.g. Act No. 16/1993 Coll., on Road Tax, as amended, or Act No. 353/2003 Coll., on Excise Duties, as amended).

With respect to the changes that became effective on January 1, 2008, it may seem as if there has been a significant improvement in the position of taxpayers who claim flat-rate expenses. To a certain extent, this conclusion is compromised due to the fact that, as of the aforementioned date, flat-rate expenses were

to include all expenses. Until the end of the year 2007, taxpayers had the possibility to include compulsory payments of social and health insurance into their expenses. If we take into consideration the fact that the Czech Republic is a country with high social security and health insurance premiums, the level of increase in flat-rate expenses in relation to one's incomes pursuant to Section 7 of AIT is cast in a different light when considering the advantageousness of the realized changes. Further in this regard, we can also point to a sort of contradictory trend in relation to the increase in flat-rate expenses, which can be considered to be quasi-increasing of the tax base by excluding some forms of expenses from the category of legitimate tax expenses. In principle, we can, however, most definitely say that this exclusion was compensated to many taxpayers via the increase in the flat-tax rate for the year 2009.

The efforts by the lawmaker to eliminate negative developments in the area of public budgets (the increasing deficit) have affected also the regulations related to the flat-rate expenses claimed with respect to the enterprise incomes and incomes from other independently gainful activities (Section 7 of AIT). As of January 1, 2010 the rates of flat-rate expenses will remain unchanged for only two main categories of incomes, namely incomes from agricultural production and forest and water management and incomes from trades. As for the remaining categories of incomes, the rate of flat-rate expenses to be claimed will be reduced from 60% to 40% as of January 1, 2010.

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INTERNAL SERVICE QUALITY IN STATE SECONDARY SCHOOLS

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ABSTRACT

Education as a service industry needs to adopt techniques of other service industries in measuring the quality of its services and satisfaction of its external customers as well as internal customers. This paper examines internal service quality in secondary schools using the SERVQUAL scale in Mauritius. Research into service quality in a secondary educational context is somewhat scant, and where investigations have been undertaken, very little has been concluded among educators' perspectives. A preliminary assessment of educators' attitudes using focus group discussion was conducted to elicit attributes of service that were deemed important by educators in secondary schools. The study further adopted a modified SERVQUAL instrument and the focus group discussion results to investigate expectations and perceptions of service quality among a sample of educators in state secondary schools in Mauritius. Exploratory factor analysis was used to group the service attributes into latent "service factors". The research findings suggested that the instrument was suitable for use in secondary school context, and the statements loaded on five factors. Analysis of variance (ANOVA) was further employed to examine if the constructs were perceived differently based on educators' demographic characteristics. Consequently, SERVQUAL, as a standard instrument for measuring functional service quality, is reliable and valid in a secondary school environment.

JEL: M31

Keywords: Secondary schools, Educators' perceptions, Internal Service Quality, SERVQUAL, Factor Analysis, ANOVA, Mauritius

INTRODUCTION

The educational environment is constantly changing and the demand for excellence in education is on the rise. Education as a service industry needs to adopt techniques of other service industries in measuring the quality of its services and satisfaction of its customers. According to Berry and Parasuraman (1992), the strategic success of a service organization depends on the ability of service providers to enhance their images by consistently meeting or exceeding customers' service expectations. These components must be measured regularly to respond to the changes of the environment where the expectations of the stakeholder are becoming higher. In service literatures, the service quality measurement have been utilized in the definitions of quality in higher education (Lagrosen *et al.*, 2004) using service quality dimensions (Owlia and Aspinwall, 1996; Joseph and Joseph, 1997; Lagrosen *et al.*, 2004) and determining the relationship between service quality and customer satisfaction (Rowley, 1997). Indeed, there is a need for service quality models in the educational institutions to enable management to identify high quality and to determine where problems exist, as it has been argued that attempts to improve quality management are being prevented because of the lack of instruments designed to measure quality (Galloway, 1998).

Although literature on service quality and its measurement has focused on external customers, there have been few exceptions (Berry, 1995; Hirons *et al.*, 1998; Pitt *et al.*, 1999) focusing on internal market

service quality, based on internal customers' perspectives. Most of the studies in education were either focused in higher education or on students' perceptions (Joseph and Joseph, 1997; Lagrosen *et al.*, 2004; Stodnick and Rogers, 2008). Empirical studies measuring service quality from the educators' perceptions from secondary schools have been found to be limited. Therefore the intention of this study is to provide a practical basis for internal service quality measurement from the educators' viewpoints in the area of secondary education in Mauritius. This study will also investigate the conceptualization and measurement of service quality and its importance within today's secondary education sector. Several authors (Carman, 1990; Cronin and Taylor, 1992; Teas, 1993; Chen and Tam, 1997) observed that, due to mixed results concerning the SERVQUAL dimensions, it is important to continue to compare the factor structures across different service settings. The study will demonstrate the relative usefulness and simplicity of the perception and expectation methodology in evaluating the internal service quality of educational services within the prominent state secondary schools in Mauritius. Therefore the specific objectives of this study are as follows:

- to investigate whether the SERVQUAL scale is a reliable and valid instrument to measure service quality in a secondary school setting
- to identify the relevant internal service quality dimensions in the Mauritian state secondary education system
- to determine the service provided by secondary schools and the demographics profiles of the educators

The concern for education in Mauritius has been the main focus of government policy over decades. However, the most prominent landmark was the introduction of free secondary education in 1977. This has led to free education at all levels and provision of substantial budget funding yearly. With the challenges of globalization, there is a need to reform the education sector and make it of world class standard so that the survival and the prosperity of future generations can be assured. Hence an effective and efficient administration of educational services within the Mauritian schools is of prime importance to the education sector. The decentralization of the Ministry of Education, Culture & Human Resources provides a better management of schools. The main headquarter is situated at Phoenix and four Regional Directorates. Thus the island has been divided into four regions namely Zone 1 (Port Louis and the North), Zone 2 (Beau Bassin- Rose Hill and the East), Zone 3 (Rose Belle-Curepipe and the South) and Zone 4 (Quatres Bornes-Vacoas and the West). The Director of each zone is directly responsible and accountable for the performance of the sector under management control. Management has to adopt a pro-active stance for the teaching-learning process, curriculum development, education research and planning as well as performance evaluation and quality assurance. The policy makers in the education sector are committed to review regularly the quality of education and services given to the students as well as the educators. It is vital to consistently measure the performance of service quality from the educators' perspective because they are directly involved in the education process. They can be seen as consumers and also as product of the education institution. Educators' views on all aspects of the educational experience are essential to monitor the quality of education delivered to the students. Despite such progress, there is a certain measure of disagreement among all the key players in the field of education on certain features of the present system. Any decisions taken at higher level regarding education are imposed on educators whose opinions are not sought as they are the one having to work under those decided conditions.

SERVICE QUALITY

The measurement of service quality has gained widespread interest due to service quality being one of the most important issues facing management today. However, the concept of quality and the characteristics of service for measuring service quality appeared to be a complicated and difficult task (Parasuraman *et al.*, 1988; Carman, 1990). Consistently providing a high quality service, however, requires practitioners in the service sector to manage the problems (Zeithaml *et al.*, 1985) that stem from five distinct

characteristics of services (Zeithaml and Bitner; 2000; Gronroos, 1982). These characteristics have been consistently cited in the marketing literature and are commonly identified as intangibility, inseparability, heterogeneity, perishability and lack of ownership (Zeithaml *et al.*, 1985; Gummesson 1987; Berry, 1995). Higher education, and in particular teaching, is normally considered very intangibly dominant (Shostack, 1985), and the activity also exhibits all of the other special characteristics of services. Service quality can be generally defined as meeting customer expectation or providing perfect service. Perceived service quality is an attitude, that is, a customer judgment on the overall service. It results from a comparison of customer's expectations with his/her perceptions of the service actually delivered by the service provider (Kangis and Voukelatos, 1997). Earlier research on service quality dimensions was done by Grönroos (1982). Grönroos found that the perceived quality of a service was affected by the experience that the customer went through for a service. The author indicates there are two types of service quality, technical and functional quality. Technical quality included the results of how customers received the service, that is, it referred to relatively quantifiable aspects the customer received from the service provider, and it could often be measured by the customer. Functional quality is about how customers enjoy the process of service delivery, it cannot be measured objectively. Grönroos (1984) further argues that, given the frequent inability to judge technical quality of service, functional service quality may be seen by customers as the most important factor in a service transaction. In later years, Parasuraman *et al.'s* (1985, 1988) proposed that service quality may be evaluated on the functional dimension and their work has led to the identification of service quality dimensions. The authors have provided a well-known framework for measuring service quality. Parasuraman *et al.* (1985; 1988) developed the SERVQUAL scale, which has been used in various sectors. The original SERVQUAL comprised of ten determinant service factors, which following extensive statistical analysis in 1988 revealed significant correlations between several of the factors, the ten service factors collapsed into five. The five suggested service quality dimensions are (Parasuraman *et al.*, 1988): (1) Tangibles (physical facilities, equipment, appearance of personnel); (2) Reliability (ability to perform the promised service dependably and accurately); (3) Responsiveness (willingness to help and provide prompt service); (4) Assurance (knowledge and courtesy of employees and their ability to inspire confidence); (5) Empathy (caring, individualized attention the firm provides its customers). The SERVQUAL model has been found to be a useful tool for understanding the notion of service quality, as defined by the customer. It allows researchers to measure the gap between customers' expectations of service and their perceived service experiences. The instrument is founded on the notion that service quality resides in favorable judgments, in which perceived service experiences meet or exceed expected service levels. SERVQUAL consists of 22 parallel expectation (E) and perception (P) statements that represent the five service quality dimensions. The 22 pairs of statements are designed to fit into the five dimensions of service quality. A seven-point scale ranging from "strongly agree" (7) to "strongly disagree" (1) accompanies each statement. Based on the traditional definition of service quality, Parasuraman *et al.* (1985) developed the gap model of perceived service quality. Service quality occurs when expectations are met (or exceeded) and a service gap materializes if expectations are not met. The gap score for each statement is calculated as the perception score minus the expectation score. A positive gap score implies that expectation have been met or exceeded and a negative score implies that expectations are not being met. Gap scores can be analyzed for each individual statement and can be aggregated to give an overall gap score for each dimension (Parasuraman *et al.*, 1988). Customers' expectations and perceptions are therefore very important to service providers as the gap helps in analyzing possible sources of quality problems.

INTERNAL SERVICE QUALITY

A large number of studies have been conducted on service quality from the perspective of external customers (Parasuraman, *et al.*, 1988; Varey, 1995; Zeithaml, *et al.*, 1996; Barnes, 2007). Much less has been reported from the perspective of internal service quality. According to Reynoso (1994) internal customers of an organization and their satisfaction is the "mirror-image" of the external customers and their satisfaction. In the marketing literature, the concept that focuses on employees and their satisfaction

is known as internal marketing, which evolves from the notion that employees represent an internal market within an organization (Grönroos, 1984). Internal service quality is characterized by the attitudes that employees have toward one another and the way employees serve each other inside the organization, and these have an impact on external service quality (Strauss, 1995; Varey, 1995). The main objective of internal marketing is to identify and satisfy employees' needs in order to increase customers' perceptions of service quality and satisfaction (Grönroos, 1984, Varey, 1995). According to Schneider and Bowen (1985), employees would deliver excellent service to customers when the organization provides employees with the necessary resources, including logistical, administrative, equipment and management support. As explained by Kang *et al.* (2002), just like external customers, employees are engaged in numerous service encounters to satisfy the needs they have in the course of carrying out their job responsibilities. Several researchers have applied and adapted Parasuraman *et al.'s* (1985) dimensions of service quality to internal services and also the expectations-perceptions gap model (Parasuraman *et al.*, 1988; Gremler, Bitner and Evans, 1994; Reynoso and Moores, 1995; Edvardsson, Larsson and Setterlind, 1997; Brooks, Lings and Botschen, 1999; Kang *et al.*, 2002). Zeithaml *et al.* (1990) argue that departments within a company could use the SERVQUAL to measure the quality of services provided to employees. Reynoso and Moore (1995) first attempted to validate the utility of the SERVQUAL instrument for measuring internal service quality and reported ten dimensions of internal service quality. However, the names of the dimensions were different from those of the SERVQUAL instrument, but examination of the content showed similarities with the original SERVQUAL measures. Similarly, Lings and Brooks (1998) conducted an exploratory study and proposed ten dimensions of internal service quality. They argued that SERVQUAL was an appropriate tool to measure the quality of service delivered by internal suppliers to their external customers. The authors maintained eight of the ten dimensions identified in the original SERVQUAL. Kang *et al.* (2002) argue that the SERVQUAL instrument for measuring service quality can be transferred to internal customers. The authors further argue that previous studies to measure internal service quality using the SERVQUAL instrument modify the SERVQUAL items and failed to establish the psychometric properties of the instrument used.

SERVICE QUALITY IN THE EDUCATION SECTOR

As educational institutions struggle for competitive advantage and high service quality, the evaluation of educational service quality is essential to provide motivation for and to give feedback on the effectiveness of educational plans and implementation. However service quality has received little attention in education in recent years, in particular in secondary institutions. Since the early to mid 1990s a stream of work has explored aspects of service quality relating to the teaching and learning factors, and the environmental attributes influencing higher education (Narasimhan, 997), with the majority of such investigations using student evaluations to assess quality (Rowley, 1997; Aldridge and Rowley, 1998). Service quality research within the educational settings has been influenced by the seminal work of Zeithaml *et al.* (1990) based on the SERVQUAL model from which a 22-item instrument for measuring customer expectations and perceptions has been developed along with five-quality dimensions: tangibility, reliability, responsiveness, assurance and empathy. However, most of the research in education has focused on higher education. Furthermore, service quality in education is far more complex. Education service quality is much more than pedagogy, it is concerned with the physical, institutional and psychological aspects of education. McElwee and Redman (1993) developed QUALED to assess service quality in higher education and initially used the ten original dimensions of service quality but later dropped the security dimension, as it was not applicable to higher education. The authors' study showed how to adapt the SERVQUAL methodology to be used in a higher education context and found only eight applicable dimensions of higher education service quality related to course provision. LaBay and Comm (2003) also developed a number of measures to evaluate student expectations and perceptions, concerning their tutor, on a sample of undergraduate and distance learning students. Similarly, Slade *et al.* (2000) adapted the SERVQUAL to assess and compare the perceptions of service quality of undergraduate students who leave their university before completing their studies and those

who remain in the educational process. Even though some items were modified to fit the educational setting, the original SERVQUAL's five service quality dimensions were used as a basis for their analysis. Rigotti and Pitt (1992) also used a modified version of the SERVQUAL instrument and their results showed that even though SERVQUAL needed some modifications, its use within the education services industry was acceptable. In another study, Hampton (1993) used a 45-item survey containing statements similar to those found in the SERVQUAL instrument to measure service quality in a higher education professional service. His results supported the use of the gaps analysis, as presented in the Parasuraman *et al.* (1985) model of service quality, for identifying relevant service quality aspects of university education.

RESEARCH METHODOLOGY

This study adopted both a qualitative and quantitative research; however the main component of the research is quantitative research using the SERVQUAL for testing the gap between service quality expectations and perceptions. The first stage adopted a qualitative method principally to provide a greater insight into the expectations of educators, and partly because there are shortcomings of SERVQUAL (Carman, 1990; Cronin and Taylor, 1992; Tea, 1993), especially, the weakness of SERVQUAL's dimensions. These include the fact that its five factors, namely Tangibility, Reliability, Assurance, Responsiveness and Empathy do not completely match the attributes of secondary institutions in relation to service quality, so it may not be completely appropriate to use SERVQUAL in its original form to understand the expectations of educators. Quantitative approach was then adopted to identify educators' perceptions and expectations towards service quality provided by state secondary schools in Mauritius. The research instrument used will be developed based on the relevant literature review and focus group discussions results. Therefore, using both the qualitative and quantitative methods will enhance the findings of this study.

The focus group discussion was used as an exploratory orientation in this study as the rich qualitative data gathered would be useful in providing insights into the issues being investigated. For this purpose, using convenience sampling five educators from one of the eleven institutions in Zone 1 were selected. The selected educators were those who were able to provide views of their perceived and lived-in experience of the quality movement encountered at the institution. According to Wellington (2000), the total number of respondents considered for this study is adequate as the overall sample acted as Key Informants to this qualitative research, allowing in-depth issues and views to form the core of theory-building. The discussions lasted for almost 60 minutes. During the focus group stage of the research participants were questioned on their awareness of the importance of service quality issues as well those attributes that they deemed essential in their evaluation of the secondary institution service. This qualitative stage of the research was executed to support the development of the multi-item questionnaire used for identifying educators' attitudes about the importance of specific dimensions of the service experience and their evaluation of the performance of each of these dimensions.

The second stage consisted of the development of a questionnaire based on the findings of the focus group. Since it is still debatable whether SERVQUAL's five dimensions are appropriate in an educational context, this study has used the focus grouped discussions results to design the survey instrument. The study adopted a modified SERVQUAL and based on the literature review and focus group discussions, seven dimensions were identified, namely, reliability, responsiveness, assurance, empathy, tangibles, school discipline and service facilities. Hence, the questionnaire consisted of two parts. The first part was designed to measure the demographic and other information such as gender, age, level of education and years of service. The second part was aimed at identifying educators' expectations and perceptions using a modified SERVQUAL dimensions with thirty statements. These statements were revised and were added to the SERVQUAL scale to increase the accuracy of the questionnaire, thus the SERVQUAL was modified to fit the research purpose. The respondents were asked to respond to a five-point Likert scale,

which ranged from 1 = strongly disagree to 5 = strongly agree. In order to assess the reliability of the various constructs, identify any errors, and ensure the clarity of instruction the questionnaire was subjected to a pretest. Based on the feedback, revisions were made to various questions that were not clear to remove all ambiguities. This was necessary to increase the validity of the questionnaire before embarking on the full-scale survey. Using convenience sampling, Zone 1 has been selected for this study due to the difficulties of selecting all the state secondary schools from the four zones. Questionnaires were administered both personally or using the 'personal contact' approach to the respondents in each of the ten secondary school in Zone 1. This enabled to collect all the completed responses within a short period of time. Data collected using the 'personal contact' approach was suggested by Sureshchandar *et al.* (2002) whereby 'contact persons' (colleagues) have been approached personally and the survey explained in detail. The final questionnaire together with a cover letter was then handed personally to the 'contact persons', who in turn distributed it randomly to educators within their respective institutions. Any doubts that the respondents might have regarding any questions was clarified on the spot. A total of 560 questionnaires were distributed to ten secondary institutions. Of these 390 were returned and thirteen discarded due to incomplete responses, thus leading to a response rate of 67.3%.

The obtained data was analyzed using SPSS 16.0 software. Descriptive analysis are calculated and a paired mean t-test is used to test the significant mean difference between the educators' perceptions and expectations of the service quality provided by secondary schools in Zone 1. Based on the educators' gap scores, principal component factor analysis with varimax rotation was used to summarize the information in the 30 original variables into a smaller set of new correlated composites of educators' perceived service quality dimensions. Cronbach's coefficients were calculated for all the service determinants to test the reliability of the scale used in the study. Analysis of variance (ANOVA) was employed to examine if the service quality constructs were perceived differently based on the educators' demographic characteristics.

RESULTS AND DISCUSSION

This section discusses findings from both the qualitative and quantitative research phases. The qualitative research was used to identify the service attributes deemed important to educators from secondary institutions when rating their service expectations and experiences. The benefit of using a qualitative approach is its ability to generate theory and gain a contextual understanding of social phenomena, the product of which is often regarded as providing meaning through the accumulation of rich, deep data (Lee, 1999). The respondents were asked one opening question: "Please tell me the service attributes that are most important to you as an educator?" According to the focus group discussion, the respondents' responses with regard to secondary school service quality were: (a) to understand the educators needs (b) to provide adequate support and assistance (c) to creates harmonious relationship among staff and students and develop democratic school regulation (d) to be courteous with educators and (e) to provide nice and pleasant school-environment and physical facilities (f) to provide appropriate equipment. During the discussion, the five dimensions of SERVQUAL emerged together with other new dimensions such as school facilities and disciplines in school. While the main objective of this study was to test the appropriateness of the perception-expectation methodology it also proved useful to gauge the use of the modified measurement instrument (adapted SERVQUAL) for measuring educator perceptions of service quality of the secondary school service offering. As stated previously, Zeithaml *et al.* (1990) defined the service quality construct in terms of the five dimensions, reliability, assurance, tangibles, empathy and responsiveness. Carman (1990), however, recognized the idea that dimensions can range from one to eight. Similarly, in a later study Parasuraman *et al.* (1994) established the possibility that three dimensions have common characteristics (responsiveness, assurance and empathy) and may even overlap into one.

The basic findings related to demographic characteristics of educators from the secondary schools examined in the survey are given in Table 1. Distribution of respondents by gender shows that females

make up about 58.6 percent of the sample. Distribution by years of service experience shows that most of the respondents have 11-15 years of service experience representing 34.5 percent, followed by 6-11 years of service having a percentage of 33.2. It is further observed that 48.8 percent of the respondents are head of department. The majority of the respondents have been working for 6-10 years in the current secondary schools (50.2 percent). It is also observed that 50.4 percent of the respondents have Bachelor degree as highest qualification, followed by Bachelor degree and Postgraduate Certificate in Education (38.7 percent).

RESULTS OF THE MODIFIED SERVQUAL MODEL

In developing new scale, factor analysis is used to determine the new dimensional structure of service quality. To test the validity of the seven-factor structure in service quality within the Zone 1 secondary institutions in Mauritius, factor analyses were performed on the 30 items that assessed the gap scores for the educators' responses. All exploratory factor analyses were initially performed using the principal axis factoring method and Varimax rotation with the Kaiser Normalization. The results of the factor analyses for the gap scores are shown in Tables 1. The Bartlett test of sphericity was significant (Chi-square = 2028.480, $p < 0.000$). The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was computed to quantify the degree of intercorrelations among the variables, and the results indicate an index of 0.791. Since the Kaiser-Meyer-Olkin measure of sampling adequacy was larger than 0.6, it showed that the use of factor analysis was appropriate. A cut-off factor loading of 0.5 and an eigenvalue greater than or equal to 1 were used (Hair *et al.*, 1995). The exploratory factor analysis gap score results in Table 1 indicate that the seven-factor structure did not factor out. Careful review of the loadings indicated that a number of items did not load strongly on any variable and needed to be dropped. Twenty-three of the 30 items in the questionnaires were reduced to five factors. The findings revealed that the original service quality dimensions for the secondary education did not factor out and the five factor would be more appropriate for this study sample. Some similarities and differences were found between the present construct and the original dimensions as well as the Parasuraman *et al*. (1988). There is evidence that the five factor structure shows coherence and resemblance to SERVQUAL. This indicates that the SERVQUAL dimensions are appropriate to this particular service that is, measuring service quality in an educational setting. Furthermore Zeithaml and Bitner (1996) suggest that when customers can not accurately evaluate the technical quality of a service, they will focus their quality judgments on process, that is, functional dimensions. The resultant factor structure explained 60.44% of the variance (Table 1). The two of the five dimensions were re-labeled, to better represent the dimensions identified by factor analysis, as school facilities and assurance-discipline. Service attributes that loaded on factor one was Empathy and accounted for 18.32% of the variability. The items in this factor were similar to those in the original dimension. The four items are related to the educator's perception of the extent to which the school demonstrates a personal care towards its teaching staff. Factor two was re-labeled as School Facilities, contained six items which accounted for 14.61% of the variability. The factor is related to the more general physical environment and services facilities provided by the school. These included the equipment, laboratory and library facilities and sports facilities. This factor contained three items from tangibles and three items from service facilities dimensions. Factor three relates Reliability, comprised of four items and explained 12.36% of the variance. The items explore whether the educators can count on promises made by the school. The items under this factor were similar to those from the original dimension. Factor 4 was concerned with Responsiveness, consisted of four items from the original dimension. The factor explained 7.43% of the variance and the items measured willingness of the secondary schools to be responsive and helpful. The last factor, factor 5 loaded five items and accounted for 6.73% of the variance. This factor was re-labeled as assurance-discipline. Three items from the original assurance and two items from discipline loaded on this factor. This factor explained educators trust on the school. Hence the research question with regard to the salient service quality dimensions in secondary schools is answered.

After these modifications were completed, reliability tests were run on the revised variables as suggested by Parasuraman *et al*. (1988). Cronbach's coefficient for each of the five dimensions using data on the differences between the perceptions and expectations were calculated. The coefficient alpha should range in value between 0 and 1 where values close to 0 mean poor reliability, while values close to 1 suggest more reliability (Nunnally, 1994). The reliability coefficients for the respondents are shown in Tables 2. The results show that the internal consistencies of the gap scales are all quite high. All dimensions have a coefficient of above 0.70. The total alpha of 0.840 indicates that the seven dimensions of the SERVQUAL are highly internally reliable (Nunnally, 1994). Thus the scales used to measure the various aspects of service quality can be regarded as reliable.

The next stage in the analysis was to examine the sample responses across the scale items to assess educator perceptions of service quality using the simple averages of the scores for all items that belong to that dimension. The results are presented in Table 1 and the items are grouped around the previously identified factor structure. The mean scores for perception and expectations are shown for each of the 23 attributes. In addition, a paired-samples t-test was run to evaluate where mean performance scores differed significantly from mean importance scores. The results of the survey indicate a range of predominantly negative service quality gaps. Significantly higher expectations than perceptions were found from all of the paired attributes. The two-tailed significance tests reveal that these negative differences are significant at the level of 1% ($p < 0.005$) in the case of all 23 of the attributes assessed. In terms of expectations of service quality, all 23 attributes received strong agreements with the statements ranging from 3.60 to 4.46 out of five. In terms of the perception of service quality, the means of the 23 attributes ranged from 2.21 to 4.02. This indicates that service quality provided by the secondary schools in Zone 1 in Mauritius still needs to be improved to reach the level of most educators' expectations. This is clearly a cause for concern to the schools as these negative differentials indicate that schools are under performing in these relatively important areas. Knowing what the educators' expect is an essential process in delivering quality service at any level of the school operations.

For the dimension of empathy, the highest gap is observed for "The school has the educators' long term interest in mind" (-1.96), followed by "The school is genuinely concerned about the educators" (-1.78). The secondary schools thus did not meet the expectations of its educators in this area. From Table 1, it is observed that the highest average gap exists in the responsiveness dimension. Among the four items in the responsiveness dimension, customer responses indicated that the greatest gap existed in the area of "The school responds quickly and promptly to educators' needs". Educators perceived a gap in this area measured at -2.19, the biggest gap among all the 23 items. The second highest gap was for "The school is never too busy to respond to educators' request" (-1.84). Secondary schools should be responsive to the shifting needs of their customers (educators). Reliability refers to providing accurate and timely information, showing interest in solving problems, and providing services right the first time. Under the dimension reliability, the findings revealed that all the items were negative and the highest gap score was for item "The school performs the service right the first time" (-1.90), followed by "The school gives accurate and timely information to the educators" (-1.77). If a school is not aware of its educators' requirements, it cannot devote resources effectively to improving those areas that may have the most significant impact on customer satisfaction. It is apparent that the proper training of school non-academic personnel in service efficiency and reduction of bureaucracy will indeed make a positive impression on the educators. According to educator opinion, among the six items in the school facilities dimension, customers indicated the greatest gap was related to "The school has modern looking equipment" (-1.98). The second largest gap was found in the area of "The school has modern library with complete collection" (-1.76). The smallest gap was observed for "The physical facilities at the school are visually appealing" (-1.27). Hence, from a holistic perspective of education, support services and facilities should play an equal, if not an even more important role, in contributing to the overall of service quality in education (Parasuraman *et al.*, 1988). The physical evidence provides representations or images that the customers use to evaluate quality (Zeithaml and Bitner, 2000). The school's facilities and equipment will

be indicative of the quality of its services (Bitner, 1990). The educators interact with the tangible aspects of the service and forms impressions of the service quality. Therefore, the appearance of the school's facilities (interiors and exteriors), its location, and the quality of material and equipment (e.g., library, laboratories) all play a role in the learning and teaching processes as well as in the overall perception of service quality. For assurance-discipline, the greatest gaps perceived by the customers were in relation to the item "The school develops democratic school regulation" (-1.12). The second largest gap was related to "The school is confident that the educator has a good understanding of the course content and syllabus" (-1.05).

Table 1: Perceived Service Quality

The following items are concerned with the State Secondary Schools in Zone 1	Loadings	% of variance	Cronbach's alpha	Gaps Mean	t-value
Factor 1: Empathy		19.318	0.824		
Genuinely concerned about the educators	0.815			-1.78	-25.83
Gives individual attention to its educators	0.599			-1.57	-22.13
Understands the individual needs of educators	0.814			-1.70	-25.37
Has the educators' long term interest in mind	0.557			-1.96	-28.59
Factor 2: School facilities		14.612	0.808		
Has modern looking equipment	0.699			-1.98	-29.99
Physical facilities at the school are visually appealing	0.724			-1.27	-17.40
The structure of any course content is well designed	0.539			-1.37	-19.59
Has complete and modern laboratory	0.624			-1.70	-25.40
Has modern library with complete collection	0.558			-1.76	-27.90
Has good sports and recreational facilities	0.767			-1.70	-25.40
Factor 3: Reliability		12.357	0.655		
Performs the service right the first time	0.817			-1.90	-31.06
Provides their services at the time they promise to do so	0.745			-1.14	-14.32
Shows interest to solving educators' problem	0.645			-1.26	-16.97
Gives accurate and timely information to the educators	0.766			-1.77	-25.44
Factor 4: Responsiveness		7.425	0.756		
Responds quickly and promptly to educators' needs	0.748			-2.19	-36.28
Is willing to go out of its way to help educators	0.708			-1.49	-20.14
Is never too busy to respond to educators' request	0.634			-1.84	-25.44
Always welcomes educators' questions and comments	0.565			-1.35	-19.42
Factor 5: Assurance-Discipline		6.728	0.798		
The educator is fair and impartial in grading	0.528			-0.41	-6.41
Is confident that the educator has a good understanding of the course content and syllabus	0.672			-1.05	-15.86
Is confident that the educator has an expert understanding of the material	0.768			-0.42	-6.42
Creates harmonious relationship among staff and students	0.875			-0.57	-6.71
Develops democratic school regulation	0.765			-1.12	-14.45
Overall Service Quality				**-0.79**	**-9.45**

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; Table 1 presents the factor analysis results and the gap scores for the five modified SERVQUAL dimensions. The results showed that all the statement were negative gaps, indicating areas for service improvements.

The overall mean perception, expectation and gap scores were computed by dividing the sum scores of all 24 attributes. A comparison of overall mean expectation and perception scores indicated a statistically significant difference (p < 0.01) between the two groups. The highest gap score between expectations and perceptions was obtained in Responsiveness (-2.00), followed by empathy dimension (-1.75), Reliability (-1.52), Assurance-Discipline (-0.34) and School facilities (- 0.33). This implies that management actions to close these gaps in particular are needed. The respondents' most important expectation was the responsiveness dimension which included items such as responding quickly and promptly to educators' needs, never too busy to respond to educators request and always welcome educators' questions and comments. The least important dimension is quality of school facilities, which includes physical facilities

of the school. While the educators assess the quality of school facilities dimension as being the least important in their expectation of service quality, this is likely to be due to the expected level of tangibles being met in the school, often without the educator being conscious of their presence. This finding therefore implies that tangibles element of service does not significantly contribute to quality perceptions among secondary school educators in Mauritius. However, previous studies indicated that campus facilities and environment, in this study labeled as quality of school facilities, has the most important impact on student assessment of service quality (Hampton, 1993; Shank *et al*., 1995). The responsiveness, reliability and empathy dimensions significantly influenced overall service quality perception. The implication of these findings is that the educators perceive some quality aspects to be more important than others for determining the quality of the service that they receive from their respective schools. The findings do not mean, however, that the schools should neglect other quality dimensions, for example, assurance-disciple and school facilities. It is important for a school to provide adequate service on all dimensions and to ascertain which dimension may require more attention. It is possible that responsiveness, reliability and empathy have significant influence on perceptions of service quality because these dimensions are lacking in secondary school setting.

The overall service quality gap score was -0.79, which indicated that the overall educator perceptions of service quality provided by state secondary schools in Zone 1 were falling below the educators' expectations. The results indicate that, overall, the schools are not doing a good job in meeting educators' expectations. These differences in opinion indicate that it is advisable for a school to conduct surveys among its educators to identify the most important areas for improvement. This clearly shows that secondary schools need to provide more support to educators.

ANOVA ON SERVICE QUALITY AND DEMOGRAPHIC PROFILING

Analysis of variance (ANOVA) was employed to examine if the service quality constructs were perceived differently based on the educators' demographic characteristics. This analysis can help illuminate the direction and magnitude of change that educators experience with regard to their demographic characteristics in relation to each service quality attribute. Therefore, it is important for secondary school management to understand the effect of key demographic characteristics on educators' perception of school service quality. The results of the ANOVA are presented in Table 2. The results failed to reveal a significant effect for gender and head of department on perceived service quality. However, the results did indicate significant effects for length of teaching experience on four of the five service quality dimensions, namely, empathy, reliability and responsiveness. It is observed that length of service experience has significantly higher perceptions on responsiveness, followed by reliability and empathy. With regard to level of qualification, all the five dimensions showed significant effects, with responsiveness having higher effect, followed by reliability, school facilities, assurance-discipline and empathy.

Table 2: Educators' perceptions of Service Quality dimensions on Demographics

Dimension	Demographics variables			
	Gender	Length of service experience	Head of Department	Level of Qualification
Empathy	6.528	2.377*	2.273	1.587*
School facilities	1.726	1.600	1.189	2.452*
Reliability	1.148	2.610**	3.478	2.756*
Responsiveness	2.325	4.373*	0.901	3.267**
Assurance-Discipline	3.452	2.510	1.673	2.126**
* p < 0.05; ** p < 0.001				

Table 2 shows the relationship between gender and service quality. The results failed to reveal a significant effect for gender and head of department on perceived service quality.

CONCLUSIONS

This study demonstrated that the SERVQUAL survey results were extremely useful in measuring the functional quality of the secondary schools assessed. Using a modified SERVQUAL instrument gaps between educators' expectations of service quality and their actual perceived service experience were computed. Although this study has showed that the data collected do support the five-factor structure as proposed by Parasuraman *et al*. (1988), the five dimensions are useful as a foundation for discussion of and determination of areas for improvement in an organisation's service quality. The evaluation of service quality at the secondary schools through the measurement of educators' satisfaction has significant implications for strategic planning.

The focus group discussions on service quality with educators for whom service quality is important in their teaching show that these professionals also basically agreed with the prescription of the five dimensions of service quality. The instrument has helped to identify important areas for improvement in the secondary schools daily operations. This study has highlighted how important it is for secondary schools to conduct a survey among its educators and consider their opinions in identifying areas for service quality improvements. The findings of the study revealed that educators did not seem to care as much about the dimensions of School facilities and Assurance-discipline as they did about empathy, reliability, and responsiveness. The findings suggested that concentrating resources on the service quality dimensions, particularly responsiveness, empathy and reliability may help secondary schools to improve their educators' perceptions of their work experience. The secondary schools should be aware of the important role educators' play in shaping students' perceptions of their educational experience and the school. The state secondary schools in Zone 1 is not quite delivering promised services related in providing prompt service, understanding educator's specific needs and physical facilities. Secondary schools should react accordingly, using human resource strategies consistent with market-orientated management strategies that as a philosophy recognize staff as the first market of the organization. The findings also implied that educators' perceptions of service quality vary significantly among educators of different gender, years of service, level of qualification and whether they were head of department or not. School management should ensure that they identify the discriminating dimensions of different segments to enable them to create appropriate strategies for specific target segments. Assessing the service quality of educators and understanding how the different dimensions influence overall service quality and satisfaction should enable service organizations to effectively and efficiently design the service delivery process, thus ultimately provide better service to the external customers. This pilot study showed that the heterogeneous or generic dimensions of service quality described by Parasuraman *et al*. (1985; 1988) are applicable in a secondary school context and that modification of the research instrument to include industry-specific quality features, as suggested by the original researchers, is appropriate. It would seem that the concept of customer-driven service quality is a meaningful one for policy makers who wish to develop measures of the quality of education in the secondary sector.

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OPERATIONAL PROGRAMS MANAGEMENT THE PARTICULARS IN ROMANIA

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ABSTRACT

The European funds do not represent an inward purpose, but instruments in reaching the objectives established at the level of the European Union, of the EU member state, based on the implementation documents. The access to Social and Cohesion Funds offers Romania a possibility to develop the regions which are lagging behind, to modernize transport and environment infrastructure, to support rural development, to create new employment opportunities, to sustain social policies which will lead to the growth of the standard of life. This research work displays diverse aspects concerning the implementation methodology of irredeemable funds; starting, on one side, from the comprehension of the spirit, philosophy and reasoning of the European Union objectives, and on the other hand, from the definition and general characteristics of any program destined to engaging such funds. Is absolutely necessary the existence of a strong institutional structure, capable to ensure the formulation and application of public policies, to keep the coordination processes inside ministries going, the implementation of national programs, increasing the application capacity of partnerships between local administrations.

JEL: G14; G24; G38.

KEYWORDS: European funds, the growth of the standard of life, strong institutional structure, local administrations, implementation methodology of irredeemable funds.

INRODUCTION

Inspired by the will of the Europe's states and citizens to build a commune future, the European Union, in its actual shape, is the result of some ample processes of economic and political cooperation and integration started on April 18th, 1951, when the Treaty concerning the „ European coal and steel community" was signed. The six initial members (Belgium, Germany, France, Italy, Luxembourg and Netherlands), were joined, in five adhesion waves along a period of almost four decades, by another twenty one new members. These integration and cooperation processes are not considered closed at present since the European Union is opened to all those European states who respect its values and undertake to commonly promote them.

One of the fundamental objectives of the European Union is the strengthen of the economic – cohesion by reducing the regional disparities. This is also the reason why the member states participate to a European regional policy financed from European funds, which confers a concrete and immediate meaning for the communitarian solidarity (Bandarra, N.J. 2006). The European Union economic and social cohesion policy for 2007 – 2013 focuses on three main objectives:

- *Convergence*, which is an objective financed with 81,9% from the budget destined to structural and cohesion funds and which regards the regions from the member states of the EU that have PIB/inhabitants less than 75% from the communitarian average;

- *Competitiveness and employment,* is an objective financed with 15,7% from the budget destined to structural and cohesion founds that regard regions that are not eligible within the objective of convergence;
- *European territorial cooperation* is the objective financed with only 2,4% and refers to transnational, trans-border and interregional cooperation.

After the adhesion of Romania to the European Union, as of January 2007, the national policy for the creation of facilities is more and more tightly connected to the community policies, principles, objectives and regulations in the field, the National Development Plan (PND) being the fundamental instrument through which Romania shall try to rapidly recover the socio – economic development disparities compared to the European Union James, (K. Mc Collum; Bănacu, Cristian Silviu, 2007).

STRUCTURAL INSTRUMENTS OF EUROPEAN UNION FOR THE PERIOD 2007-2013

European Union is one of the most prosperous economic areas in the world. However as we point out, there are certain disparities regarding the productivity and prosperity between member states which may lead to major structural weaknesses (Manolescu, A., Mironescu, A., Matei, I., 2008). Since the integration, in May 2004 and January 2007, of the new 12 member states such disparities have become even more striking. Therefore for a better operation of the European unique Market and implicitly for increasing competitiveness, European Union encourages a cohesion policy along with the environmental protection policies and the equality of chances policies. The Cohesion Policy is financed through structural instruments. Each structural instrument has, in its turn a specific destination:

The European Regional Development Fund (FEDR) was set up to stimulate the lasting economic development at a regional and local level by the mobilization of local capacities and diversification of economic structures in fields like technological research and development, innovation and entrepreneurship, informational society, SME-s, environmental protection, tourism, energy;

European Social Fund (ESF) contributes to the increase of the adaptability of the workforce and enterprises, the increase of the access on the labour market, prevention of unemployment, the prolongation of active life and fights discrimination;

Cohesion Fund (CF) finances projects in the field of environmental protection and trans-European transport networks, projects within the field of lasting development, etc.

Complementary funds:

European Fund for Agriculture and Rural Development (FEADR) with the purpose of increasing competitiveness in agricultural sector, the development of rural environment.

European Fisheries Fund (EFF) invests in the development of living aquatic resources, in the modernisation of fishing crafts, etc.

It is very important to reduce the disparities between the regions so that all members can contribute to and benefit from the opportunities offered by European Union through structural instruments, especially at this time of economic crisis (Bourrinet, J. 2007).

Romania, having registered before 2007 a GDP of approximate 35% of the European average is considered eligible for receiving support within the objective „Convergence" as well as within the objective European territorial Co-operation".

Structural Instruments of European Union do not act on their own but they are co-financed, mostly from the public resources of the member state but also from private financial contributions. Within the objective „Convergence" the maximum rate of the communitarian contribution is 85% for one operational programme, not only for Structural Funds (ERDF, ESF), but also for Cohesion Funds.

STRUCTURAL INSTRUMENTS USED IN ROMANIA FOR THE PERIOD 2007-2013

After 1989, Romania encountered unprecedented economic and social changes with major effects on the country and population. The ever growing integration to the world's economic flows represents a dynamic process and Romania must be prepared to render profitable all possible advantages especially in the current economic context when most countries face negative economic situations. Romania has the opportunity to continue, through the Structural instruments, the economic reform in order to catch up with differences between the Romanian regions and the regions of the other seven European countries. Programming Documents based on which the Structural funds are implemented are the following:

National Development Plan 2007 – 2013 (N.D.P.), represents the document for strategic planning and multiannual financial programming with the purpose of stimulating the economic and social development of the country in order to achieve the objective of economic and social cohesion. It is based on a careful analysis of the social and economic situation of the country and includes the priority fields of investments for medium term as well as the financial sources for supporting the said investments.

National Strategic Reference Framework 2007 - 2013 (N.S.R.F.), it is the strategic document based on which the intervention priorities of Structural and Cohesion Funds are established according to the strategic priorities set in NPD. It represents a link between the national development priorities and European priorities. The financial support of European Union is allotted according to the strategy set up in this document (Hubă Stefănescu, Carmen Catălina 2008).

Operational Programmes (O.P.), represent programmes through which important elements of N.D.P. are implemented and which ensure the achievement of the general objective of the Regional National Strategy, namely the reduction of the disparities between Romania's Regions. Operational programmes present major fields of intervention which are co-financed by Structural and Cohesion Funds. According to The National Strategic Reference Framework Romania prepared seven operational programmes under the Objective „Convergence":

Regional Operational Programme (ROP) is the programme which implements important elements of the National Strategy for Regional Development of NDP contributing together with the other Sectoral

Operational Programmes to the achievement of the general objective of the Regional National Strategy namely the reduction of the disparities between Romania's regions and member states of European Union. The strategic objective of the regional programme shall be achieved by a fund allocation differentiated in each region according to the development of the regions and by a close coordination with the actions executed by the other operational programmes. Thus from the total number of financial allocations related to *Regional Operational Programme* for the period 2007-2013, in amount of 4.383,4 million euro (out of which 3.726,0 million euro from European Funds), the regions will receive between the minimum of 7,75% for the Region Bucureşti Ilfov, considered the most developed region in Romania and 16,52% for the North-East Region, considered the poorest region of European Union (Figure 1).

Sector Operational Programme of Environment (SOP Environment) – it is based on the objectives and priorities of environmental policies and European union infrastructure development policies with the purpose of protecting and improving the quality of the life environment in Romania which should materialize in efficient public services taking in account sustainable development and „the polluter pays". For the period 2007-2013 the total funds allocated for this programme are in amount of 5.610,7 million euro (out of which 4.512,3 million euro from European Funds), and until September 30, 2009 payments were only worth 171,394 million euro.

*Sector Operational Programme for Transport (SOP-T)***,** with the objective of promoting in Romania a sustainable transportation system which will allow rapid, efficient and safe transportation of persons and goods and services of a high quality level according to European standards. The funds allocated for this programme are in amount of 5.697,6 million euro (out of which 4.565,8 million euro from European Funds), and until September 30, 2009 payments were only worth 0,011 million euro.

Figure 1: Regional Allocation of the Funds under the Regional Operational Program
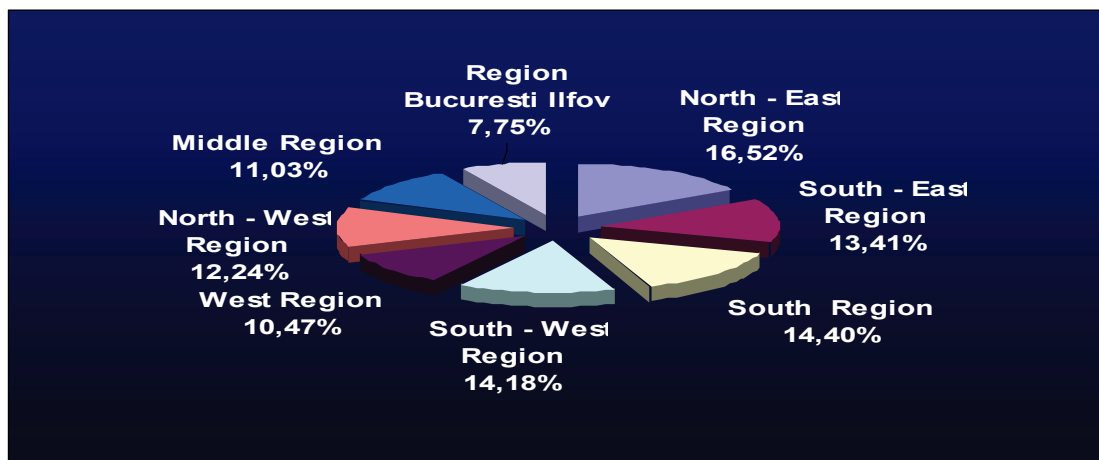
This figure shows how the total funds allocated for the Regional Operational Program may attract each region in period 2007 – 2013.

Sector Operational Programme Increase of Economic Competitiveness (SOP-IEC), having as a main objective the increase of Romanian companies' productivity in order to reduce the disparities compared to the average productivity of European union hoping to generate, as a consequence of the measures which are to be taken, an average annual growth of productivity by approximately 5,5% and to allow Romania to reach approx. 55% of the European Union average productivity by 2015. In order to reach this objective there have been allocated funds for the period 2007-2013 in total amount of 3.011,1 million euro (out of which 2.554,2 million Euros from European Funds) and until September 30, 2009 were attracted to 120,758 million euro (Faludi, A. 2007).

Operational Programme Development of Human Resources (SOP-DHR) – the objective of this programme aims at developing human capital and increasing its competitiveness by connecting education and lifelong learning to labour market and providing more opportunities to be on a modern and flexible labour market comprising 1.650.000 persons. Funds in total amount of 4.089,3 million euro (out of which 3.476,2 mil. euro European Funds), of which up to September 30, 2009 were attracted 48,210 mil. euro.

Operational Programme Administrative Capacity Development (OP-ACD) aims at the creation of a more efficient and effective public administration for the socio-economic benefit of Romanian society. Funds in amount of 246.0 million euro (out of which 208.0 million euro European Funds) were allocated for this programme, and until September 30, 2009 were attracted to 0,596 million euro (Lefter, Cornelia 2006).

Operational Programme for Technical Assistance (PO-AT) **-** the objective is to ensure support for the coordination and the implementation of the structural instruments in Romania, to ensure reliable managing and monitoring system for these instruments and to ensure appropriate communication to the general public about the European Funds. The funds allocated for the implementation of this programme for the period 2007-2013 are in total amount of 212.8 million euro (out of which 170.3 million euro European Funds), and until September 30, 2009 were attracted to 0,054 million euro (Figure 2).

Figure 2. Actual Stage of the European Funds Absorption Process, By Operational Programs
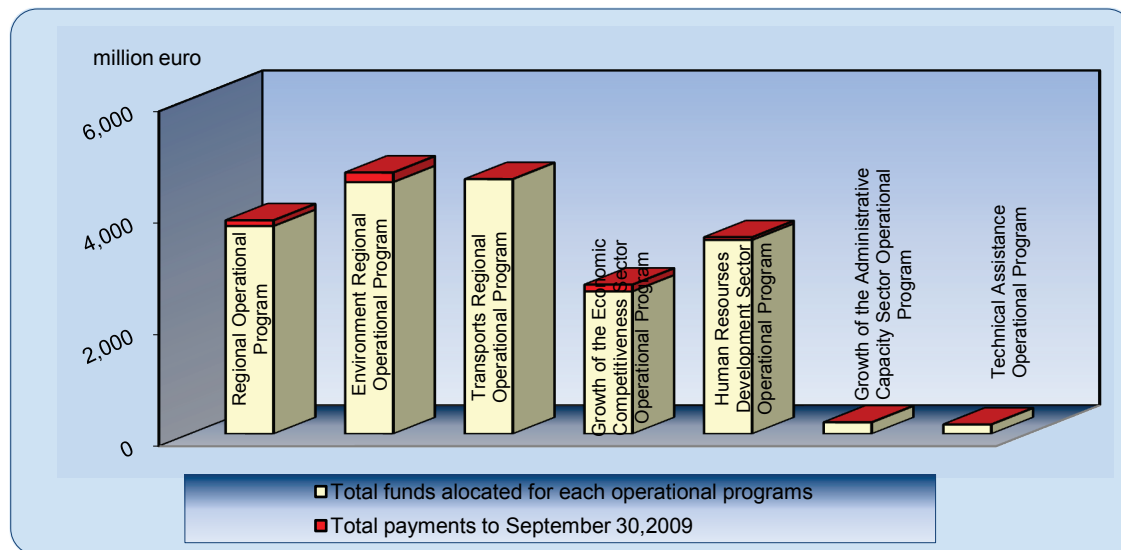
This figure shows as the total funds allocated in period 2007-2013 for the operational program were attracted to the September 30, 2009

On a careful analysis of the situation, it can be noted that Romania is faced with problems in the process of attracting European funds. How, with such problems faced by other countries, the European Committee established a new target: to simplify certain rules in the management of the European funds in order to support the regions in fighting back its negative effects. Concretely, considering the rapid growth of the unemployment in all the European Union member states, in a moment when their budgets are really tight, it was decided to give the opportunity to pay back 100% of the costs declared by the member states for the projects financed from the European Social Fund (FSE) in 2009 and 2010. The member states are not required to contribute with a national co-financing, which allows a speed-up of the implementation of the projects supporting the employment. This option does not re-open the discussion on the distribution of funds among the member states, or the total value of the funds and raises not liabilities on the member states to contribute with a subsequent co-financing (Farta, Constantin, 2007).

The storm on the financial markets will slow down, but the loans will be more and more expensive. This is the reason why the European funds become very important for our development. According to the specialists, a project is considered successful if the project continues to produce benefits to target groups for a long period of time after the closing of the main part of the grantor's assistance.

The use of Structural Funds can only be auspicious, the amount of absorbed quantities being less important than the value of the processes they cause. The European ideas are powerful enough, but they can be put into action only if there are appropriate local people and a domestic context ready for a change.

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A MODEL OF THE RELATIONSHIP BETWEEN SERVICE QUALITY, TRAVELER VALUE AND TRAVELER RETENTION IN CULTURAL TOURISM ACTIVITY

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The culture is a value, a life style, and an education. As the added economic value for cultural industry has been highly recognized, many nations have paid attention on developing cultural tourism. To create different activities, the country history, art of culture, places of historic interest, and folk custom will be received by the people. This will be the purpose of cultural tourism activities. Celebrating Dragon Boat Festival in Lugang Town is the one of "nation twelve largest festival activities" in Taiwan. This study examined how service quality affects traveler value and also traveler retention in cultural tourism activity. Experiencing two-years period, 1671 tourists involved in the survey. A model of these relationships was created based on earlier researches and used SERQUAL Scale developed by Parasuraman, Zeithaml and Berry (1988), a 6-item scale for assessing traveler value along with questions to assess traveler retention. Confirmatory factor analysis indicated that "Responsiveness", "Tangibility", "Reliability", and "Accessibility" dimensions contribute significantly to service quality. The model was tested and modified using structural equation modeling. The results generally support a positive relationship between service quality, traveler value, and also traveler retention. In other word, the service quality to be highly recognized, the level of traveler value will be increased. Additionally, the higher level of traveler value the higher traveler retention will be received. Suggestions for future research are also included.

THE EFFECT OF SERVICE QUALITY TO TRAVELER RETENTION IN CULTURAL TOURISM ACTIVITY

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The culture is a value, a life style, and an education. As the added economic value for cultural industry has been highly recognized, many nations have paid attention on developing cultural tourism. To create different activities, the country history, art of culture, places of historic interest, and folk custom will be received by the people. This will be the purpose of cultural tourism activities. Celebrating Dragon Boat Festival in Lugang Town is the one of "nation twelve largest festival activities" in Taiwan. This study examined how service quality affects traveler retention in cultural tourism activity. A model of this relationship was created based on earlier research and used SERQUAL Scale developed by Parasuraman, Zeithaml and Berry (1988) along with questions to assess traveler retention. Using a sample of 811 tourists who have participated in the activity, the SERQUAL Scale has been redefined. Confirmatory factor analysis indicated that "Responsiveness", "Tangibility", "Reliability", and "Accessibility" dimensions contribute significantly to service quality. The model was tested and modified using structural equation modeling. The results generally support a positive relationship between service quality and traveler retention. In other word, the level of service quality to be highly recognized, the higher level of traveler retention will be received. Suggestions for future research are also included.

A MODEL OF CORRELATION BETWEEN THE BUDGET-FUNDED ACTUAL EXPENDITURES ON PUBLIC ORDER AND THE GROSS DOMESTIC PRODUCT IN ROMANIA

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ABSTRACT

Public order represents an integral part of the social life, a safety and stability element and a feed back effect of the social action. Public order finance is included in the public finance, a field of economics concerned with the administration and design of the funds needed to operate the public order institution and with paying the contributions to the state budget. The public order and national security institutions are the beneficiaries of one of the highest budgetary allowance and they are mainly funded from the redistribution of the gross domestic product. Public order expenditures are non-productive expenditures that absorb a part of the gross domestic product. Due to the economic development and modernization, the need for goods and services increase and new requirements regarding the way in which the resources are used appear. It becomes clear that the public order expenditures are rather high for the state budget. This is the reason why all countries should manage and design their public order expenditures very rationally. Such an institution needs not only time to become operational but also financial and moral support, alongside with technical and professional compatibility. The topic of the present article deals with the identification of an assessment model for the actual expenditures on the public order in Romania.

JEL: H55

KEY WORDS: public order, gross domestic product, model, funding, expenditures.

INTRODUCTION

Public order in Romania represents the state authority invested by law with duties and competences in the field of public order and safety and with police responsibilities. Public expenditures represent a financial concept that translates the economical and social relations between the state (on one hand) and the legal and natural persons (on the other hand) into financial terms when it comes to using the state financial resources and to putting into practice its responsibilities and duties. Public expenditures refer to the allocation of the public finance, namely the division and use of the state financial resources.

It is important to establish some important financial funds in order to satisfy the general needs of the society. These funds will benefit from the gross domestic product and shall be used to support the national and local social needs.

Public order represents an important element of the Romanian security policy meant to safeguard both the citizen and the state. The Ministry of Administration and Interior of Romania includes the police and the gendarmerie, the two structures responsible of securing public order in peace time or during states of emergency (Văcărel I, Bistriceanu GH.,D., Anghelache, G., Bodnar M., Bercea, Fl, Moşteanu, T., Georgescu, F.,2003). The Ministry of Administration and Interior plays an important role in adjusting the objectives of the Romanian development to the objectives of the European security and stability.

FUNDING METHOD FOR ACTUAL EXPENDITURES ON PUBLIC ORDER

Actual expenditures on public order can be funded from state budgets, external credits, forgivable loans, own capital and international funds. Nowadays, countries worldwide tend to reduce the resources allocated to public order. Developed countries allocate about 4% up to 10% from the public expenditures and about 1% up to 6% from the gross domestic product to funding public order. Developing countries allocate about 7% up to 22% from the public expenditures and about 2% up to 5% from the gross domestic product to funding public order.

The money for the public order is redistributed from the gross domestic product considering the efficiency reached. The budget-funded expenditures for public order are divided and designed considering the public needs; the method to collect the financial resources meant to cover these expenditures will be decided at a later date.

The needs of the public order institution represent the needs of the country. For this reason, in the absence of the financial resources, we cannot talk about operational national security and public order institutions. The public order expenditures quota from the Gross Domestic Product differs each year depending on the economic development, the public needs and the degree of indebtness.
Due to the Romanian austere budget and limited budget allocation that directly depends on the gross domestic product, public order institutions should make all effort to attract new European structural and cohesion funds (Florescu D. 2008).

According to a paperwork by Europe Institute of Vienna concerning the impact of the enlargement of the European Union as of 2007, the benefits of the enlargement shall strongly incline above Romania. The study forecasts, for Romania, a cumulative growth of the PIB of 0.5%, due to the integration effects. Moreover, Romania propounded to use the structural assistance in order to raise the PIB by 15-20% until 2015.

Actual expenditures represent a fixed consumption of the gross domestic product. These expenditures are renewed each year and they include personnel, goods and services expenditures, interests, transfers, investments and social assistance expenditures; expenditures on non-financial assets represent an advance payment from the gross domestic product. Personnel, goods and services expenditures together with the expenditures on non-financial assets cover the main quota of the actual expenditures on public order.

'Personnel expenditures' cover the salaries for the personnel employed with the Ministry of Administration and Interior of Romania responsible for safeguarding, maintaining and restoring public order, the budget contributions associated with the aforementioned salaries together with the contributions paid to special accounts, the transport and equipment.

'Goods and services expenditures' provide the proper operation of the institution and of the national security and public order missions (Stroe, R., Armeanu, D., 2004).

'Expenditures on non-financial assets' are directed towards the development, equipment and modernization of the national security and public order institutions for the accurate accomplishment of the missions. The expenditures directed towards public order institutions are meant to provide the reorganization, improvement and modernization of joint defense and extended security missions within European alliances and North Atlantic Alliance by observing NATO standards.

Considering the worldwide crisis, the main objective of the Romanian government is to improve the absorption capacity of the resources obtained from the collected budget taxes and fees and from

forgivable loans. Exceptional measures shall be taken to reduce the effects of the crisis, to re-launch the economy and to increase the gross domestic product (Mironescu, A., Popescu G.H., Nica. E, 2009).
The main objective of the Ministry of Administration and Interior of Romania is to reorganize its structures with a view to improve the efficiency of the activities developed, to restructure the public administration by safeguarding the legal stability and coherence, to decentralize public services and to improve national public order and the citizen's safety (The Ministry of Administration and Interior Strategic Plan for 2007 -2009", *Overview, 2007*).

A MODEL OF CORRELATION BETWEEN THE ACTUAL EXPENDITURES ON PUBLIC ORDER AND THE GROSS DOMESTIC PRODUCT

Correlation Model

This model is designed considering the statistical procedures, namely the least-squares method. The method helps us to study the trends in actual expenditures on public order made by the Ministry of Administration and Interior in relation with the evolution of the gross domestic product.

The least-squares method involves the following steps:

Step I: Data for 2005 - 2009 was considered;
Step II: Linear models were considered:

$$y = a \cdot x + b$$
(1)

where:

y – actual expenditures on public order
x – gross domestic product

- minimum condition is used :

$$E = \min \sum_{t=1}^{5} (a. \cdot x_t + b - y_t)^2$$
(2)

$$\frac{\partial E}{\partial a} = 2 \cdot \sum_{t=1}^{5} (a \cdot x_t + b - y_t) \cdot x_t = 0$$
(3a)

$$\frac{\partial E}{\partial b} = 2 \cdot \sum_{t=1}^{5} (a \cdot x_t + b - y_t) = 0$$
(3b)

$$a \cdot \sum_{t=1}^{5} x_t^2 + b \cdot \sum_{t=1}^{5} x_t = \sum_{t=1}^{5} x_t \cdot y_t$$
(4a)

$$a \cdot \sum_{t=1}^{5} x_t + 5 \cdot b = \sum_{t=1}^{5} y_t$$

(4b)

Application of the Correlation Model between the Gross Domestic Product and the Actual Expenditures on Public Order

In order to apply this model we used the gross domestic product and the income and expenditure budget approved for the Ministry of Administration and Interior considering the actual expenditures on the public order during 2005 - 2009. Both the expenditures on the public order and the gross domestic product are expressed in the national currency, in actual prices.

Table 1: The evolution of the gross domestic product and of the actual expenditures on public order

- mil. lei RON-

Years	Gross domestic product	Actual expenditures on public order
2005	287.,200	2,490.13
2006	342,400	4,219.67
2007	404,700	5,160.37
2008	503,900	5,341.60
2009	592,200	6,759.07

Source: Own data processing considering the data offered by the National Commission of Prognosis, the Ministry of Public Finance and the Ministry of Administration and Interior

Using the aforementioned model and solving the equations yield:

- the following parameters for 'Actual expenditures':

a = 0.01

b= 533.36

For variable 'y' we used the deviations between the values of this variable obtained by using this model and the real values.
The results obtained for the main group of expenditures on public order, namely 'Actual expenditures', are presented below:

Table 2: Evolution of the actual expenditures on public order after the application of the model

- mil. lei RON -

Years	y obtained based on the estimation model	y according to the approved budget	Deviation %
2005	3,405.36	2,490.13	+ 37
2006	3,957.36	4,219.67	- 6
2007	4,580.36	5,160.37	- 11
2008	5,572.6	5,341.56	+ 43
2009	6,455.36	6,759.07	- 4

Deviations have higher values in 2005 and 2008 because the actual expenditures on public order from the gross domestic product were lower for these two years: 2005 (0.87%) and 2008 (1.06%). This thing was determined by the reduced funds that were redistributed from the gross domestic product and by the budget rectifications with direct impact on the deviations.

Actual Expenditures on Public Order Estimate for 2010 Based on the Correlation Model

In estimating the expenditures for 2010 we considered the assessment made by the International Monetary Fund (IMF) on 01.10.2009 according to which the Romanian economy is stationary in 2009 and the 2010 forecast that stipulates a 0.5 -1% increase of the Gross Domestic Product. My assumption is that the 'Actual expenditures' will reach a 1% increase in 2010 as compared to 2009, thus the expenditures on public order will read as follows:

Table 3: Gross domestic product and actual expenditures on public order forecast based on 2010 model

- mil. lei RON -

Indicators	2005	2006	2007	2008	2009	2010 forecast
Gross domestic product	287.,200	342,400	404,700	503,900	592,200	598,122
Budget approved for 'Actual expenditures' on public order	2,490.13	4,219.67	5,160.37	5,341.56	6,759.07	6,519.91

In 2010 we will find out if the actual expenditures on public order forecasts are correct.

CONCLUSIONS

The calculations above show that the deviations for the 'Actual expenditures' on public order in Romania vary between - 6% and 43 %, with an average deviation of 20.2%. The lower the actual expenditures on public order from the gross domestic product, the higher the average deviation. The data forecast for the actual expenditures on public order can be adjusted considering the estimated average deviation (Stroe, R., Focşeneanu, GR., Braşoveanu, I., 2004). I consider that the average deviation can be used in estimation and that the model above can be used for forecasts within the limits of the deviations.

Moreover, depending on the historical tendency of the gross domestic product evolution, forecast estimates can be made for other expenditures which are funded from the gross domestic product; these expenditures include the main expenditures on public order, 'personnel expenditures', 'Goods and services expenditures' and 'Expenditures on non-financial assets' made by the Ministry of Administration and Interior.

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DO ACTIVE MUTUAL FUNDS MIMIC THE INDEX DURING A BULL MARKET?

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ABSTRACT

This study seeks to determine whether during a bull market, large actively-managed mutual funds 1) mimic the composition of the S&P 500 Index, and 2) mimic the risk attributes of the S&P 500 Index. Employing a panel data set of volatility and MPT statistics for two-hundred large, actively-managed US equity and hybrid debt-equity mutual funds between 1995 and 2000, we find no evidence of fund portfolio composition converging toward that of the index; indeed, as the bull market advances, fund managers move progressively away from holding securities comprising the S&P 500 Index. Our results also reveal levels of fund systematic risk that are lower and significantly different to that of the S&P 500 Index while fund pseudo-industry risk levels (as proxied by technology holdings) are not significantly different to that of the S&P 500 Index. This suggests that managers mirrored S&P 500 Index technology weights with the purchase of technology firms outside of the Index.

KEYWORDS: mimic, closet indexing, active risk, pseudo-industry risk, institutional herding

INTRODUCTION

Over the last forty years, investment capital in the United States has become increasingly pooled under the direction of professional fund managers. As of June 2009, households had entrusted over $10 trillion to investment companies with over 45% of total assets allocated to higher risk equity and hybrid debt-equity funds. (Investment Company Institute, 2009).

As stewards of this substantial proportion of US wealth, mutual fund managers are increasingly under the scrutiny of shareholders, regulators and researchers for indications as to their investment strategies and risk-taking. This has particularly been the case during extreme bull and bear markets when the sheer magnitude of assets controlled by US investment companies calls attention and occasionally makes them the target of those who argue that security prices are heavily influenced by the trading activities of mutual fund managers. Claims of institutional "herding", "closet indexing", and excessive risk-taking frequently appear in the popular literature. In 1999 for example, the New York Times suggested that growth stocks may have been driven up in price as a result of active fund managers purchasing *en masse*, the largest-capitalization companies in the S&P 500 Index so as to profit from the market's momentum[1] . In another article appearing on CNNMoney.com, Jason Zweig argues that many money managers are so leery of lagging the stock market that they end up copying it, owning similar proportions of the stocks that carry the most weight in the index [2].

LITERATURE

According to Jacob (1998), an investment manager's tendency to "mimic" her benchmark index, that is, deviating from it in only minor ways so as to avoid underperforming it, is a widespread activity in the fund management industry. Jacob argues that managers know they will not be fired for simply matching benchmark returns so their self-interest is served by minimizing the risk of underperformance rather than maximizing the chance of outperformance. This behavior however, is suboptimal from the shareholder's point of view as she ends up paying the high fees associated with active management but receives only benchmark returns (less fees). Given this theorized conflict of interest between manager and shareholder,

one might expect an active fund manager who pursues a strategy of "closet indexing" to face an increased risk of termination, yet Jacob suggests the opposite is true.

Shleifer (1986) reports that stocks newly included in the S&P 500 Index earn a significant positive abnormal return at the announcement of the inclusion, most of which persists for at least 10 to 20 trading days. Although this may be an informational effect, Shleifer concludes based on the evidence, that the abnormal returns result from excess demand for the shares by pension funds attempting to mimic the return on the S&P 500.

Kallinterakis and Ferreira (2006) find evidence of correlated trading toward the composition of the Portuguese PSI-20 Index, particularly between 1996 and 1999, and suggest that this coincides with the Portuguese stock market's boom and bust cycle of that period. Their methodological approach however; does not enable us to determine whether it was primarily institutions or individual investors shifting their asset mix toward the Index.

In a study involving structured interviews with UK equity fund managers, Baker (1998) finds commercial risk – defined as the risk of poor performance relative to competitors – important to 40 percent of the total sample. Pension fund managers in this study perceive external performance measurement as significantly affecting their portfolio decisions, with almost half of the sample replying that it has a "considerable" or "extreme" influence upon security selection. One fund manager interviewed reveals

> If your livelihood depends on the retention of funds and if those funds are being measured by WM [whole market] every 3 months, and if you know that three or four bad quarterly performances are going to cost you your fund, then you tend to reduce and reduce and reduce your exposure to anything outside the Index.

A behavioral phenomenon observed in institutional investors and one which is largely consistent with a tendency to mimic the benchmark index is that of preference for securities that have particular characteristics with respect to size, liquidity, volatility, institutional ownership, financial ratios, etc[3]. In theory, if all equities are substitutable, there should be no relationship between the level of institutional demand for a stock and that stock's firm-specific factors (Eakins, Stansell, and Buck, 1998). Institutional fund managers however, may need to demonstrate the prudence of their investment decisions in order to reduce the possibility of client criticism and are drawn therefore, to hold shares in companies that are perceived as sound investments (Badrinath, Gay, and Kale; 1989). These researchers find that institutional ownership of a stock is positively related to company size, beta, trading liquidity, and the number of years the stock has been listed.

Lakonishok, Shleifer, and Vishny (1994) show that institutions appear to prefer "glamour stocks", i.e., securities that have high visibility and typically carry low book-to-market ratios. These researchers posit that the previous success of these stocks enables institutions to justify their portfolios to investors. O'Brien and Bhushan (1990) report a positive relationship between institutional ownership and the number of analysts following the stock. Hessel and Norman (1992) find that the debt ratio, R&D to sales ratio, net operating income to assets ratio, and firm size are all positively associated with the percentage of institutional ownership. Falkenstein (1996) reports that mutual fund managers demonstrate a preference for large company stocks with high liquidity and visibility (as proxied by news stories) and are averse to low-price equities with low idiosyncratic volatility.

These results suggest institutional investors have a distinct preference for the equity of large risky firms as measured by systematic beta and high debt ratios (which can be expected to translate into higher betas). Falkenstein (1996) provides a possible explanation for this risk-seeking behavior with the suggestion that in a bid to deliver higher returns than passively managed index funds (and thereby justify their fees),

active managers may invest in especially volatile securities. In an ethnographic study of mutual fund disclosure documents, Silverman (2008) discovers a number of funds which, in an apparent effort to provide superior returns, likely breach their prospectus covenants by overweighting volatile technology stocks in their portfolios. By contrast, Kim, Shukla, and Thomas (1999) report that of mutual funds which deviate from their attributes-based objectives, more than 50 percent shift into a band of lower systematic risk.

Many of the preferred equity characteristics identified in the above empirical studies – low book-to-market ratios, large size, trading liquidity, significant analyst following, high visibility, technology-affiliated – correspond closely with features shared by dominant companies in the S&P 500 Index [4]. Large capitalization technology firms like Microsoft and IBM for example, typically have low book-to-market ratios[5], high R&D to sales ratios[6], and are the focus of a great deal of attention from analysts and the press.

METHODOLOGY

This study seeks to determine whether during a bull market, large actively-managed mutual funds ("large" defined by assets under management), 1) mimic the composition of the S&P 500 Index, and/or 2) mimic the risk attributes of the S&P 500 Index. With average annual returns of over 20% (excluding dividends) as measured by the S&P 500 Index, we have chosen the period 1995 – 2000 for our study window. The data set consists of a time series of metrics for two-hundred large, actively-managed US domestic equity and hybrid debt-equity mutual funds. This data has been provided by Lipper, a Reuters company, and consists of the following measures for each fund for each month in each calendar year between 1995 and the end of 2000: beta, R-squared, and tracking error against the S&P 500 Index. The modern portfolio theory (MPT) statistics (beta, R-squared) are estimated by performing a least-squares regression of the fund's return over US Treasury bills (excess return) and the excess returns of the S&P 500 Index on a monthly basis. A second data sample consists of sector weightings data for 38 mutual funds which also appear in the Lipper database. Sector weightings are reported once annually for each year between 1996 and 2000. This data has been provided by Morningstar, Inc.

Tracking error[7] is a measure of how closely a fund manager's returns track those of the benchmark index and is generally measured by the variance of excess returns relative to the index (Loftus, 1998). If a mutual fund's composition converges towards that of the index, average tracking error between the two should diminish during the study window. As US mutual funds frequently fail to disclose their target or "best-fit" benchmark index in official communications, convergence/divergence between fund portfolio holdings and that of the S&P 500 Index was assessed by including in the test sample only those funds with R-squared measures relative to the S&P500 of greater than .50 in the base year (1995). This ensures a good fit initially with the S&P 500 and contributes to the meaningfulness of the tracking error values (see the discussion on the significance of R-squared values in Field, 2005).

To address the second question of whether active equity fund managers mimic the risk attributes of the S&P 500 Index, systematic risk (beta), and factor, or pseudo-industry risk[8], (proxied by the proportion of the portfolio invested in the technology sector) were measured.

RESULTS AND DISCUSSION

Five-year bar charts depicting fund-index convergence/divergence (as proxied by tracking error) and fund systematic risk for the test sample of 200 Funds are presented in Figures 1 and 2, respectively. A five-year bar chart depicting mean pseudo-industry risk (as proxied by the proportion of portfolio assets invested in the technology sector) for the subset sample of 38 Funds is presented in Figure 3. The results of a Paired *t* test comparing mean systematic risk for the test sample and that of the S&P 500 Index (beta

= 1) are presented in Table 1. The results of a Paired *t* test comparing mean technology holdings for the subset sample and that of the S&P 500 Index are presented in Table 2.

Figure 1: Mean Fund Convergence/Divergence vis-à-vis S&P 500 Index (1996-2000)
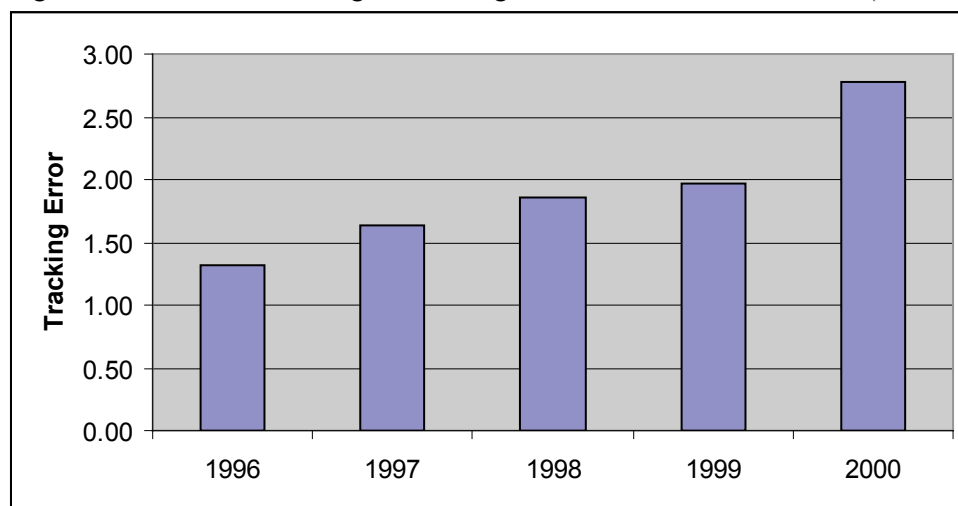
Figure 2: Mean Fund Systematic Risk (1996-2000)
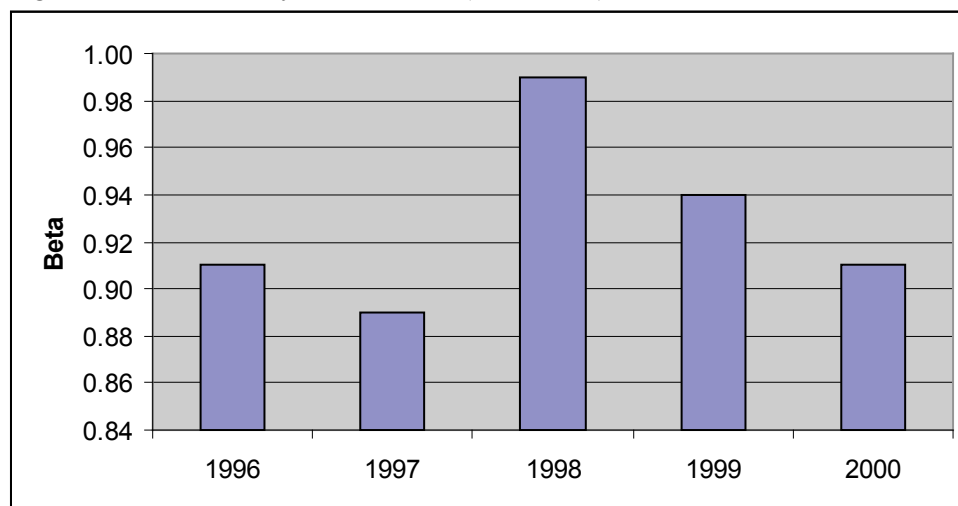
Mean tracking error rises in each year of the window from a low of 1.32 in 1996 to a high of 2.77 in 2000. Average betas remain below 1.00 in all years and the Paired *t* test indicates that in all years except 1998, fund systematic risk is significantly different to that of the S&P 500 at the 5% level. Average technology holdings rise linearly from a low of 12.14 percent of portfolio assets to a high of 25.63 percent of assets in 2000. The Paired *t* test indicates that with the exception of 1999, the mean proportion of technology holdings for the subset sample of funds and that of the S&P 500 are not significantly different from one another at the 5% level.

The results do not provide evidence of mutual fund composition converging toward, i.e., "mimicking", that of the S&P 500 Index. On the contrary, consistently rising tracking error values suggest that fund managers moved progressively *away* from holding securities comprising the S&P 500 Index as the bull market advanced.

Figure 3: Mean Fund Pseudo-Industry Risk (1996-2000)
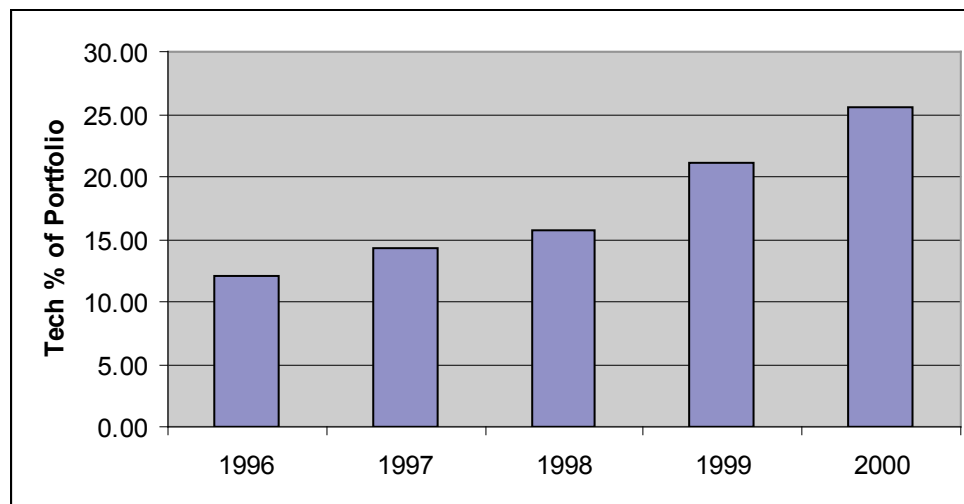
Table 1: Fund/S&P 500 Systematic Risk Paired *t* Test

Year	N	Mean	SD	t	Significance
1996	200	.9108	.2093	6.026	.0001
1997	200	.8852	.2110	7.693	.0001
1998	200	.9871	.2231	.8211	.4126
1999	200	.9398	.2411	3.532	.0005
2000	200	.9108	.2564	4.920	.0001

Table 2: Fund/S&P 500 Technology Holdings Paired *t* Test

Year	N	Mean	SD	t	Significance
1996	38	12.14 %	.1044	.126	.900
1997	38	14.27%	.1046	1.460	.153
1998	38	15.70%	.1056	-.216	.830
1999	38	21.08%	.1248	-4.063	.000
2000	38	25.63%	.1425	1.851	.072

That active fund managers are observed shifting their portfolio mix away from the mainly large and highly visible growth stocks constituting the S&P 500 Index, runs counter to both anecdotal claims and research findings discussed earlier where institutional investors appear to demonstrate a preference for shares with these characteristics (see Badrinath, Gay, and Kale, 1989; O'Brien and Bhushan, 1990; Lakonishok, Shleifer, and Vishny, 1994).   These earlier studies however, were based on panel data preceding the powerful bull market of 1995 – 2000. It may be that during this latter period of spectacular returns on the large indices, fund managers increasingly opted to sell their winners and shift investor monies toward less visible and less richly valued sectors of the stock market.

Turning to measured risk attributes, while active managers appear to have moved away from holding securities found in the S&P 500 Index, this was not at the cost of systematic risk in excess of levels for the index. Indeed, mutual fund betas remain below the Index mean of 1.00 each year (significantly so in four out of five years). These results are at variance with those of Falkenstein (1996) noted above but consistent with the findings of Kim, Shukla, and Thomas (1999) who report that of mutual funds which deviate from their attributes-based objectives, more than 50 percent shift into a band of lower systematic risk.

Pseudo-industry risk escalates substantially each year such that by 2000, average technology holdings represent over 25 percent of assets under management -- double the proportion observed in 1996; however, with the exception of 1999, mean technology weights for funds in the test sample are not significantly different to that of the S&P 500 Index. That fund technology weightings remained comparable to those of the Index even as tracking error levels rose suggests that active managers expanded their technology holdings with the purchase of technology firms *outside* of the S&P 500 Index. This would not be inconsistent with orthodox portfolio management practice whereby fund managers seek to mirror benchmark sector weights while reaching for superior risk-adjusted performance, or alpha, via judicious stock selection within the same industrial sector (see Jacobs and Levy, 1998).

CONCLUSION

Investment companies in the United States now control a substantial share of household wealth. As the mutual fund industry has grown in terms of assets under management, the popular press and a growing body of academic studies have focused on active equity fund managers in an effort to better understand their investment practices and risk-taking on behalf of shareholders. There has been significant interest in the question of whether fund managers mimic their benchmark index in an effort to avoid underperforming it, whether they demonstrate a preference for securities which share common fundamental characteristics, and whether they expose shareholders to excessive levels of risk in a quest for superior returns. We examine these issues within the context of the bull market of 1995 – 2000 so as to discover and trace fund manager behavior during a period when anecdotal evidence suggested that large actively-managed funds may have been engaged in "closet indexing". We find no evidence of fund compositional convergence toward the S&P 500 Index; indeed, as the bull market advanced, fund managers moved progressively away from holding securities comprising the Index. Our results indicate that during the study window, mutual funds in the sample closely mirrored levels of pseudo-industry risk (as proxied by average technology holdings) seen in the S&P 500 but maintained significantly lower levels of comparative systematic risk.

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3. This framework assumes that investment managers are drawn to hold these securities for reasons other than the objectives and constraints explicitly stated in client contracts or prospectuses.

4. Haugen (1995) for example, notes that the S&P 500 index is dominated by growth stocks, i.e., those with low book-to-market ratios, a sought-after characteristic amongst institutional investors according to Lakonishok, Shleifer, and Vishny (1994).

5. In July of 2008, the average book-to-market ratio for companies constituting the Dow Jones US Technology Index was .28 as compared for example, to an average book-to-market ratio for firms in the Dow Jones US Industrials Index of .38 and an average book-to-market ratio for firms in the Dow Jones US Consumer Services Index of .46.

6. See "The 2007 R&D Scoreboard" published jointly by the Department for Innovation, Universities & Skills (DIUS) and the Department for Business, Enterprise & Regulatory Reform (BERR). Retrieved on June 7, 2008 from http://www.innovation.gov.uk/rd_scoreboard/

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8. See Elton and Gruber (1970; 1973) and Farrell (1974;1976)

THE HISTORY OF BANKING TECHNOLOGIES IN THE UK: PATTERNS OF TECHNOLOGICAL INVESTMENT DECISION-MAKING AND EXPERTISE

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ABSTRACT

The central role of banking in the 2008 credit crisis has been the source of much controversy about the quality and robustness of decision-making in the Financial Services sector. This paper aims to surface the influence of the historical evolution of expertise in the banking sector, on such decisions and, in so doing, to underline that the decision-making activity is strongly linked to the views of dominant expert groups in the industry in each era. The paper proposes that Technological Investment Decision Making (TIDM), as viewed historically, has been highly contingent to both technological developments in banking and the subsequent developments in banking expertise that provides the pool for decision-makers in the industry.The paper adopts an historical perspective to illustrate that, counter to popular belief, TIDM is a socially constructed process rather than the outcome of any normative exercise. History demonstrates that there is no optimal method for TIDM with rigour and accuracy of execution determining successful outcomes. On the contrary, in each era, the "right way" to perform TIDM has always been underpinned by the standpoints and beliefs of specialised practitioners who dominated the UK banking industry and by the received wisdom of a community of expert professionals, administrators and think tanks, dictating "realities" on the state of the economy, the role of banks and the value of technologies.

KEYWORDS: Banking technology history, technological investment, decision-making, uncertainly, banking expertise, banking policy, regulation.

INTRODUCTION

The pertinent role of technology has long been demonstrated in the history of banking, not only as a facilitator for operations and improving efficiency, but also as one often determining the shape of the sector. Relevant research in the UK has most often dealt with the development of process and product innovations, the relation between technology and employment and the impacts of mechanisation on the industry (Batiz-Lazo & Boyns, 2003; Batiz-Lazo & Wardley, 2005; Booth, 2004; Consoli, 2005). While these research attempts offer a vivid picture of technological developments in UK banks and provide useful taxonomies of banking technology eras, they do little to discuss the relationship between expertise development in the sector and technological investment decision-making (TIDM). It is argued in this paper that examining this relationship will greatly contribute to further understanding the mutual shaping of banking technology and banking organisations.

The aim of this paper is to elucidate that relationship and argue that there are identifiable, though not always transparent, historical patterns of TIDM that are directly connected to respective patterns of expertise in the sector. To make this point, the paper begins from a broad account of UK banking technology history and later focuses on the evolution of banking expertise that accompanied technological and other socio-economic occurrences. It finally zooms-into the core subject of how historical patterns of TIDM in UK banking developed in conjunction with the respective patterns of expertise and other social, political and economic conditions.

The paper is laid-out in a spiral, where the successive review of (1) the technological developments in UK banking, (2) the evolution and distribution of expertise in the sector and (3) the respective evolution of technological investment decision-making (TIDM) complements, step by step, the picture to unpack

the hidden connections towards the conclusion. It begins with a brief account of the history of technology in UK banking. That is complemented by a parallel account of the professional composition of the industry in the UK, where also connections are drawn with respective technological developments. Last, the above two historical iterations are enriched by a third parallel review that focuses on technological decision-making. Starting from the observation that TIDM has been dynamically redefined through different eras, this review establishes its relationship with the other 2 historical processes (technological development and the evolution of expertise). By examining the changes in expertise and formal structure of UK banks, and relating them to the changing role of technology in banks' activities, the paper suggests that there is a strong relationship between the political development of expert groups (partly as outcomes of technological development), and the ways that technological decisions are made under the auspices of these expert groups. The key finding of this work is that TIDM is a process determined, in each era, by the proclaimed role and importance of technology, as perceived by dominant banking experts, prominent scientific strands and the aggregate view on the valuation of technology echoed by a *community of received wisdom*. (Samakovitis, 2006a).

THE NATURE AND HISTORY OF BANKING IN THE UK: THE ROLE OF TECHNOLOGY

A history of banking technology must be carried out with reference to its wider context that includes economic, regulatory, political and other industry-specific dimensions. Only in this way can one appreciate the full role of banking technology and, in turn, recognise the evolution of TIDM practice. This type of historical account for banking technologies is provided in the next few paragraphs.

The first uses of communication technology in banking are recorded as early as 1846 in the U.S., with the application of telegraph messaging (Garbade & Silber, 1978). The use of accounting machines, as they became known at the beginning of the 20th century, signalled the start of the mechanisation of banking. These machines, such as Felt & Tarrant's Comptometer and Burroughs's calculator, were from the 1890s used in banking as desktop adding machines (Cortada, 1993, pp. 39-41). In the late 19th century, banking applications were merely general purpose uses of desktop adding machines. The literature of computing history suggests that this accuracy-driven purpose of early computers was the perceived paradigm for the industry of adding and calculating machines. That was one of designing better machines for manipulating large volumes of numeric data (Cortada, 1996, p. 14).The then current understanding of the nature of banking business reflected the view that technologies should be applied with the aim of achieving speedier and less error-prone performance of clerical tasks. For this reason, such engines were viewed before the 1920s as standalone applications, rather than as parts of a system (Cortada, pp.3, 44). Even with the prevalence of limited liability banking, a regulatory requirement that later led to the development of nationwide branch networks (Batiz-Lazo & Wood, 2002, p. 7), branches remained technologically isolated units, rather than under central control from the headquarters.

The introduction of the punched card tabulating machine in the 1920s marked a new era for banking technologies. Three reasons contributed to that: First, tabulating machines pioneered a *systems* rationale in banking technology: The use in banking of dedicated equipment had been the first application of *systems*-based technology (Cortada, 1993, p.44). Established perceptions about banking were that the branch-based business could only be technologically facilitated through improvements through the massive application of calculators for speeding up and offering accuracy in clerical tasks. Such office configurations, though, were not developed in a systems rationale, but were mere ordered aggregations of identical office equipment. Second, banking applications for tabulating machines marked the first sign of the industry's perception of its data processing intensity and the subsequent potential for technological applications aiming at cost reduction. That had largely gone unnoticed for the 30 years that tabulating machines existed.   Cortada (ibid, p.45) observed that the data processing industry, where tabulating machines were developed, was of relevantly minor business significance before the 1920s. It was the

identification of the mass-processing capacities of tabulating machines that made firms realise that business potential.

Technological inventions were, until the 1920s, clearly geared to supporting the accounting function (Cortada, 1993, p.51). That is also evident from looking at the spectrum of applications of tabulating machines that ranged from census tables and sales statistics to billing in the railway business and cost accounting in insurance. Third, tabulators were the first technology that appeared to challenge the established labour structures in banks: Tabulating machines were by the 1910s already viewed as less skill-demanding devices, and hence had raised controversy amongst accounting professionals who saw them as a threat to their expertise. In turn, that aspect of tabulating technology further fuelled the gender-based division of labour in UK banks, where unskilled female staff were largely recruited to operate tabulators (Booth, 2004).

The witnessed gradual adoption and adaptation of tabulating machines in banking is explained by a number of factors and events: the deteriorating economic conditions, the increased scope of banking business, the emergence of several service innovations in the industry, the realisation of the urgent need for reducing cheque-processing costs are some such factors. Tabulating machines, notably, were transformed until the mid-50s from single-function engines to unified systems comprising data entry, sorting and other management functionality. (Cortada, 1996, p.45)

Simultaneously, developments in the data processing industry made the technology more usable by standardising several functions into failsafe protected processes. That further contributed - in conjunction with pressures for lowering labour costs - to a rise of employment of unskilled women as bank clerks. As indicated in the case of Midland Bank (Booth, 2004, p.281) male employment was reduced in relative terms during a period (1939-69) where overall numbers rose significantly. By 1962 more women were leaving banks for more attractive careers, causing often severe problems for bank staffing. Interestingly, the role of technology was critical in this pattern: stagnant innovations in the area of banking applications of tabulating machines and office equipment led banks to deal with higher data volumes and capacity by increasing the size of existing infrastructure. High equipment costs further justified that choice as against investing in new infrastructure. This size explosion had an economic impact on banks with regard to their abilities for cost-justification of technological investments: the need for buildings adjustment to accommodate bulky machinery often made technological investments indefensible. Because high-street property was the most valuable asset of banks by that time, limitations imposed by adaptation costs, often made many, otherwise crucial, retail outlets unsuitable for the already technology-heavy intended use. The concept of "reverse salients" (Hughes, 1983) is visible in these developments. As technological innovations in developing smaller and more 'intelligent' machines stagnated, the only path to coping with growing processing demand was the increase in system size (i.e. aggregating more machines and thus taking more space). This undeniably led to either banks having to abandon or expand their existing high-street property to accommodate bulky technology. Giving rise to a significant economic problem, the industry need was automatically created for banks to seek technological solutions of less space and higher processing power.

The transition from standalone equipment to mechanical systems was furthered during the 1950s and 1960s with developments in electronic technologies, such as the commercial introduction of the computer in 1948 by IBM (Campbell-Kelly, 1989) and the development of MICR. The acronym MICR stands for Magnetic Ink Character Recognition, an application first developed by the Stanford Research Institute in 1956, later used for cheque sorting and data capturing (Batiz-Lazo & Boyns, 2002, p. 14). Steiner & Teixeira, (1990, p. 33) report that early computers (such as the NCR 315/316) as well as later ones (such as IBM 360) applied MICR technology. Despite the technical superiority of electronic over mechanical processing, the rationale of systems' usage in banking largely remained unaltered: computers were introduced to deal with specific technical problems of effectiveness in volume processing. Subsequently,

the speed of transaction processing delivered by electronic equipment contributed to the success of this mass-market expansion. At that stage, electronic technologies were implemented in existing departments to deal with existing problems (Morris, 1986), rather than assuming the role of transforming business processes.

Computer technology in banking in the UK was operationally restricted to the 'back-office' – and considered as a class of applications suited to speeding-up existing tasks and providing cost-savings on labour. The extreme cost of that equipment further contributed to the perception that computer technology could only be economically viable in centralised massive processing tasks. However, two key developments furthered the role of information technology in banking: First, the newly introduced hardware called for specialised programming skills, which triggered a shift towards banks developing in-house solutions and the expertise that came with them (Fincham et al., 1994, p. 153). That trend, combined with the lack of universal programming languages in the early years of computerisation imposed significant costs on implementing banks in recruitment and training, whilst reusability of the skills was very low across different hardware platforms. Second, the local-only character of early computer technologies had a significant impact on upgrading the strategic role of the branch: driven by increased technical capability, branches - the main points of customer service – gained flexibility as computers enabled them to perform tasks previously performed by the bank's headquarters only. This upgrade necessarily came hand-in-hand with increased power of branch managers, thus reinforcing a status established in the 1920s.

The period between 1965 and 1969 saw the introduction of EDP (Electronic Data Processing systems) and DBMS (Database Management Systems) in UK banks, triggering a series of important changes. First, on the operational side, EDP and DBMS promised integration and accumulation of existing customer and other data, with a view to consolidating disparate and otherwise unused bits of information, centralising their control and, ultimately, distributing it selectively where it was needed. Again, the rationale for such expensive systems remained focused on the high volume and complexity of existing customer data (Batiz-Lazo & Wood, 2002). Second, on the organisational side, DBMS applications in particular allowed the centralisation of information handling and the resulting redistribution of responsibilities and, therefore, of power: given the established branch-based structure, the shift from regional to central control of sensitive customer information resulted in a loss of control from existing hierarchies. Finally, on the technological side EDP and DBMS were the first steps in the development of intra-bank networks (as opposed to the technological 'culture' of standalone equipment that prevailed in banking up to then) and the foundation of Integrated Banking Technology Standards (Consoli, 2005). Notably, the prevalence of database-driven design rationales for banking systems gave precedence to new perceptions of the economics of networks and important new applications that shaped the global banking industry The literature refers to a number of initiatives based on early DBMS technologies, such as BACS and Girobank (Batiz-Lazo & Wood, 2002) and other applications relevant to the automation of the UK Clearing System and retail money transfer. See Fincham et al. (1994), Morris (1986), Mandell (1990) and Consoli (2005) for more detailed accounts. However, the EDP / DBMS era was characterised by the persistence of a culture of isolated (as opposed to integrated) technological efficiency targeting, economic justification of technology on the basis of labour cost minimisation, and a view of technology as a means for automating existing processes. Despite the improved labour cost structures that were introduced because of the increased computing power of banks, the economic justification of technologies remained cost-saving in the head office, with minor and expensive branch efficiency improvements and other potential technological gains sought at local level only.

High degrees of diffusion of DBMS applications nearly coincided with the growth of Automated Teller Machines (ATMs). Following developments in MICR technology and the launch of the first credit card in the UK by Barclays in 1966, who also introduced them for the first time in the British market two years later, primarily to exploit the extreme popularity of cash withdrawals from credit card accounts (Ackrill &

Hannah, 2001, p. 187). The first ATM application was operated with a paper voucher that was issued by the bank as a £10 token, later to be replaced by plastic punched cards and later by magnetic stripe cards (Consoli, 2005). The economic justification for ATMs was primarily advocated on the basis of labour savings and the savings from not having to acquire premises for branch expansion for cashier positions (Ackrill & Hannah, 2001, p. 338). Despite their ubiquity by the late 1980s, ATMs were, however, not always seen as a clearly profitable investment, since their financial appraisal was difficult: the ambiguity in the way that cost improvements were calculated primarily stemmed from the fact that ATM prevalence caused an increase in the number of transactions, which made financial calculations difficult (Steiner & Teixeira, 1992, p. 93). Usage patterns of ATMs reportedly altered completely the logistics of - mainly - cash withdrawals in terms of both volume and number of transactions daily. ATMs favoured smaller and more frequent transactions, while significantly increasing the volume of data processing. Coupled with their reduced cost per transaction, ATMs typically 'disturbed' the established ways for financial appraisal (Ackrill & Hannah, 2001: pp. 335-338; 214-217; 327; 353).

However, the development of network technologies that detached ATMs from branches had significant impact, not only to the spread of such machines but also to the shift in focus of banks' investments from acquiring new branches (a necessary investment to expand their ATM network) to achieving technology efficiency.

The period from the late 1960s until the 1980s has been characterised as one of high penetration of hardware and software technology in banking, with banks emerging as key customers of the computing industry with ATMs and EDI (Electronic Data Interchange) systems prevailing in banking data processing (Fincham et al., 1994). Advances such as the development of Euromarkets – primarily driven by new technological capabilities and with the contribution of other socio-economic factors – brought London to the centre of international banking and altered the recruitment patterns of the industry (Morris, 1986). This was further facilitated through the significant decrease of equipment costs during the 1970s and 1980s (Ackrill & Hannah, 2001, p. 338)Full automation of branch operations and the shift of technological focus from processing to communications and MIS (Management Information Systems) were some of the key events of this period. The newly instilled culture of EDP and DBMS gradually brought networking to become the primary technological characteristic of UK banking, with IT permeating the customer-bank interface. Strategic aims were focused on effective service provision rather than expanding the customer base, or even creating customer value.

The 15 years following the close of the 70s were marked by great technological changes, namely the emergence of the personal computer (PC), developments in digital data telecommunications (Fincham et al., 1994, p. 155) and advances in programming such as RDBMS (Relational Database Management Systems) and Object-oriented Programming (OOP). Termed the era of 'Information Revolution in Financial Services' (Batiz-Lazo & Wood, 2002), this period saw an unprecedented demand for secure transmission of financial information related to large volumes of mainly international payments. On the technological front the key impacts of new developments were the higher standardisation of processes, the lowering of entry barriers to the industry through diminishing prices of equipment and the shift of technology strategies from efficient performance of tasks to full integration of systems and information. Together with the introduction of RDBMS the adoption of the PC altered the patterns of employment in the industry: with RDMBS hugely quickening the pace of training (Consoli, 2005) and computer skills being less industry-depended, cross-industry migration of IT skills became easier, more standard and cheaper.

The period from 1980 until 1995 was one of major – though more subtle – changes for UK banking, mostly driven by technology. With *information* acquiring a key role in financial transactions, many technological applications aimed at improving quality, security and speed of financial information. On the front of customer-facing technologies, the ability to detach ATMs from branches and the

institutionalisation of banks totally altered the significance and role of the branch, from a traditional point-of-sale (PoS) one to a more service and marketing-centred role. This pattern was closely followed and stably augmented in later years. Together with other economic incentives, that technological ability contributed to the reduction of branch numbers.

The latest stream of developments in the history of banking technology in the UK is attributed to two major events that signalled the furthering of alternative channels use in retail banking services. One was the introduction of call centres, the forerunner of contemporary integrated Customer Relationship Management systems (CRM) and telephone banking systems and the other, PC banking, namely direct service provision through the customer's own computer. Both applications introduced the notion of Home Banking and, with it, a novel perception on service provision and disintermediation of branch-based banking. These applications came to the fore with a number of developments related to general computing and the networking technologies. The resulting spillover of generic programming skills to the home user and at the individual level appears to have played a role in the familiarisation of employees with computer technologies. At the same time, while all industries invested heavily in computer technology, mainly to support the customer service end, the migration of both software applications and expertise became easier and more transparent. Developments in software techniques (such as OOP) made application development more uniform and standardised, reducing the need for specialisation. The new definition of programming as *designing processes by interfacing between reusable objects*, in turn, reflected a wider business rationale: re-engineering business operations through process redesign.

Overall, since the early 1990s, diminishing costs of technological infrastructure and standardisation have facilitated the innovation-laden, dynamic environment that followed the 'Big Bang' of the British financial sector. Key technological feats which allowed these developments include high-speed data communications, database integration, the emergence of the Internet and security technologies and the legislative and regulatory impacts that they had. The emergence of applications on CRM, e-commerce, smart cards, EFTPOS and, most important, Internet Banking can largely be attributed to these broader instances. Interestingly, as happens in most instances of technological progress, technical barriers in banking technology have often been overcome long before the relevant technical solutions were implemented. Such were the cases of ATM connectivity (fully achieved in 1999 in the UK) and the development of small payments clearing mechanisms. The full potential of technological capability is, historically, only exploited when ample economic benefit can be reaped from interested parties.

At this stage the discussion focuses on analysing the context and meaning of these significant events in UK banking technology history, which will serve as a guide to understanding the essence of technological investment decision-making. This is because, I believe, technological decision making is an inherently historical activity, and that historicity is revealed through locating, among events, patterns of human or group behaviour, perceptions of reality, techno-economic conditions, power relations and organisational structures that dictate patterns of decision-making and that occur in a repeated, or even cyclical, manner. A discussion on these aspects will be provided in the final part of this paper.

TECHNOLOGY AND EXPERTISE: ANTECEDENTS TO TIDM AND THE ROLE OF BANKING EXPERT GROUPS

This section is devoted to the professional and economic sides of banking technology assessment. It contends that the appraisal of technological investments and TIDM at large, greatly relies on the development and establishment of expert groups in banking. These evolve either within the banking industry or outside it but still within areas that are very relevant to it. There is therefore a direct relevance between the pattern of expertise development in UK banking and the pattern of TIDM practices as these can be historically observed.

The approach is based on the historical account provided earlier, with a new focus on locating instances, patterns and cycles in the evolution of UK banking technologies that link expertise development to established perceptions on the value of technology. In order to systematise the account, use is made of familiar taxonomies of the history of banking technology. Such taxonomies are provided by a number of scholars (Morris ,1986; Batiz & Wood,1997; Consoli, 2005) and are broadly based on major technological innovations in the sector and consequent changes in banking business. A summary of two such historical categorisations is provided in Table 1. These cover the periods until 1995, while the last period (1995 – now) is introduced in this work.

Instead of simply following the taxonomies as compartmentalised pieces of history, this section will look across them and identify patterns by which banks have addressed technologies with respect to their economic viability, their potential benefits and, overall, their perceived value. This will allow an investigation of the linkage between, on the one hand, the roles of technology in banking and the technology's practical treatments and, on the other, the respective roles of established expert groups. The intent is to establish that there exists a close relationship between the expertise backgrounds of key decision makers and the established attitudes of the organisation towards technological appraisal. This is part of a wider contention that patterns of expertise in any industry are part of the broader business paradigm that dictates the background of decision-makers, sustains their dominance, adheres to their understanding of reality and rewards actions that are considered rational under this paradigm. This framework, ultimately, informs the formal and practical approaches to valuation of any aspect of business, technology being one of them.

Table 1: Periods of banking history (adapted from Morris (1986) & Consoli (2005))

Years	PERIOD (Morris)	PHASE (Consoli)	Key Features
1864 – 1945	Early Adoption	Electric to Electronic communications	Reduce inter-market price differentials
			Increase coordination between Head Office and branches
1945 – 1968	Specific Application	Processors to Databases	Conversion from branch to bank relationships.
			Automated bank statements
			Cheque Guarantee Cards
			Reduce cost of labour-intensive processes
1968 – 1980	Emergence	Automated machines to local networks	Growth of cross-border payments
			ATM introduced
			Automation of branch accounting
			Real-time control begins
1981 – 1995	Diffusion	Standardisation vs. customisation	Supply of non-payment products like insurance, mortgages and pensions.
			Growth of alternative distribution channels (phone, EFTPOS)
1995 - now	Generic (Open Platform)	Application	Internet gains momentum in business applications
			Object oriented programming & visual languages
			Integration of banking across all levels (STP)
			Convergence of ICTs & computing
			CRM

This framework suggests that normative definitions of TIDM are only contingent to the actors who participate in it (Samakovitis, 2006a). Expertise is seen as one of the key intellectual features of these actors and, hence, it is given great importance in this discussion. Along these lines, this section seeks the sources and rationale of TIDM, to conclude that attitudes to technologies are determined by the established viewpoints of dominant expert groups. TIDM rationale and practice therefore becomes, it is proposed, a question of expertise dominance in respective eras, marking different paradigms of investment appraisal. This section addresses expertise and TIDM perceptions in two parts. The first discusses the evolution of expertise by looking at historical periods of UK banking technology. In the second, discussion is focused on locating and analysing aggregate attitudes of financial institutions to technological investments. The final paragraphs of the section draw connections between expertise and investment valuation of technologies.

Patterns in UK banking expertise

The nature of expertise in banking has traditionally been dictated by the professional background of practitioners who performed it. As such, investigating banking expertise in historical terms requires that we begin with the professional groups which pioneered banking and the trajectories they followed through time. Early banking in the UK was practised by London goldsmiths, a class of professionals enjoying high social esteem, financial wealth and political clout (Backhouse, 2002; Galbraith, 1987) Being a profession characterised by trust, confidentiality and reliability, the goldsmith expert group was a natural fit with the nature of the business it was pioneering.

The history of banking from the 1600s until the late 1800s shows that banking demanded a combination of skills for mathematical precision, administration, legal knowledge and business negotiation. Later, the high relevance of banking to the state's affairs added political persuasion to the composition of banking expertise. At the stage where historians of technology address banking as an application field, the British banking sector constituted primarily professionals with backgrounds in Accounting and Economics. Both these expert groups were strongly underpinned by well-established academic traditions Contrary to popular belief, this disciplinary background was relevant to mathematics only in the case of accounting. Economics were largely non-quantitative until the beginning of the 20th century. The mathematisation of Economics is attributed to Walras, while the first scientist trained in rigorous mathematics to pursue a career in Economics was reportedly Irvine Fischer (Backhouse, 2002, pp.170, 198).

1864 marks the beginning of the first period of banking technology history, identified as the *Early Adoption* era. This era saw the introduction of accounting machines and tabulators, used to perform faster and more accurate day-to-day clerical tasks such as paper cheque handling, ledger keeping or issuing and handling letter correspondence between branches and the Head Office or customers (Morris, 1986, p.44). One of the main characteristics of this period was the division between managerial and clerical labour in banks, with managerial roles involving individuals whose position was due to their high educational, political and financial status. On the other hand, bank clerks in the early 20th Century constituted an initially unskilled labour force that received formal training in specialised clerical posts in the bank, most often maintained as lifetime jobs.

The nature of this on-site skill acquisition culture was reinforced with the replacement of the traditionally male clerical labour force during WW I (and later WW 2) with young women due to men's involvement in active military service (Ackrill & Hannah, 2001, p. 77). During the inter-war years, the pattern of recruitment was to demarcate managerial from routine job specifications at one level and temporary from permanent at another. The introduction of accounting machines in UK banks, in 1914, had an impact on banks' clerical staff numbers as late as the end of 1920s, when London banks replaced multiple ledger functions, typically operated by large numbers of clerks, with clusters of such engines, operated primarily by women typists. Accounting machines were introduced to improve the performance of managerial staff (Batiz-Lazo & Wood, 1998); however, their introduction also had a slowly evolving impact on the nature of clerical tasks by requiring skills in typing and operating mechanical devices. By the late 1930s trained bank clerks, typically part of the permanent staff, came to be seen as valuable workforce and remunerated generously, since much time and effort was invested in their training. After the early 1930s, a large number of the perceived efficiency problems were addressed with technology, which turned most banks' management attention to the discontinuity between managerial and clerical staff (Ackrill & Hannah, 2001, p.79) and led to pioneering efforts for promoting permanent staff members to higher positions. That pattern, however, was not visible before the close of the era of *Early Adoption* in 1945.

In the following period, *Specific Application* (1946 – 1967), banking expertise begin to shape into a more profession-related skillset. With advances such as the introduction of electronic equipment and the maturing and post-war expansion of existing technologies across branch networks, there were two main

changes to the nature of the business: One, the role of the branch network changed, from its previous limited one of customer recruitment and relationship management, to one where more of the previously headquarters-based technical tasks could be addressed at local level (Batiz-Lazo & Wood, 1008). Two, programmable automation pioneered internal skill development by enabling banks to pursue local solutions to technological infrastructure issues. These two events had a significant impact on the composition of the labour force. On the one hand, the post war surge in business volumes led to mass recruitment that expanded the clerical base of banks. This was primarily driven by the increase in the proportion of middle-income individuals, a market that was newly addressed by UK banks after WW 2 (Collins, 1988). Mass recruitment was, however, also boosted by the post-war UK government demands from banks for maintaining a high and stable level of employment (Ackrill & Hannah, 2001, p. 115).

On the other, the new technological capabilities, and technical developments such as batch processing, EDP and, later, DBMS, created an increasing need for expertise development in software design, programming and implementation (Fincham et al, 1994, p. 153). However, despite the development of internal technological expertise within UK banks, it was not until later on that this expertise was formalised under recognisable skill sets and job specifications. Instead, during this period, the expertise base in the UK banking industry remained firmly with professional groups who held expertise on the quantitative sides of accounting, statistics, economics and advanced mathematics, a class of experts that primarily populated the insurance industry and that had a long-established tradition with quantitative analysis tasks.

The next era was the *Emergence* period (1968-80). Driven technologically by numerous feats in communication and data processing, such as data networking, ATMs and the emergence of MIS (Management Information Systems), this period was characterised by a major expertise spillover into the financial services sector. This resulted from the ending of many military projects, primarily in the US, that led to the release of large numbers of highly skilled programmers and scientists onto the labour market. This labour force was now availing itself not only to programming posts in banks but also to a market for financial managers, economic and financial forecasting specialists and other non-technological banking expert jobs. That change largely contributed to an altered perception of banking job descriptions, expressed in the UK through a shift in banks' recruitment patterns: since technological advantage was increasingly considered a major competitive asset, highly skilled university graduates were now seeking careers in UK banks. This altered the hitherto dominant pattern of internal job markets discussed above (Batiz-Lazo & Wood, 1998, p. 13). Developments such as London's upgraded role in international finance (with the successful implementation of Euromarkets in the 1970s) and the impact of applied Management Science through the formalisation of business analysis attracted large numbers of young qualified graduates mainly with positive science or Economics backgrounds who now viewed banking as an attractive, high-paid, promising and motivating sector.

The last of Morris's identified periods (1981-95), the *Diffusion* period, is marked by the information revolution in financial services (Batiz-Lazo & Wood, 2002), mainly expressed through major internal integration of banks' systems and high standardisation of IT applications with the proliferation of the PC. Further IT applications like RDBMS quickened the pace of internal skill acquisition which, in turn, meant increased organisational flexibility through reduced training cycles (Collins, 1988, p. 78). The consequence for expertise development was that existing specialisations could be cross-fertilised, giving rise to a new class of internally trained employees of diverse skills who would later assume managerial roles. The high degree of institutionalisation of UK banks contributed to explicit departmental subdivision, which brought both costs and benefits. The downside was that the high degree of specialisation isolated the speciality groups, leaving the communication between them and the integration of their knowledge and skill to higher management levels. It can be argued that this has been a source of disagreements, fierce debates and often conflicts on issues of organisation, valuation and decision-taking.

Developments since 1995 have seen the UK banking sector enter a new era, both with regard to technological applications and to expertise evolution. Expanding on Morris's taxonomy, I term this period (1995 – present) the period of *Generic (or Open Platform) Application*, based on the shift of technological applications onto platforms that are universally designed and then tailored to specific needs. The key such platform is the Internet. The era of Generic Application is characterised by reduced costs of incremental infrastructure building and a shift of technological implementation focus from designing dedicated systems to integrating software and hardware units over universal platforms. This changed perception of technology has influenced the composition of banking expertise in the UK. The beginning of the 1990s found UK banking institutions (which now included building societies and insurance companies after the 1986 Big Bang) under the unchallenged dominance of those expert groups that developed from the 1970s 'new generation of City bankers', coming from Economics, Finance, Accounting or Mathematical Sciences educational backgrounds. Other expert groups, such as IT managers were assuming only local, and at most times dispersed, influence (Fincham et al., 1994). Higher level decision-making thus remained at the exclusivity of traditional experts with technology groups playing only an advisory and largely complementary role.

Since 1995, the change in the composition of expertise in UK banking can largely be explained by the shift of focus of IT that challenged the established norms. Banking technology, as it developed during the high technological growth era of the 1980s was of an overly dedicated character in both software and hardware terms; applications were tailor-made to cover banks' needs, often following principles that were very specific to individual institutions. This contingent expertise structure was challenged by generic applications for universal platforms that allowed easy migration of programming and wider IT expertise across industries, a pattern that was previously inconceivable. Such cross-fertilisation among industries, I propose, may be partly held responsible for the evolution of new types of professional groups, indicated by a number of IT-savvy banking experts that currently appear in Boards of Directors in UK banks (Samakovitis, 2006a).

Patterns of technological investment valuation

The account of banking expertise development that preceded is now complemented by an account of the perceptions of technological value, as these appear through UK banking history. The discussion underlines the point that expertise dominance in each era influences the corresponding understanding of the purpose, potentials and value of implemented technologies.

Beginning with the *Early Adoption* era (1864 – 1945), historical evidence suggests that the introduction of accounting machines in banking was justified on the basis of speed and homogeneous, legible and properly filed record-keeping (Collins, 1988, p. 45). Because technology at that stage was introduced to deal with growing business volume, the whole justification was influenced from appraisals that were made on the use of this technology in other sectors. According to Cortada (1993) accounting machines were widely used in processing census data in the US with extremely high success.. Early perceptions were focused on producing more output without using extra labour, rather than achieving cost savings by replacing labour (Morris, 1986; Batiz-Lazo and Boyns, 2003). This pattern, observed in the 1920s, can be linked to the fact that, traditionally, bank performance was measured in terms of business growth rather than efficiency, and only reported on request from the Board of Finance. Additionally, such measurement was only made at the branch level (Batiz-Lazo & Boyns, 2003, p.8). Interestingly, the same practice of 'measurement by size growth' occurred during the introduction of computers in building societies in the early 1960s (Yavitz, 1967), most probably due to the fact that growth had been the target for these institutions in that period.

Technological appraisal patterns appeared to change following the Second World War, when UK government intervention forced banks to maintain high employment levels and buy the more expensive

British technology to support the local computing industry (Batiz-Lazo & Boyns, 2003, p. 10). These conditions created a driver for UK banks to emphasise cost reduction. During the 1950s and 1960s, primarily driven by established accounting practices used by equipment developers it became common practice to measure banking technologies' performance by the number of staff it would dispose of. Evidence suggests that equipment manufacturers played a crucial part in establishing both standards of banking equipment and approaches to evaluating the benefits arising from their introduction (Cortada, 1993; 1996).

By the end of the *Specific Application* period, the measure widely used in evaluating computer installation propositions was Payback (Yavitz, 1967, p. 46), a technique mainly inherited from US banking computer implementations. The primary driver of technological investment valuation during that period was the perception that computer applications provided economies of scale and financial benefit when used in the back-office to handle large volumes of paperwork. However, EDP and DBMS applications that were later widely used in UK banking systems modified labour costs and altered the overall cost structures of banking business.

A major change in perceptions about technological value occured during the period following the 1960s. The *Emergence* period (1968-80) saw the spillover of IT applications across the bank and its benefits and side-effects were felt in almost all departments. In that respect, there was a recognised inability of established metrics to cope with assessing or predicting the widespread impacts of computers. The migration of IT from the back office to the bank-customer interface necessitated the introduction of estimations on customer uptake, behaviour and response to the technologies. These were aspects that were never before addressed in economic appraisal and, especially in cases of ATMs, were largely miscalculated. During both this and the next period (1981 – 95), technological investment valuation processes borrowed technical aids from other expertise groups, such as Finance, Accounting and Economics, to facilitate decision-making. This pattern was facilitated by the aforementioned surge of highly skilled new banking professionals in the 1970s. Despite an abundance of sophisticated techniques, however, the assumptions on which technologies were evaluated were still based on the rationale of 'machines replacing humans' (Batiz-Lazo & Wood, 2002, p. 18). However, developments in network technologies in conjunction with the mass-commercialisation of the PC as a generic-purpose engine totally shattered the cost structures of banking business into patterns that were hitherto unknown.

The years since 1995 – termed the *Generic Application* period – inherit many of the characteristics of previous eras, with the significant difference that the traditional labour savings assumptions no longer hold, mainly on the basis of experience from the introduction of call centres in the 1980s. Despite this, no clear new assumptions appear to have been formed, since precise measurement of expected benefits is becoming more complex. Furthermore there are a number of other characteristics that make technological investment valuation a complex task: First, costs and benefits of technology are not always conveniently demarcated into departments, functions or business areas. Second, the newly introduced ability for incremental building of technological infrastructure is a complex task for which existing valuation patterns are ineffective. Third, the long-established organisational structures of banks appear to be challenged by banking technology, necessitating newer approaches to technology valuation. Table 2 summarises the prevailing perceptions about the value of technology, as they appeared in each of the historical periods provided in Table 1.

Table 2: The Perceptions of Technological Value in UK Banking, by Historical Period

Years	PERIOD (Morris)	PHASE (Consoli)	Perception of Technological Value
1864–1945	Early Adoption	Electric to Electronic communications	Labour efficiency (doing more with the same resources) Banks measured by growth
1945–1968	Specific Application	Processors to Databases	Labour savings driven by post-WW2 cost-reduction rationales Developments in Management Science on automation and efficiency
1968–980	Emergence	Automated machines to local networks	Customer behaviour gets in the equation. Customer uptake and retention measures appear Major developments in Finance lend technical aid to banking Still labour-saving rationale prevalent
1981–1995	Diffusion	Standardisation vs. customisation	Economics of networks Similar TIDM approaches as before First 'failures' of Finance for appraisal of IT
1995–now	Generic Application	(Open Platform)	Emergence of IS/IT research strand Recognition of need for strategic appraisal Development of large number of alternative assessment methods

Although no clear-cut patterns of correspondence between expertise and perceptions on technological value can be drawn in the modern history of banking, a number of observations can potentially associate these two dimensions. To begin with, in the Early Adoption years until WW2, understanding of technological value was very limited and largely based on perceptions imported into banking from technology providers, or imposed by governmental authorities. In addition, there were few choices to be made as only a few providers existed, meaning that technological investment valuation was rather straightforward. In terms of the role of expertise, demand for technological valuation appeared as early as the 1920s when banks needed to assess their investment in technology firms. However, the combined technical knowledge and forecasting skills needed to accommodate such needs were almost non-existent in Britain (Ackrill and Hannah, 2001, p. 93), and no particular internal expertise appears to have dictated technological valuation until the Second War. The period following the War brought a better integration of professional skills in banks, caused primarily by the gradual collapse of the class barriers between bank management and clerical occupation. At the same time, the educational backgrounds of employees and in-house training converged to define a set of desirable skills for future bankers: that of the highly qualified, quantitative sciences graduate. The nature of banking activity, largely defined as quantitative, attracted professionals from Accounting, Finance, Economics, Mathematics and Engineering, all highly skilled in mathematical knowledge and comfortable with manipulation of numerical data. It was arguably on the basis of this framework of professionals that the introduction of methodologies like Cost-Benefit Analysis, Payback and later-on NPV occurred in technology valuation processes. The dominance of these expert groups in higher managerial posts apparently influenced the trajectory of technological investment valuation in the 1980s and early 1990s by establishing quantitative assessment as primary decision practice. Along these lines, the increasing complexity of new technologies was to be addressed through the application of further sophisticated techniques, yet again coming from the Finance, Statistics and Mathematical Economics grounds, and focusing on accuracy of calculation rather than on readdressing the context of implementation.

The period that followed the mid 1990s and extends to the present is, in terms of the 'expertise – valuation' relationship, one of complex and ambiguous developments. On the one hand, the invasion of the newly empowered IT professionals into Boards of financial institutions signalled the conscious recognition of IT's role in shaping the banking business. In particular, it rationalised the hard numbers perception of technology valuation by formalising alternative viewpoints on assessment of IT, such as the strategic appraisal (Ballantine and Stray, 1998; Nair, 1995; Irani et al., 1997). On the other hand, the

paradigm of quantitative assessment as decision-driver, though still persisting, is negotiating its way with developments such as Real Options Valuation to embed strategic value into quantitative metrics (McDonald & Siegel, 1986; Copeland & Antikarov, 2001). On top of these advancements, the debate on assessing technological value has shifted to how we should adjust our faith in numbers, according to the economic and business conditions that prevail each time (Porter, 1995). The changing landscape of expertise appears to be gradually influencing the banks' perception and practice on technological appraisal rather deeply. I see the primary expression of this influence being the shift from sophisticated quantitative assessment, to understanding that banks need to reassess the value of technology by working at the higher organisational level. Possibly the realisation that technological infrastructure and IT at large is being transformed, from a configuration of facilitating constructs, into the backbone of the financial institution, alters entirely our perception of what constitutes banking technology and whether we are able, or indeed need to, economically appraise it in separation from the organisation itself.

CONCLUSIONS

As proposed in this paper, the history of UK banking technology can largely be seen as a parallel to the history of computers which, from early accounting machines to modern CRM systems, were at the centre of developments in the industry. The evolution of UK banking technology happened around a series of events that reflected prevailing socio-economic or political conditions. Under these conditions, in some instances a number of bottlenecks, or 'reverse salients' gave the impetus to British banks to move on to new stages of technological development. In other instances, such impetus was provided by identified opportunities that UK banks needed to address to grow or survive. Yet again, other instances saw banks mobilising technological innovations to cope with regulatory or other government intervention in order to maintain their business interests.

Most frequently, technology was introduced in UK banking to address clearly circumscribed problems. In many cases, this 'solution by technology' has opened new perspectives in the way that the banking business itself was focused and, in the extreme case of the late 1990s, it has challenged the traditional organisational structures. Ever since the first accounting machines, technology has played not only the role of introducing new forms of automation or processing, but also an *enabling* role for older, more mature technologies. Mostly *generic* technologies, such as ICTs, RDBMS and the Internet have brought specific mature banking technologies, such as ATMs, call centres and home banking to new dimensions: EFTPOS kiosks, integrated CRM systems and Internet Banking systems respectively, were such new applications. This role of technology presents a recurring pattern within discontinuous technological trajectories, as the role of enablers is arguably played each time by revolutionary concepts that prompt breakthrough developments in more industries.

In addressing perceptions on the value of technology, as these are historically recorded, a key role is given to the evolution of expertise in UK banking. British banking has come a long way from being dominated by noble businessmen with no homogeneous or relevant educational background, to today's Boards of Directors, composed of people of a diverse, but rather specific to the trade, range of expertise on Finance, Accounting, Technology, Law and Banking. The development of expert groups in UK banking was in the early days driven by a tradition that segregated banking clerical labour from managerial activity, a tradition that had to break in light of both the enabling effects of technologies that decentralised management tasks and the identified efficiency gaps. Notably, professionals of particular backgrounds on Banking, Finance, Accounting and Economics dominated the higher managerial levels of financial institutions as late as the 1970s, when the effects of both the recruitment of well-educated graduates and specialist scientists were felt. This development followed an equally high rate of scientific advancements in Mathematical Economics, Forecasting and Finance. Technological expert groups did not appear among the practitioners until quite late. That was, first, because of the dispersed nature of banking technologies early on, which didn't call for centralised technological skills. Second, the appearance of

technological expertise had to wait until the attitude of banks to Information Systems changed, until banks were institutionalised with role-specific departmentalisation taking effect, and until dominant expert groups of Bankers, Actuaries, Accountants and Economists began relying heavily on technologies.

The impact of the evolution of banking expertise on established perceptions on technological investments is not always transparent. This paper proposes that there is a subtle relationship that results from the negotiation between dominant expert groups on how the bank should evaluate technological investment. In all reviewed respects, what is ultimately at the centre of TIDM approaches, are the power interests of expert groups. On that account, professional communities of practitioners negotiate the development of constructs through which decisions are taken. They arguably do this with view to imposing their own expert knowledge as key to managing and controlling these constructs and, through them, justify decisions of their own preference. TIDM techniques are, in that respect, serving the role of a channel through which professional groups promote their collective interests; objectifying this channel is what provides dominance over decision-making.

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BIOGRAPHY

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WILL HUGE BUDGET DEFICITS AFFECT THE AMERICAN CRIMINAL JUSTICE SYSTEM

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ABSTRACT

At the same time that the State of California faces crushing annual budget deficits, the Governor faces a mandate from the federal courts to significantly reduce prison overcrowding. California prisons were originally designed to hold fewer than 100,000 inmates. They are currently housing over 170,000 inmates. The problem facing California lawmakers is how to reconcile looming budget cuts, including those in the corrections system and the court system, with the mandate to reduce the number of prisoners. One suggested plan, to grant early release to approximately 27,000 inmates, has run into stiff opposition from police and prosecutor groups. They cite recent high profile abductions and murders committed by parolees who were released early to live in treatment centers and half-way houses. Criminal justice experts also predict that the early release of inmates will increase recidivism rates in a state that already has the nation's highest recidivism rate. This paper will explore and review the ongoing political and fiscal battles over the allocation of scarce public funds currently taking place in California, and the direct impact it will have on the criminal justice system in California and the rest of the United States.

INTRODUCTION

California is one of many states that face ongoing and difficult decisions about how to allocate scarce financial resources while suffering from projected multi-billion dollar budget deficits. And since the projected annual budget deficit is so large, it serves as an appropriate subject for the issues addressed in this paper. As the economy of the United States, and the economies of all 50 states, continue to suffer from one of the greatest recessions of modern times, our state governments are faced with the challenge of prudent fiscal planning for the future of their criminal justice systems. The competing interests of financing court systems, due process rights of the accused, legislative mandates such as "three-strikes laws," and determinate sentencing have all contributed to an ongoing and growing strain on the budgets of government entities. Now, as if to add insult to injury, California is struggling under the weight of a Federal Court order to significantly reduce the prison population of the state prison system. With constricted state tax revenues leading to massive annual deficits, the Governor and the Legislature are faced with the overwhelming task of making deep and significant cuts to the state budget. The education and health care systems of the state are direct competitors with the criminal justice system which includes the corrections and court systems for these scarce dollars.

This paper will focus on the ballooning prison population in California. It will explain the issues and discuss some of the proposed solutions. The political divisions run deep over these matters, especially when the looming threat of early release of felons into our communities takes on a real and imminent threat. These difficult times of high unemployment and economic uncertainty are a breeding ground for the commission of new crimes. Adding a flood of early released felons into this environment is unsettling and problematic.

FEDERAL MANDATES FOR CALIFORNIA

All night they battled. Hispanic inmates on one side, blacks on the other, they smashed glass to use the shards as knives and ripped off pipes for bludgeons, burning down part of the prison and injuring hundreds. The riot on August 8th-9th was not the first and won't be the last in California's dreadful prison system.

It occurred in a prison in Chino, just east of Los Angeles, that houses nearly twice as many inmates as it was built for, about the same degree of overcrowding that plagues California's 33 prisons as a whole. It is also one of the prisons that are currently trying to implement a 2005 ruling by the Supreme Court that inmates must not be segregated by race.

The overcrowding in California's prisons, by far the worst in the country with only Georgia and Alabama coming close, has been the subject of lawsuits for years. The latest riot came just days after three federal judges, calling conditions "appalling," ordered California to prepare, within 45 days, a plan to bring its prison population down to 137% of capacity in order to approach constitutional standards of decency. Jerry Brown, California's attorney-general as well as a former governor and likely 2010 candidate for governor, has vowed to fight the order.

In the past three decades, California's penal system "has gone from one of the best to one of the worst in the world", says Joan Petersilia, an expert on prisons at Stanford Law School. In the 1960s and 1970s, California was a model for its success in rehabilitating criminals.

But in 1976, California decided to switch from "indeterminate" to "determinate" sentencing. The first system, emphasizing rehabilitation, gives a lot of discretion to parole boards, who can reward good behavior and also help with overcrowding by reducing inmates' prison time. Determinate sentencing on the other hand, reflects a philosophy of deterrence and means that prison time is relatively fixed, whether an inmate behaves well or badly.

Since the switch to determinate sentencing, California has passed approximately one thousand laws mandating tougher sentencing. Many have gone through the legislature, where politicians of both parties compete to be "toughest on crime". Others have come directly from voters, who often bring a "crime-of-the-week mentality" to the ballot box, says Barry Krisberg, the president of the National Council on Crime and Delinquency, a think-tank in Oakland.

The result is a disaster, says Ms Petersilia. California spends $49,000 a year, the annual cost to house each prisoner, almost twice the national average. Yet California, still has the country's worst rate of recidivism, with 70% of people who leave prison ending up back in it, compared with a recidivism rate of 40% for the rest of the country.

The new prisons built in the 1990s to help accommodate the prisoners serving these tougher sentences have also helped contribute to the state's fiscal crisis. A desperate deal between the governor and the legislature to balance the budget includes cuts of $1.2 billion from prisons, which also includes a provision to early release approximately 27,000 prisoners. However, many Republican legislators are objecting to the possibility that 27,000 prisoners will have to be released to capture this savings. For the time being, California's prisoners remain crammed together with predictable results.

RECENT LAWMAKER MANEUVERING

California lawmakers' clash over reducing the state's prison population threatens to become another Sacramento stalemate.

To fulfill part of its July budget deal, the state Assembly passed a bill in August that would reduce California's prison population of 160,000 by a total of 17,000 in the next 10 months. Democrats passed the bill with a bare majority of 41 votes in the 80-member Assembly, without any Republican support.

The bill would allow certain inmates to be released early by completing rehabilitation programs, eliminate parole supervision for some nonviolent convicts and allow probation violators to be housed in local jails. The legislation faces an uncertain fate in the state Senate.

"It still has elements that are still not acceptable," said Republican state Sen. George Runner. He said Republicans are livid over two major components of the plan: a "good-time credit," which would make it easier for inmates to be released earlier for good behavior; and the parole overhaul, which would reduce the number of parolees who return to jail for technical violations, such as missing appointments with an officer.

Democratic Senate President Darrell Steinberg, on the other hand, is pushing for deeper cuts in the inmate population and more structural overhauls. "I'm in no hurry to take up what [the Assembly] passed," he said at a press conference. Mr. Steinberg vowed to restore elements of a plan, passed by Democratic state senators and supported by Republican Gov. Arnold Schwarzenegger, that would have reduced the inmate population by 27,000 and saved more money.

Mr. Runner said that if Senate Democrats try to pass a bill with even deeper prison cuts, the legislature would face another lengthy stalemate that would last beyond its scheduled adjournment date.

Republican Assembly members in a recent debate used Phillip Garrido -- the California parolee accused of abducting 11-year-old Jaycee Dugard and holding her captive for 18 years-- as an example of why the state shouldn't ease penal sentencing. Democrats countered that the prison plan affects only inmates who did not commit violent or sex-related crimes.

The standoff is just the latest for a statehouse that has come to represent the epitome of political dysfunction. Lawmakers bickered for 15 weeks before closing most of a $42 billion budget deficit in February. Facing an additional $24 billion shortfall this summer, they then engaged in a two-month stalemate that forced the state to issue IOUs.

As part of the deal to close the $24 billion gap in late July, state legislators agreed to slash penal spending by $1.2 billion. But they have clashed over the details of the cuts. Legislators would have to make spending cuts in other programs if they couldn't agree to a prison plan.

The stakes are high for the state, which warehouses the nation's largest inmate population. California's prisons hold more than double the designed capacity, and are so overcrowded that a federal court ordered the state to reduce the population by more than 40,000 in the next two years. A three-judge panel gave the state until late September to develop a plan to carry out its order, which caps the inmate population at 110,000.

Gov. Schwarzenegger asked for a delay of the order, but was denied. He filed a formal appeal to the U.S. Supreme Court.

An 11-hour riot at a prison in Chino, outside Los Angeles, is indicative of the system's problems. In early August, fighting among 1,300 inmates touched off a riot that burned down a dormitory at the unit. The prison housed nearly 6,000 prisoners, twice the number for which it was designed.

CLASHING POLITICAL VOICES

California lawmakers signed off on deep cuts to education, healthcare and welfare that many said they could scarcely have imagined in years past. But when it came time last week to address the state's overcrowded prison system, an area where the Democrats who control the Legislature have long pushed for change, they froze.

State prisons, criticized as unwieldy and inefficient by experts in California and across the country, have in recent years become the most sacred area of state government, seemingly impervious to transformation because of politics, fear and mistrust.

"You have an absolute hysteria," Assembly Speaker Karen Bass (D-Los Angeles) said. Crime and corrections, she said, are "a visceral issue."

Legislators listened to attack lines from Republicans: "Mayhem on the streets," Sen. Jeff Denham (R-Atwater) predicted. And Senate GOP leader Dennis Hollingsworth of Murrieta said the changes would let "bad people" take away Californians' life, liberty and property.

Assemblyman Ted Lieu (D-Torrance), who is running for attorney general against fellow Assemblymen Alberto Torrico (D-Newark) and Pedro Nava (D-Santa Barbara), opposed the measures. He described as "early release" a provision that would allow some inmates to serve the last year of their term on home detention with electronic monitoring. In an interview, Lieu said his bid to become the state's chief law enforcer had nothing to do with his stance on the plan.

"Forget about healthcare, environment or education policy," Lieu said. "If people are not safe or don't feel safe, then government has failed."

Assemblyman Warren Furutani (D-Gardena) said that problems in prisons are important "institutional issues" but that they pale beside the public safety implications of releasing criminals into neighborhoods, "where the rubber meets the road."

Many experts say less serious offenders belong in county jails or on probation, where they may have family support systems nearby and a better chance to turn their lives around. County and city law enforcement officials have expressed willingness to take those prisoners, but they don't believe the state would provide funding for the added burden.

"The lack of trust about money is really interfering with a great criminal justice policy in the state," said Jeanne Woodford, a former San Quentin State Prison warden and a corrections secretary under Governor Schwarzenegger.

At least one local law enforcement group, the California State Sheriffs' Assn., does not oppose putting some state prisoners on home detention, an "alternative custody" approach that counties use with their own inmates. But in a letter, the association asked that state leaders reconsider proposals that would reduce penalties for some crimes and send those offenders to county jails instead of prison. County lockups "are facing their own overcrowding crisis," the letter said.

ACROSS THE UNITED STATES

Sentencing reform, prevention efforts and investments in evidence-based treatments and programs will result in greater savings and dividends than internal cost-cutting measures that will likely be reclaimed when the economy improves.

Recession and the subsequent revenue declines are having significant effects on corrections. Across the U.S., correctional departments are closing facilities, placing beds in nontraditional space, reducing and/or eliminating programs, cutting operating costs, exploring early offender release options, enacting reduction-in-force policies, and offering employee buyouts.

Most correctional agencies' budgets are at least 51 percent payroll, which is all inclusive of benefits and salaries; therefore with major budget reductions looming, it is inevitable that payroll will require reductions. It is inevitable, that is, unless a true action-oriented understanding of where data-driven, outcome-based savings can occur. External correctional savings will have a superior benefit over reductions internally. Sentencing reform, prevention efforts and investments in evidence-based treatments and programs will result in greater savings and dividends than internal cost-cutting measures that will likely be reclaimed when the economy improves. Enacting external changes that can save costs without comprising public safety is difficult at best. This is not because such changes are lacking in research driven outcomes, but because they require collaboration, cooperation and partnerships that transcend the usual criminal justice stakeholders. Politicians will be the key, but it will require being smart on crime as opposed to just wishing to appear tough on crime.

GET OUT OF PRISON FREE

A proposal currently before the California State Assembly would reduce a number of serious crimes to misdemeanors, release inmates who have committed serious crimes early, and open the door to reduced sentences for sex offenders.

The proposal converts the following crimes from felonies to misdemeanors: receiving stolen property, writing bad checks, commercial burglary and petty theft with a prior.

A sentence of years in state prison would be replaced by a mandated sentence of no more than a year in county jail for those crimes, leading to what prosecutors call a "get out of prison free" card.

Some examples of this proposed policy are: a repeat felon who is caught writing tens of thousands of dollars in bad checks would receive virtually no punishment; a chop-shop operator with hundreds of thousands of dollars worth of stolen cars in his possession would get no more than a few months in jail; someone who fences expensive jewelry, computers, and other valuable stolen from someone's residence won't be going to prison at all. Perhaps worst of all, these changes would be permanent, even after the budget crisis is over.

CONCLUSION

In short, we are not protecting citizens from the increasing danger of criminals who perpetrate violence and intimidation as a way of life, while we are locking up too many people who should not be incarcerated. It is incumbent on our state and national leadership to create realistic ways to "fix" our broken prison systems. One suggestion currently being considered is to create a national commission to look at every aspect of our criminal justice system with an eye toward reshaping the process from top to bottom. We should bring together the best minds in America to confer, report, and make specific recommendations about how we can reform the process. This commission will be tasked with giving us clear answers to hard questions, including:
Why are so many Americans currently in prison compared with other countries?
Why are our policies so costly to our nation, both in tax dollars and in lost opportunities?
How can we reshape our nation's drug policies?
How can we better diagnose and treat mental illness?

How can we end violence within prisons and increase the quality of prison administrators?
How can we build workable re-entry programs so that our communities can assimilate former offenders and encourage them to become productive citizens?
How can we defend ourselves against the growing scourge of violent, internationally based gang activity?

Today, one out of every 31 adults in the U.S. is in prison, in jail, or on supervised release. This all comes at a very high price to taxpayers. All told, corrections spending totals about $68 billion a year. In these tough economic times, leadership must come together and change the laws to solve the looming crisis of the operations of our criminal justice systems.

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WE-COMMERCE: TOWARDS A NEW PLATFORM FOR VIRTUAL COMMERCE

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ABSTRACT

The proliferation of the Internet and the latest mobile communication technologies have given rise to new forms of communication that made it easier for sellers as well as consumers to communicate and doing business in real time and in virtual space with manufacturers, retailers or among each other. In addition, consumers are building social networks for interacting, and also for collectively buying products ("We-Commerce"). From the sellers' perspective they are stepping away from traditional forms of a single buyer-seller relationship and formerly dominant group building processes. By tapping into consumer networks and using consumers as marketing assets, marketers can enhance sales volumes, save marketing spending, and increase profits. This paper (1) provides an overview of grouping phenomena in marketing. It then (2) points out different platforms of group commerce in virtual surroundings, and (3) elaborates the influence of group mechanisms onto the consumer's decision making process. Eventually, (4) further research questions are presented.

THE CONSEQUENCES OF THE ENVIRONMENTAL DETERIORATION UPON THE EUROPEAN UNION'S ECONOMY

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ABSTRACT

The phenomenon of environmental deterioration is one of the biggest problems of this beginning of century, having a strong impact on the world economy. The growing off-balance between the economy and environment has acquired a great importance at international level. The environment is deteriorating also in the European space, and the consequences of this phenomenon over the economy of the European Union are more and more visible. The negative effects of the environmental deterioration have repercussions over the development of EU economies, which imply consistent financial efforts from behalf of those states, for the environmental protection and the stopping of the deterioration process, and, at the same time, for the reducing of ecologic damages and their consequences over the present and future generations.

JEL: Q56; Q57

KEYWORDS: Deterioration, environment, environmental factors, European Union

INTRODUCTION

The history of human society demonstrates the indissoluble connections between the activities of man and his natural environment, highlighting thus the unity of the mutual relationship man-nature, as well as the historical contradiction from within. The environmental deterioration has no frontiers, as it manifests globally.   The progress and the economic and social performances have a direct impact over the quality of environment. The researches and studies on world level regarding the human society and the environment take into consideration the processes of irrational consumption of resources and of deterioration of the environment (water, air, soil). This is why, the states of the world need to focus upon the "economic governing", because, generally speaking, they neglect the environmental issues, many of these having a global character.

The relationship "economy – the neglecting of the quality of environment and the diminution of natural resources" is more accentuated and leads to tensions and resistance in applying or adopting the measures of environmental protection, at global level, but also in the European Union. The solution for the protection of the environment can be a perspective shift: those measures that limit the development of industry out of environmental reasons are at the same time stimulating the development of mechanisms and systems which make possible the cohabitation of the two – such as the advanced non-polluting technologies, the alternative sources of green energy (solar energy, wind energy) which lead to the development of a specialized market and implicitly, to economic development. Due to rapid changes in the European and world economy, but as well as due to the acceleration of the environmental deterioration phenomenon, new solutions and answers are always sought in order to stop and reduce it.

The remainder of the paper is organized as follows. Section 2 describes the environmental deterioration in the European space. The economy-environment conflict on the European Union level is discussed in Section 3. Section 4 provides the consequences of the environmental deterioration over the economy of the European Union and Section 5 concludes the paper.

THE ENVIRONMENTAL DETERIORATION IN THE EUROPEAN SPACE

By the development of the human activity, all elements of the environment are affected, yet, in different proportions. Among these elements, the most important are: the soil, the water, the air, the biodiversity. There are many areas of Europe which are affected by extreme phenomena: very high temperatures, draughts, rains and floods.

The climatic changes as main effect of the environmental deterioration have intensified their frequency and gravity during the last decades. Even if efforts are made in order to reduce the gas emissions, the presence of the accumulated greenhouse effect gases until the present time produces climatic changes. That is why the vulnerable points need to be evaluated in order to be able to act in order to limit the risks. The climatic changes manifested on the European continent have accentuated the problems related to water, and especially the lack of it. The draught phenomenon is accentuating each year as consequence of the higher and higher temperatures, and the water reserves, first of all from South Europe are considerably reducing. At the same time, the agriculture and tourism need the increase of water consumption, especially in the warm and dry areas. For example, Cyprus is facing a draught of catastrophic proportions. The water demand has had an accentuated tendency in the last 17 years, and now is over 100 million cubic meters of drinking water per year. As compared to this, in each of the last three years, this country has had available only 24, 39 and 19 million cubic meters of water. In order to ameliorate the "water crisis", in the summer of 2008, water was brought from Greece. Until September 2008, 29 ships with water were imported from Greece. But these transportations as well were delayed due to the fact that also Greece confronts with the lack of water. Under these circumstances, the Cypriot government had to apply certain emergency measures which included also the decrease of water consumption with 30%. In the summer of 2008, in Turkey, the level of waters decreased constantly. The tanks that provide drinking water for the city of Istanbul were filled at 28% of capacity. The tanks that provide for Ankara, a city with four million inhabitants were filled at only 1% of capacity (The European Environmental Agency, 2009).

The greenhouse effect gases contribute aggressively to the change of climate. There are estimations of specialists who foresee that the area from the South of Europe will become warmer and drier, while the North and North-West will be more temperate and humid. The member states of the European Union agree with respect to the fact that this growth of global temperature needs to be limited to 2ºC over the level from before the industrialization in order to avoid a severe change of climate. This is the main scope of the EU steps in order to reduce to minimum the effects. Because, those steps are focused especially on the decrease of the green house effect emissions, the limitation of the temperature growth to 2ºC means a decrease of gas emissions with 50%, at global level, until 2050 (The European Environmental Agency, 2009).

The biodiversity, the natural wealth of the planet we live in, disappears in an alarming rhythm, due to the climatic chances, due to pollution, as well as due to the manner in which the natural resources are excessively exploited in order to support the production, the consumption and the commerce in our globalized economy. The biodiversity may be looked as an insurance policy that the planet is giving us. Its value may be compared with the one of the financial markets in which the shares portfolio (species in this case) constitutes a guarantee against perturbations.

Due to the accelerated rhythm of the globe's population from 6.7 billion at present time to nine billions until 2050, the negative consequences over the biodiversity will increase, and the losses will grow. The marine life from the proximity of the discharge river mouths of the great European rivers is affected by the chemical industrial and the domestic wastes. This menace is even greater to species with already drastically reduced populations by the human activity, by the fragmentation of habitats, the illegal

hunting, the uncontrolled commerce and the non sustainable economical-social development (the polar bear, the marine species and so forth).

The pollution of the environmental factors (air, water, soil) does not take into consideration the national borders. The biggest responsibility for the environmental pollution is represented by the social-economical activities of people. The progress and the economical and social performances have a direct impact over the quality of the environment. Thus, the industries great consumers of resources and energy, but as well producers of huge quantities of wastes and carbon dioxide, the use of pesticides and fertilizers in agriculture, the transports, as well as the discharge of domestic wastes into rivers, ocean rivers and oceans, have led to the accentuation of the phenomenon of polluting all environmental factors. "We have become so numerous, and our technologies, so powerful, that we are capable to influence significantly more aspects of the environment. The most vulnerable part of the ecologic system of Earth is the atmosphere" (Gore, 2007).

THE ECONOMY-ENVIRONMENT CONFLICT ON THE EUROPEAN UNION LEVEL

"In a moment when the monetary markets are searching for new directions, maybe the environment will show us the way "(The European Environmental Agency, 2009).

The process of the global development is closely linked to nature, having considerable implications over the environment. The global requirements of humanity have overcome the power of regeneration of the Earth's resources, and the environment is rapidly deteriorating.

The experts believe that the global economy growth over the past 50 years has been accompanied by accelerated environmental decline. From 1891 to 2005, the global Gross Domestic Product more than doubled, in contrast to the 60% of the world's ecosystems being degraded or used in an unsustainable manner. Only a fraction of the national income is spent on the environment. The global annual spending on the environment is estimated at best at US$ 10 billion per year. This is in contrast to the US $60-90 billion needed for those environmental investments that contribute directly to poverty reduction alone (United Nations Environment Programme, 2008).

The world economy, within the meaning of the Gross Internal Product (GIP), has grown in an unprecedented rhythm: in 1950 the world GIP amounted to €4 trillion, and in 2007 to over €42 trillion. This growth – of over ten times – was determined by a few key factors, especially by the circulation of the raw materials and goods – all coming from the environment. In contrast to this economic growth, the environment suffers and continues to suffer even now: the blocks of ice from the mountain chains of Europe are melting down; the glacier calotte from the Arctic Ocean is withdrawing during summer and is getting thicker than ever. In 2007, the surface of the glacier calotte was half of the one measured during the 50'. These tendencies may change our relation with the natural environment, but not also our dependence on these. The economic activities and the very cohesion between our companies are supported by the natural resources that the planet provides.

For all that, we do not pay the due attention to the economy-environment relationship of dependency, because there are no societies without natural environment, but there is a natural environment without societies. The fundament of the degradation that we notice around us, in our natural environment, is the lack of values awareness that counts in this relation. In 2006, Lord Nicholas Stern elaborated the "Report regarding the impact of climate changes over the economy". He estimated that the immediate stopping of the gas emissions with greenhouse effect would significantly reduce the costs of the impact of the climate changes. If we acted starting this very moment, the costs would be much reduced and the efficiency would be bigger, as compared to if we acted later. Thus, "the costs of measurements to fight the climatic changes, through the stabilization of the Carbon dioxides in the atmosphere would be of approx. 1% of

the world annual GIP, until 2050. But the lack of the measures would cost even more, and it could reach to 20% of the world wealth". The forecasts of the report have been bleak: "the climate warming will have an effect comparable to the two world wars, and the world economy could decrease up to a fifth" (Stern, 2006).

In the „The Scientists' Conference" from Copenhagen in March 2009, Lord Stern warned us that the underestimated the risks of the global warming and the damages that it provokes and that there were "severe risks" if the temperature would exceed with 4 to 7 degrees Celsius until 2100. The agriculture will be destroyed and life will become impossible on most parts of the planet. At the same time, the recent review of the estimations from the report published in 2006 has led to the appreciation of its author that the lack of action could cost 50% and even more than the maximum value previously appreciated, risking to reach a third of the world wealth, as well as the decrease of consumption per capita of the Planet (McCarthy, 2009).

In this context, the conflict between economy and environment is more acute than ever. There are opinions according to which the salvation of the planet and of the environment is in close interdependency: the economy cannot exist without a robust and healthy environment. At world level, it is assessed that the failure to take measures in order to diminish the effects of the climate changes over the environment will lead to costs of least 5% over the world economy, namely the annual decrease with 20% of the global product, without taking into consideration the loss of the ecosystems and the species that disappear forever by means of the alteration of the Earth's climate (Hardisty, 2008).

Nevertheless, the bleak estimations regarding the deterioration of the quality of the environmental factors represent a new warning signal which has the role of contributing to the understanding by the governments of the world's states of the potential effects on planetary level, if the current patterns of production, consumption, growth and life will not change. Better world "governance" is essential for the management of the economy-environment conflict, through the intervention of the states which need to manage the international system in such a way as to exceed in the shortest time possible the global economic crisis, without producing the accentuation of the environmental deterioration.

The Norwegian Research Institute "Point Carbon", based on recent studies, shows that the Carbon emissions in the European space have decreased with 6% on 2008 as compared to the year 2007, as effect of the economic crisis. The 27 countries participating to the European system of <Carbon quotas> have issued last year 2,111 billion tones of greenhouse effect gas as compared to 2,245 billion tones in 2007 (www.green-report.ro, 2009).

Even though the European Union got involved in the protection of the environment only in the 70', when this issue became of international interest, in the following decades have been taken important measures as to the improvement of the quality of life, the limitation of pollution, the introduction of the pollution prevention principle and the one of rationalization of the natural resources and also programs were adopted which represented financial instruments for the management of the projects regarding the protection of the environment from the Member States.

Presently, on international level, the European Union is playing a central role in the fight against the climate changes, through an integrated policy regarding the energy and the climatic changes having as main scope an economy which respects the climate, based on the combination of the technologies and the sources of energy with low Carbon emissions, on the protection of biodiversity, the solving of the desertification issue, the abusive forest clearings and of the impact of pollution over the public health.
The European bodies have the role to analyze as profound as possible the modalities to integrate the adaptation to the climatic changes in the external policies and in the present financing instruments and, if necessary, to elaborate new policies. European Union needs to share its experience in this field with the

developing countries and to offer them assistance for the elaboration of their own strategies as thorough as theirs. The existing partnerships, such as the one entered with China. India and Brazil constitute an adequate basis for the widening of the European Union cooperation with the developing countries on the climatic change theme.

The main mutation which needs to be produced in the current mentality would be the one of immediately replacing the economic interest with the notion of interest regarding the conservation of the patrimony of the future generation. On this line of thinking, an economic policy needs to be conceived which, instead of submit the biosphere to the limitations given by the logics of the immediate profit, to try to organize, first of all, the proper management of the natural resources, based on which to fundament realistic environmental policies.

In this context, the strategy with anticipative character from within the policy of environmental protection is based on the principle of precaution and on other principles which are favoring the preventive action, according to which any damage to the environment needs to be corrected from the source and the polluting source needs to pay (Manolescu, A., Mironescu, A., Matei, I., 2008). Such an example is that on January 18th 2006, the European Commission has proposed a directive that helps the member states to prevent and limit the effects of floods, as well as their effects over the human health, of environment, infrastructure and properties. During 1998-2006, the floods produced by the European Union caused 700 deaths, the evacuation of 500,000 persons and economic losses evaluated to over 25 billion Euros on the insurances market.

THE CONSEQUENCES OF THE ENVIRONMENTAL DETERIORATION OVER THE ECONOMY OF THE EUROPEAN UNION

The phenomenon of environmental deterioration has consequences over the economy of the European Union, with grave manifestations over industry, agriculture and services.

The industry and services are facing the necessity to adapt to the climatic changes. The climatic changes are affecting the constructions and tourism to great extend. For example, the decrease of the number of tourists may lead to restructuration and may cause damage to the industrial infrastructure. There are opportunities to introduce on the market new products and services, as well as the adopting of attenuation and adaptation measures to the new conditions offered by the environment. E.g. the investments in the insulations field are reducing, for one hand, the heating needs during the winter time and at the same time protect against the excessive heat, reducing thus the demand for air conditioning during the warmer summers.

The European agriculture is confronting during the last years with numerous challenges, due to the international competition, the continuation of liberalization of the commercial policy and the demographic negative growth. The climatic changes are aggravating these difficulties and are raising the complexity and costs of the measures which need to be taken in the European economy in what concerns the agricultural production, the management of the live stocks and the localization of the production facilities.

The consequences of the environmental deterioration over this field have manifested by the decrease of the agricultural incomes and the abandoning of lands in certain parts of Europe. In what concerns the alimentary production, this could be a real problem in certain parts of Europe, because the heat waves, the draught periods and the parasites may lead to a growing number of cases of deficient harvests. Given that the agricultural production is more and more vulnerable, the risks for the food supply at world and European level are more and more accentuated. Along with the climatic changes, the role of agriculture and silviculture of the European Union as suppliers of ecological services and ecosystems will have a

greater importance. The agricultural and silviculture management play an important role in what concerns the efficient use of water in the dry areas, the amelioration of the floods management, the maintenance and rehabilitation of the multifunctional landscapes, and so on.

The community support for agriculture, silviculture and rural development play an important role in what concerns the food production, the preservation of rural landscapes and the supply of environmental services. The recent reforms in the common agricultural policies have constituted a first step towards creating a frame for the sustainable development of European Union agriculture. The subsequent adaptations to the common agricultural policies and the check of their efficiency could offer the occasions to analyze the best modalities to integrate more efficiently the adaptation to the climatic changes in the support programs for agriculture.

A solution for the replacement of the conventional natural resources is constituted by the bioenergy which is a dominant renewable energy in Europe. The biofuels represent a useful method to make the transportation ecologic and to eliminate the oil importation. Nevertheless, on the other hand, the transfer to the production of biofuels on large scale has considerable ecologic risks, especially due to the change of land destination. The soil and the plants are the most important collectors of Carbon dioxide on Earth – containing twice as much Carbon then it exists in the atmosphere, and the mass transformation of forests, peat coal or pastures into cultures destined for the biofuels production could generate more Carbon Dioxide that it could save. There are opinions of specialists according to which, "the extension of the surfaces of agricultural surfaces in Europe in order to satisfy both the need of aliments as well as the need of fuels could have a major impact over the biodiversity of Europe and could affect the soil and the water resources. The biofuels obtain from wastes, from harvest or forest residues, offer advantages for the environment (The European Environmental Agency, 2009).

The European Community has suggested to the EU member states a compulsory objective which needs to be attained until 2020 and namely that 20% of the total of energy produced in Europe be originated from renewable sources (wind, sun, waves, etc., as well as bioenergy). Currently, only 6.7% from the total energy consumption in Europe comes from renewable sources. Two thirds from this percentage comes from the biomass (The European Environmental Agency, 2009). On the other side, the transportations contribute to the growing of the level of greenhouse effect gases, and cancel the savings of emissions obtained in other sectors. For this reason, the European Community has suggested that the biofuels should constitute 10% from the total of the fuels destined to transportation until 2020, if they prove as a sustainable solution. If in the year 2007 the biofuels constituted only 2.6% from the total of the fuels destined to the road transport in the European Union, in order to perform the mentioned objective, the production and the import of biofuels needs to grow in an accelerated rhythm. On the other hand, the growing rate of the food consumption at global level and the additional demand of biofuels leads to the extension of the surfaces of cultivated lands in to the prejudice of the surfaces of pastures and forests, which would have, as well, a major impact over the biodiversity, as well as on the quality and quantity of water.

CONCLUSION

The world economic crisis can be an opportunity in order to solve the problems of the environment, which must not represent an issue for the economy, but a solution.

The European Union needs to actively look for manners to produce bioenergy as much as possible within itself, maintaining the equilibrium between the production of food, fuel and fibers, but without compromising the services of the ecosystems. All possible ecologic impacts need to be taken into consideration, including the effects they have on the soil, the water and on the biodiversity, as well as the

greenhouse gas emissions. Thus, the EU may become a leader in the creation of a truly sustainable bioenergetic field.

In order to avoid the creation of negative impacts determined by the use of bioenergy, strict policies are needed at community and international level in order to prevent the change of destination of the lands, adding thus an ecologic issue to the existing one in the preoccupations related to this source of energy.

The solution for the reducing of the consequences of deteriorating the environment over the economy of the European Union is represented, in my opinion, by the "real investments" in the use of the renewable energies, including the use of the nuclear energy, but as well by recycling "the cleaning" of the coal (capture and storage of Carbon) by means of which electricity can be generated with minimum pollution.

The states of the world will be forced to continue their investments in the environment. The efforts made in other domains will be cancelled by the danger the planet is subject to, namely the continuous deterioration of people's lives, but also the deterioration of the biodiversity. The global efforts for the conservation and protection of the environment need to be treated with priority and made regardless of the economical situation, because in the past also other financial crises existed and will surely appear again in the future. The investments of the world states need to be made in physical assets, instead of promises on paper. And last but not least, the cooperation between the economy and environment which will be beneficial for our future, of all, thus succeeding to leave the generations to come a planet where they can actually live in.

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SAMPLE STATISTIC WITH SEWAGE SLUDGE TO SAVE MONEY

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ABSTRACT

Nowadays we are living in World with big cities that need sewage water treatment. The final destination for residues is towards stations of treatment from sewers which are increasing worldwide concern. From one point of view, the sewage wastes are pollution but there are others alternatives such as optimize agriculture process; reuse sewage sludge; but decreasing it has been object of several economic and environmental all over the world. One solution is to fertilize the soil with sewage sludge where it can increase the spatial variability of its chemical properties and, therefore, requires more accurate sampling in order to achieve greater reliability to the results of its analysis. This study can show a possibility to use sewage sludge to save money when we fertilized it with that waste. The experimental design was based with Traballi (2008) that use a randomized block design with four replications in a split plot, with plots set up by the doses of sewage sludge (2.5, 5.0, 10.0, 15.0 and 20.0 t ha^{-1}) and the subplots, the number of single samples (5, 10, 15, 20 and 25), which were collected from 0-20 cm depth. Based on the results he concluded that in order to sample soil analysis in areas where there has been application of sewage sludge to prevail number of samples to compose a single compound or equal to 5 for pH and H^+ al between 10 - 20 and greater than or equal to 25 for P, K, Ca and Mg, if applied doses less than 20 t ha^{-1}. The order of decreasing variability of soil chemical variables, when applied up to 20 t ha^{-1} sewage sludge was: $Ca^{2+}> P> K> Mg^{2+}> MO> H + Al> pH$.

Index terms: sewage sludge, agriculture, soil, sampling, fertility, waste.

INTRODUCTION

The shocks in production related to climatic aspects, trends in energy prices, investment in biofuel capacity, prospects for economic growth and future agricultural policy developments, according to the OECD - FAO (2006), are among the main uncertainties that affect the prospects for world agricultural markets, highly dependent on economic developments in Brazil, China and India, three giants in the world of agriculture.

Alongside that, long time men have sought to establish ways of farming less harmful to the environment and able to protect natural resources, conserve the environment, and are more durable in time, trying to escape the conventional style of agriculture that has be hegemonic from the new discoveries in agricultural chemistry, biology and mechanics that occurred at the beginning of the twentieth century. So according to Caporal and Costabeber (2002), in several countries began to emerge such farming alternatives, with different names: organic farming, biodynamic, permaculture, etc.., each following certain principles, technologies, standards, rules and philosophies, according to the currents that are attached. However, in most cases, these alternatives could not provide the answers to environmental problems that have accumulated as a result of the conventional model of development and agriculture that started to prevail, particularly after the Second World War.

In this environment of seeking and building new knowledge, was born Agroecology as a new scientific approach, able to support a transition to sustainable ways of farming and thus contribute to the establishment of procedures for rural development. Based on the principles taught by the Agroecology would be established a new path for the construction of basic ecological agriculture or sustainable.

Furthermore, the sewage sludge is becoming increasingly a major problem for municipalities around the world because the quantities produced are still growing with increasing population density of cities. An alternative is available for use in agriculture and forest areas as organic fertilizer. According to Rocha et al (2004), the sewage sludge is used in several countries in forest plantations, especially in temperate regions. In tropical countries, its use is still limited and little studied. In the state of Sao Paulo, vast areas to forests could absorb much of the sewage sludge produced in waste treatment plants.

The use of sewage sludge and its potential use of fertilizer and soil conditioner as well as its positive influence on plant growth, are possibilities of linking profit to the producer by increasing crop yields and reduced use of mineral fertilizers, with gains for the generators of mud, for the realization of appropriate methods and more economical to final disposal of this waste (Guedes et al., 2006).

Many cities began, in recent decades, the construction of Sewage Treatment Plant (STP), aimed at cleaning up the rivers and reducing public health problems. This treatment results in the production of sewage sludge, which is a waste that requires proper disposal not to cause environmental problems. According to Ghini and Bettiol (2008), among the various alternatives for the provision, for agricultural purposes is presented as one of the most convenient because, as the sludge is rich in nutrients and high in organic matter, is widely recommended application as soil conditioner and fertilizer. In addition, under the environmental point of view, the agricultural recycling of sewage sludge is one of the most convenient alternatives, while offering energy savings and reserves, as it reduces the need for mineral fertilizers.

One of the potential uses of sewage sludge is its use as reconditioning physical and chemical soil used in agricultural crops and forests, according to Rocha et al. (2004), where the criteria for the application rate of sewage sludge in agriculture, according to Tsutiya et al (2001) and Melo et al (2001), are defined according to the available nitrogen, which may not exceed the ratio between the amount of nitrogen recommended by the crop and the level of available nitrogen in sewage sludge, and for the corn crop is 6 t / ha. It can also be based on the ability to neutralize the acidity of the soil, not exceeding the value of pH 7.0 in CaCl2.

LITERATURE AND FRAMEWORK STUDY

The most common alternative, according to Bettiol, Campbell and Berton (2009), to the use or disposal of sewage sludge or biosolids are available landfill (landfill and exclusive co-disposal with municipal solid waste), industrial reuse (production of lightweight aggregate, brick-making and ceramics and cement production), incineration (burning exclusive and co-incineration with municipal solid waste); conversion into fuel oil, ocean disposal, soil remediation (land reclamation and mining); "land farming (soil treatment with or without vegetation) and agricultural use and forestry (direct application to soil, compost, synthetic fertilizer and soil).

According to the authors, between the various alternatives for the disposal of sewage sludge or biosolids, that for agriculture and forestry is presented as one of the most convenient because, as the sludge is rich in organic matter and macro and micronutrients for plants, is widely recommended its use as soil conditioner or fertilizer. However, the sewage sludge presents in its composition several pollutants such as heavy metals and pathogenic organisms to humans, two attributes that should be looked at very carefully.

The sewage disposal in agriculture is an ancient practice. The information is the best known from China. In the West it is known that in Prussia, irrigation with sewage effluents was practiced since 1560. In England, around 1800, many projects have been developed for agricultural use of sewage, especially because of the fight against the cholera epidemic. The adoption of the practice of land use as a means of disposal of sewage or sludge has been common in many countries. (BETTIOL et al, 2009)

METHODOLOGY AND RESULTS

The experimental design was a randomized block design with four replications in a split plot, with plots set up by the doses of sewage sludge (2.5, 5.0, 10.0, 15.0 and 20.0 t ha^{-1}) and the subplots, the number of single samples (5, 10, 15, 20 and 25), which were collected from 0-20 cm depth. Based on the results we can conclude that in order to sample soil analysis in areas where there has been application of sewage sludge to prevail number of samples to compose a single compound or equal to 5 for pH and H$^+$ al between 10 and greater than or equal to 25 for P, K, Ca and Mg, if applied doses less than 20 t ha^{-1}. The order of decreasing variability of soil chemical variables, when applied up to 20 t ha^{-1} sewage sludge was: Ca^{2+}> P> K> Mg^{2+}> MO> H + Al> pH (Traballi, 2008).

Area

Sewage Sludge

Fertilization Random blocks

ECONOMIC ASPECTS: CASE STUDY

According to News Agency of Paraná State (08/05/2009), starting this year (2009), Companhia de Saneamento do Estado do Paraná - Sanepar - will distribute sewage sludge or biosolids for agricultural use in the region of upstate. Farmers of Londrina, in partnership with Emater will have available 300 cubic meters of product, already disinfected with lime. Sanepar and Emater defined criteria and schedule of distribution and application of sludge. The product is already used by farmers in the Metropolitan Region of Curitiba, with productivity gains ranging from 30 to 40% and average savings in the purchase of fertilizers and lime from $ 500.00.

The Wastewater Treatment Plant of Londrina and Cambé generate per year, about 9 tons of sludge (15 cubic meters). In North and South treatment plants are being deployed units Sludge Management (UGL), which will operate the target process sludge for agriculture: drying, cleaning product, and collecting samples for analysis in order to demonstrate the quality.

In Londrina, has already completed the distribution of the first batch of sewage sludge from Ventania Farm, owned by Cláudio Aparecido Alves, received 216 meters cubic meters of mud. The farmer William Pierola Antonio, site of St. Anthony, already incorporates 94 cubic meters of sludge in maize. "As I decrease the use of chemical fertilizer, the sludge is an attractive alternative to have nutrients and be free," he said. The second batch of ETE South of 131 cubic meters has gone through the process of setting and their sample has been sent for laboratory analysis.

The biosolids or sewage sludge is a solid waste resulting from treatment of domestic sewage. Rich in organic matter and have significant amounts of nutrients such as nitrogen can be used for major crops such as soybeans, corn and wheat. However, it is suitable for vegetables and culture in which the edible portion has direct contact with the ground, like potatoes and cassava.

They are made microbiological and heavy metals before the release of product for agriculture. These tests ensure that the sludge is within the health and environmental criteria established. Also in each agricultural area receiving sewage sludge are carried out soil analysis to determine the amount of fertilizer to be applied. The agronomists Emater guide, even on the mode of application and local restrictions. The coordinators of Emater and record Sanepar Notes Technical Responsibility in this case, by the regional council of engineering, architecture and agronomy.

The sludge also contains phosphorus, and some important micronutrients for plants. As the process of cleaning usually uses lime, the product can replace the limestone used by farmers to correct soil acidity. Therefore, the Sanepar is following the guidelines set by "Agenda 21", which recommends recycling as an alternative indicated for the management of waste where the quality is consistent.

The program was developed with the participation of more than 200 researchers from 27 institutions such as the Federal University of Parana (UFPR), PUC-PR, Universidade Estadual de Londrina (UEL), Senai-Cetsa, Emater Tecpar and Embrapa, in addition to major universities in nine states from all regions of the country. The whole process relies on licensing of IAP, in addition to the authorization of the Ministry of Agriculture. For the licensing process following the determinations of CONAMA Resolutions 375/06 (National Council on the Environment) and Sema 001/07 (Secretary of State for the Environment).
AWARD - This research Sanepar was the big winner of the FINEP Technological Innovation in the Process category in December 2007, competing with 114 other projects throughout the country this is the main prize for research in Brazil, promoted by Financier of Studies and Projects (FINEP) under the Ministry of Science and Technology.

CONCLUSIONS

A survey of the sewage sludge is possible and can save money if use sample statistic to determine that quality of them, because such studies should be performed by at least ten years and involve all components of the agro ecosystem, such as effects on the community of soil organisms, the physical and chemical properties of soil on survival of human pathogens in plant development and environmental contamination due to possible pollutants (heavy metals and others) that may exist in the mud, especially for those coming from highly industrialized cities. (Embrapa Environment, 2009)

The use of sewage sludge as an alternative input in the production areas is an important factor for a higher quality of environmental management and, simultaneously, has a lower cost in terms of agricultural economy, confirmed by Zapparoli et al (2007). Thus might be inferred that the sludgei has shown advantages of both environmental and economic order. The sewage sludge produced in Brazil, second Ghini and Bettiol (2009), are being used widely in agriculture, especially in cultures of cane sugar, corn, coffee and eucalyptus. However, to date, only the sludge generated by CEBS / Brasilia, SABESP / Franca, CSJ do Campo, SANASA / Campinas and SANEPAR / Curitiba are being used in agriculture.

The rules of Paraná (State in Brazil) are one of the toughest, according Andreoli (1997) and Zapparoli et al (2007). While most countries sludge distributes Class A and B, Parana only rated "A" should be intended for agricultural use. "Even after sanitized and stabilized (odor free) we opted for the safest option. Still, there remain restrictions on crops as the primary contact horticulture, for example. On solution is fertilization with sewage sludge and to save money, based on the results, we can conclude that in order to sample soil analysis in areas where there has been application of sewage sludge to prevail number of samples to compose a single compound or equal 5 for pH and H^+ al between 10 and 20 and greater than or equal to 25 for P, K, Ca and Mg, if applied doses less than 20 t ha^{-1}. The order of decreasing variability of soil chemical variables, when applied up to 20 t ha^{-1} sewage sludge was: $Ca^{2+}>$ P> K> $Mg^{2+}>$ MO> H + Al> pH (Traballi, 2008).

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INTELLECTUAL PROPERTY PROTECTION FOR THE ENTREPRENEUR –COPYRIGHT LAW IN THE UNITED STATES

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ABSTRACT

One of the most important assets that a business may possess is its intellectual property. Therefore, every business, from the smallest start-up company to the largest corporation, should at least consider acquiring some form of protection for the products and services that it makes available to the public at large. The costs that are involved in acquiring the protection are more than offset by the short-term and long-term benefits to the business. For many entrepreneurs, their first interaction with the field of intellectual property comes in the form of a question. "What can I do to make sure that no one steals the name or logo that I have chosen for my business?" "How do I prevent others from copying the book or the song that I have written and making money from my work?" "What can I do to ensure that no one steals my idea for a new product or device after I reveal it to them?"

These three questions highlight the three distinct fields into which intellectual property is typically subdivided: trademarks, copyrights, and patents. The purpose of this paper – the second in a series of three papers – is to provide both ordinary business people and more sophisticated entrepreneurs with a basic overview of the most important aspects of copyright law. Accordingly, this paper will review and discuss the purposes of copyright law, its source within the United States Constitution, and the different statutory provisions enacted by the United States Congress over the years. It will examine what is required for something to be eligible for copyright protection, with regard to both subject matter and content. The paper will explore both the scope of protection for a copyrighted work that has been registered with the United States Copyright Office (part of the Library of Congress) and the consequences of failing to register. It will review the steps that need to be taken in order to register a copyrighted work with the United States Copyright Office and the basic fees involved. The paper will also highlight the elements of a prima facie case of copyright infringement and some of the standard defenses that can be raised.

INTRODUCTION

This paper will highlight the importance of copyrights in the international context as a vital component of operating a successful business in the global economy of the twenty-first century. The paper is organized as follows:

United States Constitution – Article I, Section 8, Clause 8 – The Copyright Clause
Subject Matter of Copyright – What Is Eligible For Copyright Protection?
Elements of Copyright – What Is Needed to Qualify For Copyright Protection?
Exclusive Rights of Copyright – What Does Copyright Protection Offer?
Duration of Copyright – How Long Did / Does Copyright Protection Last?
Elements of Copyright Infringement – What Constitutes the Prima Facie Case?
Defenses to a Claim of Copyright Infringement – What Can a Defendant Argue?
Remedies for Copyright Infringement – What Can a Successful Plaintiff Receive?
Copyright Notice and Copyright Registration
Copyright in the International Business Context
Conclusion

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THE CONSEQUENCES OF THE CURRENT ECONOMIC CRISIS ON THE REDEFINITION OF THE EUROPEAN UNION CONCEPT REGARDING THE PREVENTION AND LIMITATION OF TERRORIST ACTIONS

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ABSTRACT

At the beginning of the 21ˢᵗ century, with mankind proud of its great achievements in science and technology, and with global economy tackling some big problems that are still painfully alive in the body of humanity, so as to make this planet a better, more flourishing and secure place, a new security dilemma has emerged from intolerance and hate: the terrorist dilemma. Under the impact of rapid globalization, this particularly odd phenomenon has acquired new and complex dimensions, spreading out worldwide in a variety of forms. Mankind has been confronted with multiple terrorist acts spreading fear and panic, disturbing society's life in defiance of domestic and international rule-of-law, and jeopardizing democracies, national security and world peace itself. Therefore, all joint, collective and cooperation-based security structures have been redefining their concepts on countering the effects of terrorist acts.

JEL: F50; F53

KEY WORDS: terrorism, European Union (EU), cooperation, crisis, European Police Office (EUROPOL), infrastructure

INTRODUCTION

The current economic and financial crisis is a system crisis with deep, unavoidable repercussions due to the globalization tendencies of the world economy. The economic recession is extending all over the world and seems to be much more powerful than the economic depression of 1929 -1933.

An analysis of the manifestation of this current economic crisis reveals a general view materialized under the following elements: slow, even negative rate of economic growth, increase of unemployment, rise of prices and of military expenses, emergence of a powerful pressure on the social welfare and protection, impediment of the living standard increase and proliferation of anti-social acts such as: corruption, prostitution, organized crime, generally, less represented in the developed societies.

On the background of the foresaid, we are witnessing the development of an underground economy which, due to its adapting and regenerating capacity defining it, is a serious competitor to the real economy. The underground economy has a strong social impact, being closely linked to several phenomena such as: corruption, different types of criminal offenses, drug consumption, criminal gangs, black market labor exploitation, money laundering, violation of human rights, and environment pollution etc., and implicitly, it has the same effect on the intensification and diversification of the terrorist phenomenon.

Although several analysts think that terrorism does not have major effects on the economic activities because it affects only to a little extent a state's macro-economic activity, the assessments based on practical studies contradict these statements.

The remainder of this paper is organized as follows. Section 2 briefly discusses the impact of terrorist activity on the world economy. The EU bodies with authority in preventing and combating terrorism are presented in Section 3. Section 4 provides information on the legislative framework and the strategic concept of preventing and countering terrorism. Section 5 analyses the elements of novelty regarding the tokens of maturity in the EU concept of preventing and suppressing/containing terrorism and Section 6 concludes the paper.

THE STRATEGY OF THE EUROPEAN UNION REGARDING THE PREVENTION AND LIMITATION OF TERRORIST ACTIONS UNDER THE CIRCUMSTANCES OF THE CURRENT ECONOMIC CRISIS

The terrorism may greatly influence the distribution of the productive capital among the world's states, even if a small part of their economy is submitted to direct risks generated by a terrorist attack. Thus, the terrorist activities diminish the recovery rate of capital investments, besides the increase of mistrust in a state's economy; this fact may lead to a significant shifting of the foreign investors' interests in other states because the world economy is based on the free circulation of the capital, so as the investors may direct their capitals to regions with a lower degree of terrorist risk.

According to Voinescu (2008) in an integrated world economy where the investors can redistribute their investments to other states, the terrorism may induce major capital movements. The records based on invested capital regressions of several states show that terrorist risk reduces the level of direct foreign investments and this causal relation is strongly resistant to demographic factors, governmental economic indicators and to other financial and macro-economic factors.

On the terms of these vulnerabilities inherent to institutions, bodies and regional and international agreements on the preservation of global security, the terrorism, through its effects and consequences, endangers even the existence of universal human values. The sharpening of the terrorist phenomenon called for a reaction of the international community which triggered the confrontation with the germs and the vectors of terrorism.

Under these circumstances, the Strategy of European Union on the prevention and limitation of terrorist actions includes all the legislative and operational measures within which those referring to military interdiction are substantial but not exclusive.

This official strategy offers the advantages of a multidisciplinary approach of the terrorist phenomenon designed to cover a whole range of initiatives, from the prevention of to reaction against terrorist acts. The strategy – conceived around four main pillars (Prevention, Protection, Disruption, Reaction) – attaches key importance to increasing cooperation between the EU Member States. This implies improving EU's capabilities to conduct operations both inside and outside its borders. As an underlying premise of European cooperation on counter-terrorism one has to evoke 9/11 and the immediate response to it which boosted normative security efforts. The 9/11 attacks and particularly those carried out in Madrid in 2004 and London in 2005 have generated significant developments in many national structures engaged and/or integrated in the larger European structures. In this context, great emphasis has been laid on intensifying and improving police, judicial and intelligence-related cooperation, inside and outside the EU, especially within the partnership with the US.

EU BODIES WITH AUTHORITY IN PREVENTING AND COMBATING TERRORISM

The EU Directorate for Security

The DS was created by the European Commission on 1 December 2001 as a department of the Personnel and Administration Directorate-General. Within this department, there is the Prevention and Control Unit whose counterterrorist tasks are to assess terrorist threats to EU headquarters and personnel, as well as to maintain liaison with the partner services. The unit is the European Commission's representative on the Terrorism Work Party (TWP) and the Terrorism Coordination Party

The Joint Situation Centre (Sitcen) of the EU Council

Following the March 11 attacks in Madrid of 2004, the EU Member States decided to enhance the Sitcen authority by adding counter-terrorist intelligence assessment to its competences.

Counter Terrorism Group (CTG)
The Counter Terrorist Group was created within the Club of Berne, in September 2001 in order to ensure and maintain dialogue on terrorism issues between the EU and the national intelligence services of the Member States. Since September 2001, the CTG has been providing the EU policy-makers with the terrorist threat assessments carried out by the Member States' intelligence agencies. The CTG also plays an important part in implementing the provisions of the EU Declaration on Combating Terrorism, by promoting effective cooperation and the sharing of intelligence in the fight against terrorism.

European Police Office (EUROPOL)
The initiative for a European Police Office was first launched at the European Council in Luxembourg of 28 and 29 June 1991. At that time, the plan was aimed at establishing a new agency to secure the necessary framework for enhanced cooperation between the Member States' police forces in the area of preventing and countering organized crime at an international level, including terrorism and drug trafficking.

The Europol Convention was signed in July 1991 and came into force on October 1, 1998. The Counter Terrorism Task Force (CTTF) operates as a EUROPOL component providing assistance to specialized divisions in charge with strategic and operational analysis, with preventing and countering terrorist financing, terrorist recruiting and modus operandi.

The Terrorism Working Party – TWP and Territorial Cohesion Policy Commission – COTER

These workgroups discuss the EU political response to terrorist threats as well as the possible punitive actions applicable to terrorist acts. Experts in these groups carry out assessments of the national systems for preventing and countering terrorism.

THE LEGISLATIVE FRAMEWORK AND THE STRATEGIC CONCEPT OF PREVENTING AND COUNTERING TERRORISM

Since October 2001, a great amount of legislative actions have been taken at EU level with regards to countering terrorism and preventing the acquisition, possession and use of funds and goods by terrorist organizations. Among these are:
- The Protocol to the Convention on Mutual Assistance in Criminal Matters between the Member States of the European Union, adopted by the Council of European Union, on October 16, 2001;

- Directive 2001/97/EC of the European Parliament and of the Council of 4 December 2001 amending Council Directive 91/308/EEC on prevention of the use of the financial system for the purpose of money laundering;
- Council Common Position of 27 December 2001 on the application of specific measures to combat terrorism;
- Council Regulation (EC) No. 2580/2001 of 27 December 2001 on specific restrictive measures directed against certain persons and entities with a view to combating terrorism (and the subsequent amendments);
- European Union's Council Framework Decision (EC) No 475/2002 of 13 June 2002 on Combating Terrorism;
- Council Directive of 28 January 2003, on insider dealing and market manipulation (market abuse);
- Council Decision 2005/671/JHA of 20 September 2005 on the exchange of information and cooperation concerning terrorist offences;
- Council Common Position 2005/427/CFSP OF 6 June 2005, updating Common Position 2001/931/CFSP on the application of specific measures to combat terrorism;
- European Parliament resolution of 2006 on the external dimension of the fight against international terrorism;
- Council Decision of 12 February 2007 establishing for the period 2007-2013, as part of the General Programme on Security and Safeguarding Liberties, the Specific Programme „Prevention, Preparedness and Consequence Management of Terrorism and other Security related risks";
- Commission Regulation (EC) No 969/2007 of 17 August 2007 amending Council Regulation (EC) No 881/2002 imposing certain specific restrictive measures directed against certain persons and entities associated with Usama bin Laden, the Al-Qaida network and the Taliban;
- Communication from the Commission to the European Parliament and the Council stepping up the fight against terrorism 6.11.2007, Com (2007) 649 Final;
- Report with a proposal for a European Parliament recommendation to the Council on the factors favoring support for terrorism and the recruitment of terrorists (2006/2092(INI)) 29 January 2008.

According to the security Strategy of the European Union and the EU assessments of European security, we distinguish three main threats:

International terrorism – which poses a serious strategic threat. Europe has become both a target and an area of international terrorist operations. We find a variety of networks, as well as independent persons, which are not affiliated to any specific organizations. As an entity, the European Union is not a target of specific threats from al-Qaeda and/or its associates, while such terrorist entities can be a threat to some of the EU Member States perceived as "enemies to Islam" and therefore designated as legitimate targets on grounds of their involvement in Iraq and Afghanistan.

WMD Proliferation – until the early 1990s, international treaties and strategic export control determined a limited spread-out of such weapons, but a dangerous dissemination of WMD now going on especially in the Middle East. The dissemination of missile carrier technology will increase instability and pose additional risks to Europe.

The existence of failed states and the widening of organized crime- the existence of failed states, of civil conflicts and access to weapons have allowed criminal organizations to strengthen their positions, to support drug trafficking and human trafficking, posing threats to the affected nation states.

In June 2004, the European Union drafted its Global Action Plan on Counter Terrorism including the following strategic objectives:

- Strengthening international consensus and enhancing the international community's efforts to combat terrorism;
- Cutting of terrorist access to financial and economic resources;
- Developing EU and its Member States' structural capabilities to identify terrorists, investigate and prosecute them, prevent terrorist attacks;
- Providing security for international transportation and customs control efficiency;
- Developing the EU and its Member States' capability to cope with the consequences of terrorist acts;
- Countering the determining factors that fuel terrorism and increase the numbers of recruits into terrorism;
- Directing the EU foreign relations towards other countries whose counterterrorist capabilities need strengthening.

To consolidate the strategic and political coherence of these objectives and their implementation, the European Union re-grouped them into four large platforms of global strategy, in late 2005:

- Ensuring the preventive character, mainly through preventing recruitment into terrorism;
- Ensuring better protection of potential targets;
- Dismantling existing terrorist networks;
- Improving response capabilities and post incident management;

Also, the Hague Programme: Strengthening Freedom, Security and Justice in the European Union, approved by the European Council on November 5, 2004, established the European Union policy for 2005-2010, in the area of preventing and combating terrorism, and underlined the importance of cooperation between intelligence agencies and homeland security with a view to ensuring the Union's security as a whole.

The EU Strategy on combating terrorism, approved by the ministers of Interior and Justice of the Member States in December 2005, sets the strategic goal "of fighting global terrorism, for a more secure Europe and for allowing people to enjoy freedom, security and justice". Its implementation requires the pursuit of the following objectives by the Member States:

- Prevention of attracting new followers among the population and eliminate factors that could lead to radicalization and recruitment;
- Protection of population and infrastructure to reduce vulnerabilities in the face of a terrorist attack by providing security, including critical infrastructure;
- Disruption – tracking international terrorists and bring them to justice, the frustration of their plans, support networks destruction, combating financial and logistic support
- Reaction – training managers and minimize the consequences of a terrorist attack by creating the capacity for assessing terrorist threats and coordinate effective intervention counterterrorist operations.

To achieve these objectives four categories of measures have been developed:

- strengthening national capabilities - using the best methods to enhance national capacities in the collection of information;
- facilitating European cooperation – sharing intelligence between Member States and intelligence agencies and establishing efficient mechanisms to facilitate cooperation;
- developing a collective capability – creating a collective mindset and response towards preventing and countering terrorist threats;

- promoting international partnership - cooperation with countries outside EU, international NGOs and underdeveloped countries in order to combat terrorism.

To prevent recourse to terrorism and the emergence of future generations of terrorists, the EU has developed a Strategy to combat violent radicalization and terrorist recruitment, applied though the Action Plan to Combat Radicalization and Terrorist Recruitment adopted by the European Council in December 2005.

Starting from the evidence that radicalization and recruitment to commit acts of terrorism should be combated primarily by the Member States, at national, regional and local level. European Union actions, especially the contribution of the European Commission, can provide an important framework to contribute to the coordination of national policies, to an exchange of information and to implementation of benchmarks.

The Communication of the European Commission for the European Parliament and Council, regarding "Terrorists recruiting: factors contributing to violent radicalization" (Brussels, October 3rd, 2005) states that "Violent radicalization is the way certain people embrace opinions, viewpoints and ideas urging them into acts of terrorism, as defined in Article 1 of the Framework Decision on Combating Terrorism."

With a view to disrupting terrorist activities, the European Union aims at:
- Pursuing terrorists across borders, impeding terrorists' planning, disrupting their networks and the activities of recruiters to terrorism, cutting off terrorists' funding and access to attack materials, and bringing terrorists to justice while continuing to respect human rights;
- Assessing threats and devising common response policies;
- Depriving terrorists of the means by which they mount attacks - whether directly (weapons and explosives) or indirectly (false documentation to enable undetected travel and residence).

The Action Plan for countering radicalization and terrorist recruitment assigns the Council and Commission to jointly create a media and communication strategy meant to prevent radicalization and recruitment of terrorists by efficiently communicating EU values and policies through the media. The media and communication strategy was developed in the larger context of the EU's struggle against radicalization and terrorist recruitment and it was adopted by the EU Council in July 2006.

As far as financing terrorism is concerned, the EU Strategy for tackling financing terrorism, of December 2004, establishes:
- Improving the NGOs national codes of conduct;
- Adopting Money transfer regulations;
- Securing capabilities and improving provisions for freezing terrorist assets;
- Improving cooperation between the intelligence community, law enforcement agencies and revenue services;
- Enhancing financial investigation capabilities and exchange between financial intelligence units (FIU), including the use of FIU.Net;
- Implementing EU-wide legislation concerning money laundering and money wire-transfers and tackling the misuse of the nonprofit sector;

The EU Council has also developed, in a similar way to the FTO List issued by the US State Department, a List of "Persons, groups and entities involved in terrorist acts", to be biannually updated or when necessary.

NOVEL ASPECTS – TOKENS OF MATURITY IN THE EU CONCEPT OF PREVENTING AND SUPPRESSING/CONTAINING TERRORISM

Threat Defining

Today, terrorism has acquired a global character. In spite of the significant progress in countering the terrorist threats at a global level and inside the EU, international terrorism still poses a global threat.

Terrorist structures continuously adapt against counterterrorist measures adopted worldwide. Terrorist groups spread in different countries and acting beyond the traditional national borders are currently exploiting the huge potential of communication technologies, such as the internet and the mobile communication, to achieve their malevolent ends. Terrorists use the internet on a regular basis in order to disseminate propaganda, training, indoctrination, recruitment and fund raising. Some terrorist organizations also use the internet to plan their operations and to publicly claim their public.

This threat is a major challenge to the EU as well as to its Member States. Europol and Eurojust should take on the role of fighting this threat, but cooperation between Member States and national agencies is crucial. Cooperation has dramatically improved in the past years as a result of this common threat.

Terrorist groups are able to hit targets anytime, anywhere using any kind of ways they consider, in order to have a large impact on it. Nowadays there are chemical, biological, radiological and nuclear weapons. Except nuclear materials, such weapons are quite cheap and traditional military equipment is largely inefficient in countering these.

The context of EU's action: key measures

The EU supports its Member States in their struggle against the global threat. Only by working together we'll succeed in protecting our people, in order to provide a proper solution to a matter of common interest. We cannot expect to be safe without taking on the responsibility to secure.

Europe is a security provider which can and ought to do more. We cannot consider our values and lifestyle intangible – on the contrary, they are fragile, asking for permanent protection. Terrorists jeopardize our basic rights. The Commission sustains its full commitment to protect and promote human rights. We must issue legal and necessary security measures taking into account these rights.

We must stand together against terrorism, on the entire EU's territory. We have to work shoulder to shoulder. Terrorism poses a threat to security, lifestyle and ideals. A common challenge requires a common response. Terrorist threats basically require a nation level approach - even though the current threat is mainly international. The EU response completes these efforts; it is based on prevention, protection, conviction and qualified reaction in case of any terrorist attack. These four elements define the kernel of EU Strategy on Combating Terrorism, first time adopted in 2001 and last updated in December 2005.

Considering terrorism a global phenomenon, the EU has developed a close cooperation with partner countries and international organizations with regard to counterterrorism legislation, law enforcement and judicial cooperation.

Counterterrorist struggle is an important issue on the agenda of the meetings between ministers of Justice and Interior and strategic partners and other international organizations, such as UNO and G8. This cooperation has mainly resulted in agreements with US and Canada, regarding the PNR data transfer [Passenger Name Record], which facilitates a better identification of terrorist threats to security,

simultaneously with personal data protection. The EU is an important technical support provider for countries worldwide, helping them to properly apply the Resolution 1373 of the UN Security Council.

The EU Counterterrorism Strategy defines the way in which the EU can contribute to the fight against terrorism. The key measures of the Strategy are:
- To stop violent radicalization;
- To protect critical infrastructure;
- To improve intelligence exchange between national authorities and close cooperation between all parties interested when necessary;
- To respond to unconventional threats;
- To improve threats detection;
- To cut off financial support for terrorist groups;
- Victim relief;
- Researches and technological development.

In June 2006 the Commission proposed a framework of assessment policies concerning liberty, security, and justice.

The assessment of counterterrorism policies is critical due to various changes might occur on threat analyses and also due to the impact it might have against basic rights and market running. The Commission will permanently assess adopted counterterrorism policies as well as the set of measures adopted.

Violent Radicalization

The key factor in preventing any terrorist activity lies in understanding the reasons of this activity. In 2005, the Commission started to draft new policies aimed at identifying and addressing those factors, which contribute to violent radicalization. Research in this complex area is important, so the Commission finances research studies, conferences and projects which help sharing experience and lead to a better understanding of the issue. For instance, a number of studies have been commissioned this year, with regard to factors leading to violent radicalization, radical ideology and recruiting methods used to mobilize and support terrorism. All this is being undertaken under the EU Specific Plan and Strategy against radicalization. The 2005 Strategy on Combating Terrorism reminds that "these activities are supported by the Commission through efficient guidance and policies, including research investment, conferences, education and intercultural exchange as well as pan-European oversight".

Critical Infrastructure Protection

The protection of critical infrastructure – roads, railroads, bridges, communication and information infrastructure, power plants – is crucial. This infrastructure inside and outside the EU is strongly integrated with the security levels of each country depending on the security provided by the other states.

The EU has a significant contribution by establishing minimal security standards and eliminating vulnerabilities as much as possible. The EU boosts its Member States' effort within the confines of subsidiary. Finally, each state is responsible for taking the necessary measures to protect critical infrastructure inside their national borders. Nowadays, the Council is working on a recommendation concerning the necessary political framework for critical infrastructure protection, and the Commission is hoping for results in the near future. This will allow us to focus on elements and sectors which need closer attention.

Security of Urban Transportation

In response to the EU leaders' call, the Commission has evaluated how the European Community may contribute most efficiently to protect the European urban transportation - defined as public land transportation, carried out by buses, L- trains, underground and trams - against terrorist attacks.

A real challenge for the urban transportation systems is to raise their security level and to keep a full non-restrictive service at the same time. With few exceptions, adequate equipment and infrastructure for urban transportation were not initially selected or built according to security needs. Close collaboration is needed between the EU members and all national authorities and operators engaged in attaining a high security level for the European urban transportation systems. In order to facilitate this collaboration, an Urban Transportation Security Expert Team will be settled by the Commission. The responsibility for this new Expert Team is to work in tight cooperation with other specific teams created by the more general framework of critical infrastructure protection. Further details can be found in the addendum.

Information Exchange

Information exchange – in full respect of the fundamental rights and private life data – is crucial. The PNR proposal which is integrated in this material stands proof. The Commission has taken several steps in this respect. The Internet and telecommunications providers now have to store their data according to the Data storage directive. With the Prum treaty, the first step to the principle of availability was made. Soon, all EU Member States' data bases storing fingerprints, DNA and vehicle registration data are going to be available to the authorities of the other Member States.

The Commission aims at financing activities that can be carried out or improved. They have reached an agreement granting law enforcement agencies access to the Visa Information System as soon as it becomes functional. This will allow police and other law enforcement agencies, as well as Europol, to consult the data in the VIS. The system will store data regarding resident or transit throughout the Schengen area for up to 70 million people. The data will include the applicants' photo and their ten fingerprints. This will be the most comprehensive ten digital fingerprint system. All these developments need solid legislative support concerning data protection. It is estimated that the debates on the framework decision that the Commission has put forward will be concluded by the Council by the end of this year.

Chemical, Biological, Radiological and Nuclear Weapons

Although the explosives are the terrorists' preferred weapons, it is nevertheless essential to prevent their access to CBRN weapons. Some of these can contaminate thousands of people, the ground, buildings, and means of transportation, can destroy the agriculture and contaminate all the animals, affection every link in the food chain. In July 2007 a green cart regarding the response to biological threats was adopted.

Expert seminars in legal, medical, and scientific areas are being held so that a guideline on preparation and response to crisis situations should be issued. The challenge lies in getting together all the active authorities in various fields: academic and biological research institutes, medical services, bio-industry, the army, the police and the customs. Moreover, the Commission is an umbrella for radiological and nuclear expertise. Fears of „dirty-bombs" and nuclear terrorism keep haunting our society and the people in charge with its protection. Terrorists and other criminal elements have already shown interest in this respect. The way economies and countries interconnect nowadays provide not only the basis for global cooperation development, but also facilitate the illegal radioactive and nuclear material trafficking.

Detection Technologies

Reliable, tested, accessible, available and widely recognized detection technologies are an indispensable component in counter-terrorism. The new technologies should not be the privilege of terrorists. Detection devices play a crucial role in the activity of security agencies. Private sector collaboration is essential and it is the Commission that facilitates it. The green card for detection technologies was published in 2006 and the answers are still undergoing analysis. Another pivotal element in the EU Action Plan for Explosives, adopted with the package proposal, refers to detection methods.

Denying Terrorists' Access to Finance

The efforts for depriving terrorists of financial means must be continued and consolidated. Communitary legislation has already been adopted, but the need to provide for more extended illegal action has been ever more frequent. That requires transparency to make sure the EU Member States have the right means to fight terrorist financing. The Commission is actively co-working with the Member States for the amendment of injunction and freezing terrorist assets and crime related assets in odder to establish minimal common standards for training financial investigators while promoting efficient cooperation between EU Financial Intelligence Units.

Technological Research and Development

In 2004, the Committee launched a three-year Preparatory action for Security Research (PASR) with three annual budgets of 15 mil Euro each. The preparatory action was a first step towards elaborating a new chapter regarding security in the 7th Framework Programme for technological research and development (FP7).

As many as 39 projects have been financed by PASR. Building on PASR, the 7th Framework Programme for technological research and development (FPT, 2007-2013) registered a substantial increase in the security research budget of up to 1.4 billion euros including the analysis of issues such as explosive detection, counterterrorism prevention CBRN, crisis management and critical infrastructure protection. At the same time in 2007, the European Forum for security innovation and research was established (ESRIF). ESRIF will be based on the ongoing activity of the VIPs' Group and the Advisory European Council for Security.

The ESRIF's objective is to support the decision-making process in civilian security relying on knowledge and technologies, through establishing a medium and long-term security research agenda, which will involve all parties interested at the European level, demand and offer parties included. The agenda should comprise a road map drawing on the public and private end users' future needs as well as most sophisticated security technologies.

The common security research agenda on security is meant to become the model document for the programming security research in the coming years at an industrial, regional and national level, taking into account the European research activity provided for in the 7th Framework Plan for Technological Research and Development.

The Commission will ensure that the necessary connections are in place for the various counter-terrorist activities and corresponding ESRIF workgroups.

New proposals: a Stronger Fight Against Terrorism

This package includes various proposals answering the Committee's strong call for action – mainly at the time of EC and JAIC assemblies. The measures proposed are the results of carefully preparation involving continuous negotiations with the parties' interests, including representatives of Member

States, NGOs and other private or state agencies. The recently botched attacks in Germany, Denmark and Austria are a sad reminder to us all that the terrorist threat is still alive and real and that additional preventive steps are mandatory. Alongside with the implementation of the EU Strategy for combating terrorism, the proposed measures are meant as a contribution to the implementation of the UN Global Strategy against Terrorism as adopted by the General Assembly of September 2006.

This set of measures aims at improving security in Europe and combating the terrorist threat by:

Taking measures against followers of terrorism. Dissemination of terrorist propaganda, terrorist training, terrorist financing, spreading out information on making bombs and explosives, and public inciting to terrorist acts should all be criminalized as subject to adequate punitive action throughout the European Union. The amendment proposal for the framework Decision of 2002 will ensure that all Member States define these acts as crimes and apply the punitive actions, including sentencing terrorists to prison. All European arrest and search warrants will have to be used to that avail.

Practical measures to prevent the use of explosives: Many different actions would be initiated to prevent terrorists' access to explosives and materials that help their manufacture and to improve tools that law enforcement authorities have at their disposal to prevent terrorist attacks with explosives, purchased in different ways or manufacturing handicrafts. These include rapid alert systems in case of disappearance or theft of the explosives and suspicious transactions, a network of experts in removing and deactivating bombs and checking of staff who works in the explosives industry. Cooperation between public and private sectors is essential.

Establishing a European system in the exchange of PNR data („PNR"). Member States must collect these data, to process and when appropriate, to exchange information with others. PNR is mainly associated with the negotiations outside the UE countries, in particular with the United States Union is a potential target at least equally as well as the United States. PNR data are important because past experience shows that many terrorist plots involved in a certain phase shifts to the EU and third countries. The Commission also adopted its report on implementing this decision - the framework on terrorism. Member States shall act more decided to implement the system adopted in 2002 in national laws to support the work of police, prosecutors and judges.

In April 2009, the European Commission adopted a new 3 year-program to combat terrorism, illicit trafficking and proliferation of weapons of mass destruction. The program, worth 225 million euros, is part of the Stability Instrument 2009 - 2011 and includes the first global anti-terrorist measures developed by the EU Executive together with experts from the Member States. Key priorities are Pakistan, Afghanistan and the African Sahel.

The European Commission priority will be the supporting of EU strategy of nonproliferation mass destruction's weapons (WMD). EU assistance in critical areas such as export control and combating illicit trafficking will be consolidated in the former Soviet space and significantly expanded in new risk areas WMD including South Asia and South Eastern Europe, Middle East and Africa.

CONCLUSION

We must continue to act at EU level to combat the threat of terrorism, with a corresponding development in the external dimension of this policy. There is no other option to act in this regard because of the international and cross border character of the threats and common interests that exist across the EU as a result of its successful development. EU brings more value by supporting Member States and broaching cross border issues. Lastly it is the responsibility of Member States to protect their citizens. Security Policy must protect EU citizens while ensuring respect for fundamental rights. Terrorism is a complex

challenge, with multiple faces. Thus, the activity of the EU seeks to broach all aspects of this challenge - prevention, protection, prosecution and response in case an attack takes place. The present package of proposals demonstrates the commitment of the European Commission to continue to broach these challenges and put a base to strengthen our defense against terrorism.

Through this approach, the European Union may significantly contribute to the development of a multilateral security system that leads to the building up of a prosperous, equitable and secure world.

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EMPLOYEES SATISFACTION – STRATEGIC FACTOR, WHICH INCREASES SAFETY OF COMPANY INFORMATION

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ABSTRACT

Employees' satisfaction is important not only due to the need for efficient utilization of human resources, but also to preserve and secure information that is essential for the company. This information is usually associated with know-how, since their transfer outside may threaten competitiveness and long-term stability of the firm. Satisfaction reduces staff turnover, so it reduces the risk of transmission of information from former employees and competitors to exploit these data, and positively affects the productivity and profitability indicators. The problem is: how to assess satisfaction and to find ways of interpreting of found results, because the subjective criteria of the evaluator play an important role. This article describes the methodology of workers satisfaction. The goal is to quantify the measures of satisfaction of workers and to allow its construction with regard to the specific needs of a specific firm. The proposed indicator has been empirically verified in a selected company. The first results were obtained in 2003; the research has been conducted again in 2009. The results indicate: this indicator has a meaningful value, but over the years it is necessary to updated sub-indicators and their weights, because they reflect the current economic situation, business and society.

JEL: J53, M12, O15

KEYWORDS: employee satisfaction valuation survey, Employee satisfaction indicator, company information securing

INTRODUCTION

Human resources are considered strategically most important company resource, even though it cannot be expressed in numbers from financial point of view. The task, which is often subject of company management focus, is motivation of their employees to quality working output. Motivation is closely linked to employee satisfaction (Kaplan, Norton, 1996), which is one of main motive forces of future company output. Moreover, content employee has no reason to change his occupation; therefore the workforce fluctuation within company is low. Consequently the costs for training new employees are reduced and revenues are not reduced as a consequence of lower working output of untrained employees (Belcourt, Wright, 1998).

Influence of satisfied employees will manifest even outside the company, in customer-supplier relations by satisfaction of customers (Styblo, 2001).

Other, no less important, reason to ensure employees satisfaction is safety of information taken as purely internal. We cannot delimitate those as strategic, because such information are probably not available to common workers, but in small businesses it could be information about suppliers and customers structure, about used work processes etc. With narrowly specialized workers there is a danger, that they can be dragged by a competitor.

All the findings stated imply that it would be appropriate to engage in employees' satisfaction issue in more detail and to find ways and methods of measuring it and consequently design methodology of satisfaction evaluation.

Usage of causal analysis can help us delimitate more causal strings; following are considered important:

a) in terms of work output:

Insufficient work output→ unwillingness of employees to maximize their work output (in quality and quantity areas)→ ins ufficient motivation→ no motivating influence is clarified → employees are not satisfied.

b) in terms of internal information safety:
Company information leakage → bad company climate → unsatisfied workers.
Application of deductive causal analysis can delimitate primary cause of insufficient work output and also information leakage – employees' dissatisfaction (Myskova, 2003).

EMPLOYEE SATISFACTION VALUATION– METHODOLOGY AND DATA

The aim of this methodology elaboration is:
- to describe and to delimitate possibilities of employee satisfaction evaluation according to needs and requirements of the company,
- to enable construction of employee satisfaction indicator and its application in practice of individual companies, with consideration of their specific conditions.

The aim was to create a methodology to measure employee's satisfaction, which would consequently point to areas with possibility of improving the satisfaction. The reason why we want to determine satisfaction level within a company is casual relation expressed in method BSC and also in systems of quality management, respectively: employee satisfaction leads to productivity increase and thus increase in efficiency of the company as a whole.

In spite of the fact that factors which influence employee satisfaction have qualitative character, it is necessary to determine and measure them.

In process of resolving this problem we have to ask a number of questions.

What is the content? – Determination of employee satisfaction and determining the influencing factors.

Who is the subject? – Company employees.

Where is the problem resolved? – Best within company as a whole with workers classification according to their position.

How often is the problem solved? – Employees' satisfaction needs to be observed not only once, but in regular periods. That way we can search for ways to increase it and consequently use the gathered data as a feedback for evaluation of already realized changes within company (related to employees' satisfaction).

Why is the problem solved? – Employees' satisfaction is a motive power of the future output rate and it helps finding ways to increase human potential. Dissatisfaction of employees is a reason to fluctuation, lower working effort and thus lower utilization of human resources.

What kind of values should we look for and how many factors should we delimitate? – The answer to this question depends on specific conditions of the company. (I recommend delimitating 15 factors.)

The applied process of measuring satisfaction includes:

1. Analysis and formulation of solved problem,
2. Determination and analysis of all parameters (factors) which characterize the problem and determination of possible values (level, implementation) of individual parameters,
3. Systematic delimitation of current problem solution alternatives by means of all combinations of individual values of parameters,
4. Choice and realization of selected alternative.

Ad 1. Analysis and formulation of problem is already described in the text above.

Ad 2. In course of factors delimitation we created questions for questionnaires; their comprehensibility should be consulted with certain workers (for example HR workers, but also company employees as representatives of henceforth enquired groups). Accuracy and integrity of element delimitation is further verified by means of questionnaires within company (eventually amended by controlled conversations with workers) where workers themselves delimitate factors influencing their satisfaction and also significance of these factors for individual. I recommend utilization of scales for numeric and metric (cardinal) data necessary to determination of satisfaction indicator. Also we can apply a semantic differential (scalable by method that uses items up valuation where scales are equally oriented and end points are assigned with antonyms).

Ad 3. Quality of analysis of all the elements depends on delimitation and data collection. Statistic determination can be:

- Complete – if all statistic units are available (parent population is described by parameters; that mean unique constants),

- incomplete – statistical population is incomplete, constricted, does not contain all statistic units (sample population), we deduce characteristics of the whole from characteristics of a part, therefore we have to consider probability theory and selection of descriptive characteristic which has characteristic of random quantity.

If we do not conduct comprehensive questionnaire procedure (that means covering all company employees within parent population), the questionnaire procedure has to respect requirements on statistic population.

Sample population has to correspond with parent population; therefore it is important to determine volume and method of selection. It is vital to distinguish individual hierarchical levels of workers and stated conditions have to be fulfilled for each delimitated group of workers.

For calculation (verification), whether sample population fits into required accuracy and approximation reliability, we can recommend requirements delimitation as follows:

- approximation accuracy :   5 %, 10 %,

- approximation reliability: 80 – 95 %,
- variation coefficient: 0,3 – 1,
- delimitation of number of factors which influence employees' satisfaction level: according to
  needs and opportunities of the company.

Selection of method for data analysis depends on decision; whether questionnaires would serve for the sole purpose of delimitation of the most important factors which influence employees' satisfaction with aim to, for example, quickly remove acute deficiencies within this area in company or whether we seek for synthetic indicator of employees' satisfaction which covers all influencing factors, if possible.

Further progress will be decided based on selected viewpoint:

process 1: determine only the factor(s) with greatest influence – in course of solving current problem, in limited time period,

process 2: complex evaluation of all factors with influence.

Ad 4. Point 4 is represented by own evaluation of filled-in questionnaires.

DETERMINING THE FACTOR WITH GREATEST INFLUENCE ON EMPLOYEES' SATISFACTION

In order to evaluate obtained data we use aggregate statistic characteristics, which allow us to determine:
- location (level) – description of data on a number axis according to their order,
  dispersion (variability) – describer level of representation of parent population and collective
- dispersion around mean value,
- inclusion of special characteristics (for example harmonic mean, geometric mean),
- dispersion characteristics need to be used for evaluation of sample population characteristics.

We use following location characteristics to evaluate scales:

- Arithmetic mean (value, which replaces marks of values so that total sum of values remains the same if arithmetic mean is multiplied by population volume),
- modus (the most often occurring value is used, when we require integer, not fraction),
- median (value, which divides the population to two equally big parts according to order is used instead of mean, if mean value is influenced by extreme value caused by abnormal representative of file of values),
- fractile (probability of limitation of statistic population).

For correct interpretation of statistic data it is vital to present characteristics according to points a) to c).

For purpose of practice it is, in our opinion, possible to determine the most significant factor of employees' satisfaction with median. Usually this factor reaches the highest value of   median.

Another possibility is to evaluate the factor with greatest influence on employees' satisfaction, for example by means of maximum relative frequency, where relative frequencies can be calculated according to following formula:

p_i = *number of evaluations of i-th factor by maximum number of points / total number of workers* (1)

We can assume that even in parent population there will be the same relative frequency of this factor (with consideration of reliability we can determine maximum error for relative frequency approximation in %). An advantage of this approach is possibility to simplify empiric research and demand only factors that influence their satisfaction level and not to differentiate their significance. Then the most significant factor would correspond to highest relative frequency of answers.

CONSTRUCTION OF SYNTHETIC EMPLOYEE SATISFACTION INDICATOR

Construction of this indicator is executed by following process.

1. Classification of filled-in questionnaires to groups according to characteristic marks.
2. Evaluation of the scale by arithmetic mean, modus, median, standard deviation and variation coefficient for each of surveyed factors influencing employees' satisfaction.
3. Selection of characteristic which optimally describes sample for further calculation of factors' weights within total indicator (for example median).
4. Application of the Saaty method or method of pair comparison with determination of weights of individual criteria (influencing factors). When applying more methods, weights determination is then done by arithmetic mean of values obtained from individual methods.
5. I suggest employee satisfaction indicator as synthetic resulting from following relation

$$I_{sp} \approx \Sigma \ w_i . \ I_{si}, \tag{2}$$

Where w_i = weights of individual (partial) factor (mark) of satisfaction,

I_{si} = i-th partial satisfaction factor,
$i \ \epsilon <1,2,..k>$ for k = number of satisfaction factors.

1. Substitution of recognized weights (w_i) and partial indicators (I_{si}) to synthetic employee satisfaction indicator equation ($I_{sp \ xx}$). I formulate employee satisfaction indicator within designed methodology like this:

$$I_{sp \ xx} = \Sigma \ (w_i * Fs_i) \ / \ 10, \tag{3}$$

where $I_{sp \ xx}$ = employee satisfaction indicator within group xx,
         xx = delimitates group according to a characteristic symbol,
         Fs_i = fulfillment of partial (i-th) factor of employee satisfaction in particular company conditions (expresses in %),
         w_i = weights of partial satisfaction factor,
         i ε ‹ 1,2,..n ›, where n = number of factors, which influence employees satisfaction,
         $I_{sp \ xx} \ \epsilon \ ‹ 0, 10 ›$.

The employees' satisfaction indicator can take the value from interval ‹0 - 10›, where 0 represents complete dissatisfaction, 10 means complete content. Choice of this interval ensued from need to ensure comparability with range of scales used in data collection.

Calculation of employees satisfaction (by substituting assigned percent points Fs_i to individual factors according to their occurrence and fulfillment in the company) and verification of employees satisfaction indicator by subsequent comparison of resulting value of the indicator with subjectively stated value of satisfaction in selected sample of employees). When there is greater variance between calculated and subjective values we will adjust the weights of factors (eventually new enquiring).

CONSTRUCTION AND VERIFICATION OF EMPLOYEE SATISFACTION INDICATOR ACCORDING TO DESIGNED METHODOLOGY – EMPIRICAL RESULTS

Employees' satisfaction indicator can be constructed for selected satisfaction factors and delimitated work groups according to various perspectives resulting from different needs of the examiner. Satisfaction indicator of certain work group can be obtained by substituting calculated weights w_i to equation (3). Calculation of satisfaction is, as mentioned above, realized by substituting Fs_i.

This formula was used within empiric survey and its predicative value within certain company was tested. Designed indicator was verified by sample of common workers selected as random sample without repeating based on data filled in to questionnaires. Each worker valuated (in %) fulfillment of partial criteria within company and then expressed his/hers satisfaction by one number from interval from 1 to 10. Calculated indicator Common worker's satisfaction $I_{sp\ cw}$ was compared to subjectively stated satisfaction of employees in their current occupation. Weights of satisfaction indicator related to individual methods for group of common workers are stated in table 1.

Table 1: Weights of partial criteria for group Common workers – calculation according to survey from 2003

	Common employees		
Criterion	*Method 1*	*Method 2*	*Weights-average*
Type of work	*0,0998*	*0,0976*	*0,0987*
Wage	*0,0998*	*0,0976*	*0,0987*
Working hours	*0,0608*	*0,0609*	*0,0609*
Organization of work	*0,0608*	*0,0609*	*0,0609*
Team	*0,0608*	*0,0609*	*0,0609*
Environment	*0,0608*	*0,0609*	*0,0609*
Qualification	*0,0608*	*0,0609*	*0,0609*
Educational possibilities	*0,0608*	*0,0609*	*0,0609*
Superiors	*0,0608*	*0,0609*	*0,0608*
Independence	*0,0608*	*0,0609*	*0,0608*
Traffic	*0,0397*	*0,0401*	*0,0399*
Vacation	*0,0397*	*0,0401*	*0,0399*
Vacation term	*0,0397*	*0,0401*	*0,0399*
Working process	*0,0397*	*0,0401*	*0,0399*
Work safety	*0,0397*	*0,0401*	*0,0399*
Necessity of education	*0,0231*	*0,0234*	*0,0233*
Re-qualification	*0,0231*	*0,0234*	*0,0233*
Team leading	*0,0231*	*0,0234*	*0,0233*
Benefits	*0,0231*	*0,0234*	*0,0233*
Employment contract restrictions	*0,0231*	*0,0234*	*0,0233*
Sum of weights	*1*	*1*	*1*

Source: authors

Method 1 corresponds to Saaty method with utilization of columnar standardized matrix for weights calculation; method 2 applies geometric average value for weights determination. Pair comparison is not used, because in my opinion the result would be burdened by method error.

Table 1 further show weights determined by arithmetic average value from used applications. I assume that for practical usage it would be sufficient to round weights of individual criteria (factors, which influence employees' satisfaction) to 3 decimal places.

VERIFICATION OF SATISFACTION INDICATOR IN PRACTICE IN 2003

The designed indicator was further verified in chosen company. The subject had 21 employees, 4 of which constituted Company management. The verification does not tell males and females apart and the indicator is calculated for all common employees. Calculated satisfaction indicator of common employees $I_{sp\,cw}$ is then compared to subjectively stated employee satisfaction in current occupation.

Results of this verification are stated in table 2.

Table 2: Satisfaction of common employees according to subjective evaluation and satisfaction indicator (one company, data from 2003)

Employee	Subjective satisfaction (2003)	Satisfaction indicator (2003)
1	7	7,21052
2	6	5,5756
3	8	7,5253
4	7	6,74535
5	8	8,59351
6	6	6,78221
7	6	6,13689
8	6	6,75268
9	8	7,56912
10	7	6,59874
11	7	7,02158
12	8	7,27155
13	6	6,503
14	5	4,21552
15	6	6,2893
16	7	7,69842
17	9	8,57413

Source: authors

The predicative ability of satisfaction indicator can be thought of as sufficient (max. Deviation of subjectively stated satisfaction is 0,785), even though we cannot separate out error rate caused by both subjective evaluation of employees and by company specifics. In this particular case this factor manifested in subjective evaluation by effort of responders to round up percentage representing fulfillment of individual factors to tens.

Satisfaction indicator can express satisfaction of individuals from delimitated group (as shown in table 2), but it can also cover even satisfaction of whole group or all employees. In this case there are two ways of calculating the result:

1. We will determine satisfaction of all individuals within group (company) and satisfaction of whole group (all company employees) is then calculated as arithmetic mean from these values,

2. We will determine fulfillment level of each (i-th) factor of employees' satisfaction Fsi within team (company) as an arithmetic mean of values stated by individuals; then we can institute that value into satisfaction indicator formula.

VERIFICATION OF SATISFACTION INDICATOR IN 2009

Considering economic changes and on-going crisis we can presume that employee satisfaction will be influenced by individual factors with a different rate. For this reason we conducted the survey in the same company as in 2003 with aim to recognize changes and to determine factors of satisfaction and their weights in current conditions. Table 3 contains results of satisfaction survey from selected 14 common employees – those who had been working for the company by that time. Answers obtained from filled in questionnaires from 2003, so the weights of individual criteria for satisfaction indicator calculations correspond to data in table 1.

Table 3: Subjective satisfaction of common employees and satisfaction indicator value - year 2009

Employee	Subjective satisfaction (2009)	Satisfaction indicator (according to 2003)
1	6	7,569
2	8	9,1254
3	7	8,021
4	5	4,568
5	9	9,544
6	5	3,965
7	6	7,658
8	6	7,951
9	7	7,689
10	4	4,213
11	5	4,368
12	8	8,924
13	7	7,988
14	6	7,052

Source: authors

Satisfaction indicator has lower predicative ability than in 2003 (max deviation 1,951), which is caused by changes of individual satisfaction factors. Based on current evaluation of these criteria significance (from empiric survey from 2009) we determined new satisfaction indicators weights for common employees in surveyed company.

Table 4 states their values and consequently indicates by + and – symbols changes in preferences compared to 2003. Newly inquired employees delimitated the most important factor, which was certainty of work combined to stability of their company.

The indicator calculated with newly calculated weights of individual satisfaction factors was again verified by subjectively expressed satisfaction of individual employees. Results are stated in table 5.

Table 4: Weights of individual criteria for group of common employees – calculation based on survey from 2009

Criteria	Weights (Saatys method, Usage of columnar standard matrix)	Change from 2003	Weights 2003
Wage	0,1083	+	0,0987
Type of work	0,0824	-	0,0987
Organization of work	0,0678	+	0,0609
Qualification	0,0678	+	0,0609
Independence	0,0678	+	0,0608
Work safety	0,0678	+	0,0399
Traffic	0,0523	+	0,0399
Superiors	0,0523	-	0,0608
Certainty of work	0,0523	New factor, +	
Working hours	0,0421	-	0,0609
Vacation	0,0421	+	0,0399
Team	0,0421	-	0,0609
Environment	0,0421	-	0,0609
Educational possibilities	0,0421	-	0,0609
Necessity of education	0,0296	+	0,0233
Vacation term	0,025	-	0,0399
Re-qualification	0,025	+	0,0233
Working process	0,025	-	0,0399
Benefits	0,025		0,0233
Employment contract restrictions	0,025		0,0233
Team leading	0,0161	-	0,0233
Sum of weights	**1**		

Source: authors

Tab. 5 Subjective satisfaction of common workers within surveyed company and satisfaction indicator value – calculation based on survey from 2009

Employee	Subjective satisfaction (2009)	Satisfaction indicator (according to 2009)
1	6	6,451
2	8	8,336
3	7	7,522
4	5	4,753
5	9	8,792
6	5	4,787
7	6	6,564
8	6	6,254
9	7	7,310
10	4	4,532
11	5	5,215
12	8	8,321
13	7	6,756
14	6	6,162

Source: authors

CONCLUSION

Indicator I_{sp} created according to this methodology for one company (by delimitating factors of satisfaction according to workers of that particular company) quite precisely expresses satisfaction rate of the subject employees.

Over the time satisfaction of employees is influenced – in varying degrees – also macro-economic factors, for example increasing unemployment rate, tax burden. Aggravated situation of 2009 as a result of financial crisis reflected in weights of individual satisfaction factors, priorities of employees have been changed.

The situation within examined company is very good in the light of achieved outputs and long-term company stability. Main activities are software services, hardware service and sale. Most of employees, save administrative, are rewarded based on output (related to commissions). That is why the possibility of adjusting work and working hours is so important. Management provides their employees with various benefits: company car even for private use and for way to work, company cell phones, and high meal allowances. Company management knows that loss of such narrowly specialized workers represents not only increase of costs caused by training of new employee. Switching to competition constitutes the greatest risk: transfer of confidential information and know-how. Employees' satisfaction is therefore very important aspect of safeguarding confidential information.

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COMPREHENSIVE INCOME UNDER THE CRISIS: EMPIRICAL EVIDENCE FOR IBEX-35 COMPANIES

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ABSTRACT

Given the increasing importance of comprehensive income as an indicator of corporate performance internationally, especially since the revision of IAS 1 by the IASB in 2007, in this paper we intend to assess its impact on the more traditional net income during the period 2004-2008 for the select group of the Spanish IBEX-35 listed companies, pursuant to the information disclosed in accordance with said IAS. This will allow us to verify the importance of comprehensive income for the corporate groups at a time of serious financial and economic crisis as was 2008. The non-parametric Wilcoxon Signed-Rank Test was used to perform the corresponding statistic comparisons, as the variables did not conform to normalcy. The results show a statistically significant impact of comprehensive income on net income for three of the five years that were studied, especially for 2008, when there was a spectacular decline in corporate performance when considering the impact of the first on the second. This confers more informational relevance to comprehensive income, being much more in tune with market reality than traditional net income.

JEL: *M41*

KEYWORDS: *Comprehensive Income, Net Income, Context of Crisis, IBEX-35 Companies, 2004-2008.*

INTRODUCTION

The most influential accounting standard setters around the world, among which are the ASB (FRS 3, 1992, revised in 1993, 1999 and 2007), FASB (SFAS 130, 1997), and IASB (NIC 1, 1997, revised in 2003 and 2007), require that companies disclose their comprehensive income, considered in SFAC 6 (1985, par. 70) by FASB as all changes in equity during a period except those resulting from investments by owners and distributions to owners.

This is determined by adding to the net income the expenses and income which, pursuant to the corresponding regulations, should be directly ascribed to net equity, such as unrealized gains and losses in available-for-sale securities, adjustments associated to derivatives and cash flow hedges, and certain foreign currency translation adjustments. Thus, we have an accounting income more in tune with market reality than the more traditional net income.

Comprehensive income is becoming increasingly important as an indicator of corporate performance internationally, especially since the revision of IAS 1 by the IASB in 2007. That is why, having looked over the literature, with this paper we intend to assess its impact on the more traditional net income during the period 2004-2008 for the select group of Spanish IBEX-35 listed companies, pursuant to the information disclosed in the Consolidated Financial Statements in accordance with the IFRS by IASB, and in particular with that stated in the aforementioned IAS 1.

As the period 2004-2008 comprised years of economic and stock market expansion, with steep drops in the stock markets in 2008, we have a period that will allow us to assess the importance of comprehensive income compared to net income in the corporate groups during the years of economic bounty as opposed to 2008, which saw a serious economic crisis and drops in the international stock markets.

In order to perform the pertinent statistical contrasts it may be suitable to use the paired T-test for the case of two related samples, but the variables did not conform to normalcy in any of the years studied. Therefore it was considered more appropriate to use the alternative non-parametrical Wilcoxon Signed-Rank Test.

The results of our study, in line with the pioneering work of Sousa (2009a), and Sousa and Carro (2009b), show a statistically significant impact of comprehensive income on net income for three of the five years that were studied, especially for 2008, when there was a spectacular decline in corporate performance, when considering the impact of the first on the second. This confers more informational importance to comprehensive income, much more in tune with market reality than the traditional net income.

LITERATURE REVIEW

We must first define the essential theory on which comprehensive income is based as a foundation for our research, and then review the empirical literature produced internationally in recent years.

Essential Conceptual Basis for Comprehensive Income

The FASB was the first standard-setter to incorporate the concept of comprehensive income in the SFAC 3 (1980), replaced by SFAC 6 (1985), where this concept is defined in paragraph 70 as "the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. It includes all changes in equity during a period except those resulting from investments by owners and distributions to owners".

As we can see, this is close to the British Nobel award winner Hicks' (1939, p. 172) concept of income. As he established in his book *Value and Capital,* the aim of calculating income is to show how much an individual can consume without becoming impoverished, for which he developed the following central concept of income: "A man's (*sic*) income is the maximum value which he can consume during a period and still expect to be as well off at the end of the period as he was at the beginning".

If we transfer this concept to Accounting, according to Alexander (1950, p. 15), the profit of a business corporation can be defined as the amount of dividends that a company can distribute to shareholders without reducing the capital invested, that is, to be as well off at the end of the year as it was at the beginning.

This concept would evidently lead us to the clean surplus theory (Brief and Peasnell, 1996; Felthan and Ohlson, 1995; Beale and Davey 2000; and Mattessich, 2002; among others), according to which profit is determined comparing the book value of equity at the end of a financial year with that registered at the beginning of the year, without the shareholders' operations.

In short, as referred by Linsmeier *et al*. (1997) and Sousa (2007 and 2009b), by adopting comprehensive income we have such an important event in Accounting at the beginning of the 21st century as is the approach to the economic concept of income advocated by authors of the classical normative-deductive approach several decades ago (MacNeal, 1939; Edwards and Bell, 1961; Alexander, 1950; Moonitz, 1961, and Sprouse and Moonitz, 1962, among others). However, it is not conceived as a sole and unquestionable *a priori* magnitude, but rather devised to satisfy the needs of the users, particularly of investors, given that it contributes to the efficient functioning of the market and to usefulness of the accounting information for market valuation of corporations (Mora, 2004, p. 10).

Empirical Literature on Comprehensive Income

When looking at the international empirical literature on comprehensive income produced in recent years , we find that some descriptive research projects analyze the importance of comprehensive income for corporations on the more traditional net income (Luecke and Meeting, 1998; Bhamornsiri and Wiggins, 2001; Pandit *et al.*, 2006; among others).

Likewise, another set of research projects concentrated on the capital market (Dhaliwal *et al.*, 1999; O'Hanlon and Pope, 1999; Hodder *et al.*, 2006, among others), and aimed to prove along general lines whether comprehensive income would explain stock returns better than net income.

On the other hand, other research projects analyzed the impact of comprehensive income on net income from different viewpoints [Sousa (2008a, 2008b, and 2009a), and Sousa and Carro (2009a, 2009b and 2009c)]; whereas others concentrated on studying the impact that presentation formats have on analysts and investors (Hirst and Hopkins, 1998; Maines and McDaniel, 2000; and Hunton *et al.*, 2006).

From the aggregate of representative research on comprehensive income performed internationally in recent years, the works of Sousa (2008a) and Sousa and Carro (2009a) centre on issues similar to our research. However, these authors work with samples and periods that differ from ours, and do not include the effects of the serious economic crisis that began showing in 2008, thus our study will provide empirical evidence on aspects as yet not investigated.

We also consider that our research may contribute to the international debate on the presentation of corporate performance, set forth in the EFRAG-ICAC (2006) document, Cauwenberge and Beelde (2007), and the joint project on financial statement presentation by the IASB (2009) and the FASB (2009), among others.

DATA AND METHODOLOGY

We took as reference for our research the information disclosed in the Consolidated Annual Reports of the IBEX-35 listed companies pursuant to the IFRS by the IASB, especially pursuant to IAS 1, for the years 2004-2008. That information is available on the website of the Spanish Stock Exchange Commission (CNMV) and on the websites of the listed companies.

Given that this period comprised years of economic and stock exchange expansion as well as a year of great recession and drop of the Stock Markets around the world, 2008, this will allow us to confirm the extent to which comprehensive income, as opposed to net income, affects corporate groups under very unfavorable economic and financial circumstances.

We have also limited our research to the companies listed on the IBEX-35 (*Iberia Index*) drawn up by Bolsas y Mercados Españoles (BME), which is a capitalization-weighted stock market index, comprised of the 35 most liquid Spanish stocks traded in the continuous market, and is the benchmark index for the Bolsa de Madrid (the Madrid Stock Exchange).

Among other listed companies, the following are comprised in this index: Telefonica, Banco Santander Central Hispano, Banco Bilbao Vizcaya Argentaria, Repsol, and Endesa; large Spanish corporations that are present worldwide, especially in Latin America.

From January 1st, 2005 all of the listed companies in the European Union have the obligation to formulate their consolidated financial statements pursuant to the IFRS by the IASB. This, in addition to the current convergence of the economic information models with the IASB regulations, not only at a

European level, but worldwide, means that the fact that we work with a sampling of the most liquid 35 Spanish listed companies, applying these regulations, makes our research current and of international interest.

On the other hand, as we wish to empirically evaluate the impact of comprehensive income on net income for the aforementioned sample and period, it may be suitable to compare the medians between both types of results with the paired T-test for the case of two related samples.

Nevertheless, as shown in Table 1 and in accordance with the One-Sample Kolmogorov-Smirnov Test, we rejected the null hypothesis of normalcy for the variables made up of the differential between comprehensive income and net income in the years 2004-2008.

Consequently, as the variables in some of the years of the study did not conform to a normal distribution, we must use the alternative non-parametric Wilcoxon Signed-Rank Test for the comparison, with a 95% confidence level, which leads us to a $p < 0.05$ significance.

This non-parametric test contrasts the null hypothesis that the medians of two related variables are the same, which applied to the specific field of our research will allow us to determine whether comprehensive income differs significantly from net income for the group of the 35 IBEX-listed companies in the years 2004-2008.

Table 1: One-Sample Kolmogorov-Smirnov Test

		CI-2004 −NI-2004	CI-2005 −NI-2005	CI-2006 −NI-2006	CI-2007 −NI-2007	CI-2008 −NI-2008
N		35	35	35	35	35
Normal parameters [a]	**Mean**	15.65	286.73	-73.74	-155.33	-965.93
	Standard Deviation	224.97	556.51	259.15	490.54	1,874.29
Most extreme differences	**Absolute**	0.279	0.321	0.270	0.286	0.314
	Positive	0.279	0.321	0.186	0.223	0.246
	Negative	-0.258	-0.264	-0.270	-0.286	-0.314
Kolmogorov-Smirnov Z		1.651	1.902	1.595	1.693	1.855
Asymp. Sig. (2-tailed)		0.009	0.001	0.012	0.006	0.002

Test distribution is Normal. *This Table shows the contrast of normalcy of the variables made up of the differential between comprehensive income (CI) and net income (NI) in the years 2004-2008 for the IBEX-35 listed companies.*

As we know, the paired T-test for two related samples is used in many areas of human knowledge, or its alternative in non-parametric tools, the Wilcoxon Signed-Rank Test, which we used in our research to contrast whether significant differences exist between two measurements taken for each of the subjects comprised in our sample, one before and the other after introducing a certain treatment or stimulus.

In our paper, we decided to take two measurements of corporate performance such as comprehensive income and net income. This will allow us to evaluate whether the aggregate of the items included in comprehensive income, which are specified in the revenues and expenses that should initially be disclosed in equity, significantly affect corporate performance.

EMPIRICAL RESULTS

We now proceed to the disclosure and analysis of the results of our research. Table 2 contains the descriptive statistics of the variables that our research is based on, and Figure 1 shows their means profile throughout the study period. Likewise, Figure 2 shows the IBEX-35 behavior in the years studied in our research.

Table 2: Descriptive Statistics

Variable	N	Mean	Standard Deviation	Minimum	First Quartile	Median	Third Quartile	Maximum
NI-2004	35	701.69	1,019.50	-44.60	135.80	332.80	695.00	3,996.20
CI-2004	35	717.34	989.67	-71.20	80.00	411.70	697.60	3,703.50
NI-2005	35	1,005.34	1,570.31	-10.00	152.10	396.00	834.90	6,749.80
CI-2005	35	1,292.07	2,080.72	-58.00	155.70	474.30	1,268.80	8,049.30
NI-2006	35	1,323.78	1,899.39	45.70	200.20	608.60	1,388.60	8,245.80
CI-2006	35	1,250.04	1,832.41	18.60	170.20	700.00	1,478.80	8,039.40
NI-2007	35	1,507.67	2,340.93	2.00	223.00	787.60	1,336.60	9,636.20
CI-2007	35	1,352.35	2,020.26	-182.00	222.70	731.90	1,326.30	8,423.00
NI-2008	35	1,430.02	2,479.00	-1,650.00	182.40	397.40	1,257.70	9,332.40
CI-2008	35	464.09	1,604.98	-3,660.00	-110.00	244.10	871.50	6,447.00

This Table shows the descriptive statistics for Comprehensive Income (CI) and Net Income (NI) in the years 2004-2008 for IBEX-35 Listed Companies.

Figure 1: Behavior of the Means of Comprehensive Income (CI) and Net Income (NI) in the years of 2004-2008 for the IBEX-35 listed companies.
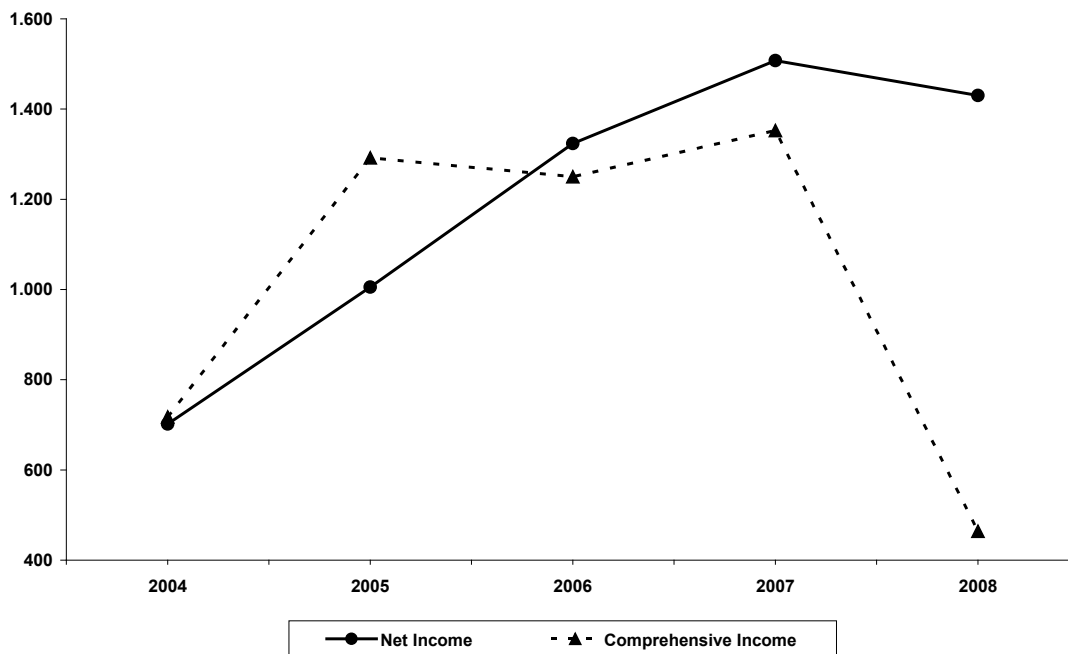
This Table shows the behavior of the means of Comprehensive Income (CI) and Net Income (NI), expressed in million Euros, for IBEX-35 listed companies at the end of each of the years during the period 2004-2008.

Figure 2: Behavior of the IBEX-35 during the period 2004-2008
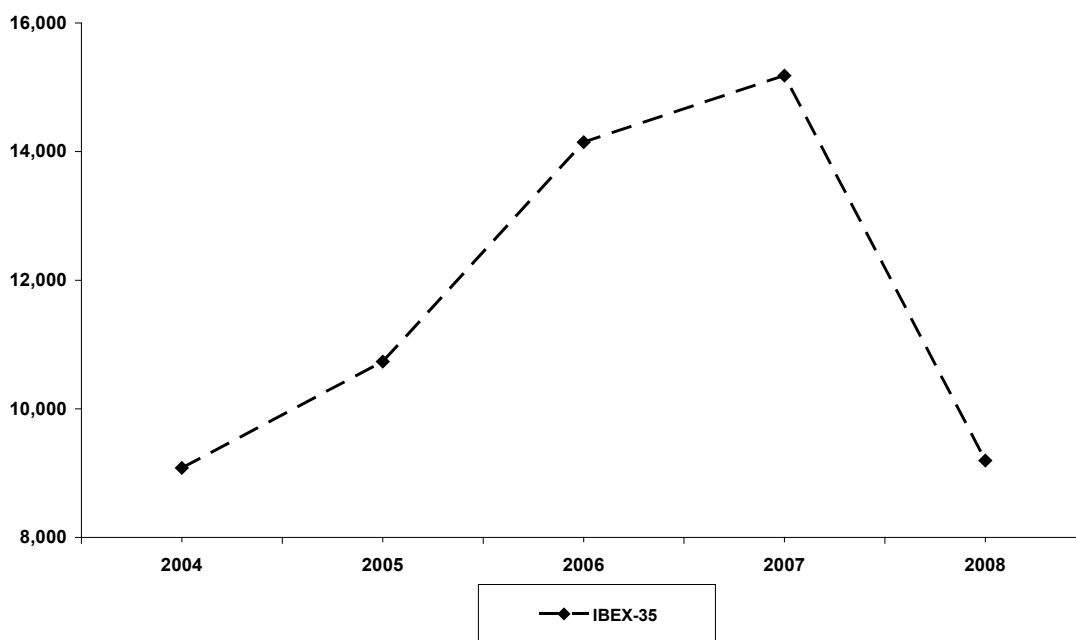
This Table shows the behavior of the IBEX-35 at the end of each of the years from 2004-2008, with values expressed in points on said index.

In keeping with the years of stock market expansion 2004-2007, when a large rise in the IBEX-35 was registered according to Figure 2, net income, and to a lesser degree comprehensive income, also showed noticeable increases as shown in Figure 1.

The serious crisis of 2008 that led to the drop in international stock markets, also severely affected the aggregate of IBEX-35 listed companies, with spectacular losses in the index for that year.

However, it is noteworthy within this context of serious economic and stock market crisis that net income and comprehensive income do not follow the same behavior pattern in keeping with the descriptive statistics under analysis.

Thus, we can see that net income for the aggregate of the listed companies is practically immune to the serious 2008 crisis, whereas comprehensive income causes a spectacular decline in the corporate groups' performance, thus showing a behavior that is practically parallel to the large drop in the IBEX-35.

On the other hand, with the help of the boxplot analysis and as shown in Table 3, we wanted to identify the specific impact of comprehensive income on net income on the corporate groups, based on the extreme scores and outliers registered in each of the years studied.

Table 3: Extreme scores (*) and outliers◦( ) regarding the relative impact of Comprehensive Income (CI) on Net Income (NI) during the period 2004-2008

LISTED COMPANIES	INDUSTRIES	YEARS OF THE PERIOD 2004-2008					Mean 2004-2008
		2004	**2005**	**2006**	**2007**	**2008**	
Abengoa	**Basic Materials, Industry and Construction**	- 35	52	- 74 o	96 *	-166	-5.4
Acerinox	**Basic Materials, Industry and Construction**	- 10	90	- 36	- 96 o	- 397 o	-89.8
Actividades de Construcción y Servicios	**Basic Materials, Industry and Construction**	- 10	16	- 7	37 o	- 68	-68
Cintra	**Consumer Services**	- 60	- 480 *	- 32	- 9,200 *	- 2,528 *	-2,460
Criteria Caixacorp	**Financial and Real Estate Services**	133 *	65	- 16	35 o	- 277	-277
Ferrovial	**Basic Materials, Industry and Construction**	0	- 17	10	- 53 o	- 122	-122
Grifols	**Consumer Goods**	-50 o	129 o	-59 o	- 68 o	12	-7,2
Iberdrola Renovables	**Oil and Energy**	- 37	2	4	-161 *	12	-36
Iberia	**Consumer Services**	2	1	5	- 9	- 838 *	-167.8
Obrascón Huarte Laín	**Basic Materials, Industry and Construction**	- 41	47	- 59 o	- 21	- 180	-50.8
Sacyr Vallehermoso	**Basic Materials, Industry and Construction**	71 o	- 14	- 29	- 13	- 118	-20.6
Telecinco	**Consumer Services**	- 89 *	0	0	8	0	-16.2

*This Table shows the extreme scores (*) and outliers◦() for the IBEX -35 listed companies regarding the relative impact of Comprehensive Income (CI) on Net Income (NI) for the period 2004-2008, measured as [(CI – NI) / /NI/]·100. In this formula, we had to take absolute value in the denominator so that the sign effect would not distort the reality of the studied relative impact.*

The extreme scores, which appear in Table 3 marked with an asterisk (*) are defined as scores that are greater than 3 box lengths away from the upper or lower edge of the box. The outliers, which are noted with a circle (◦), are defined as scores that are between 1.5 and 3 box lengths away from the upper or lower edge of the box.

We see that a significant number of corporate groups, practically 35% of the sample, show extreme scores and/or outliers for at least one year of the five-year span, with a number of negative values, some of which are remarkable. This generally denotes the noticeable negative impact of comprehensive income on net income, especially for a year of such serious economic crisis as was 2008.

Once the statistics that describe the net income and comprehensive income behavior for the study sample and period have been analyzed, along with their association with the IBEX-35 behavior, we will now

perform the corresponding comparisons which will ultimately determine whether there are statistically significant differences between both types of result and, if any, in which specific years.

In first place Table 4 shows the negative, positive and tied ranks, along with the means and sums of ranks in the net income and comprehensive income comparison for each of the years studied.

Table 4: Ranks of Wilcoxon Signed-Rank Test

	N	Mean Ranks	Sum of Ranks
Negative Ranks…..……………….........….……	21[a]	15.00	315.00
NI-2004 Positive Ranks………………………………..	13[b]	21.54	280.00
CI-2004 Ties……...…..…..……………………….....	1[c]		
Total………..…………………………………..	35		
Negative Ranks…..……………….........….……	8[d]	11.38	91.00
NI-2005 Positive Ranks………………………………..	25[e]	18.80	470.00
CI-2005 Ties……...…..…..……………………….....	2[f]		
Total………..…………………………………..	35		
Negative Ranks…..……………….........………	16[g]	23.31	373.00
NI-2006 Positive Ranks………………………………..	18[h]	12.33	222.00
CI-2006 Ties……...…..…..……………………….....	1[i]		
Total………..…………………………………..	35		
Negative Ranks…..……………….........….……	24[j]	18.56	445.50
NI-2007 Positive Ranks………………………………..	10[k]	14.95	149.50
CI-2007 Ties……...…..…..……………………….....	1[l]		
Total………..…………………………………..	35		
Negative Ranks…..……………….........………	26[m]	19.85	516.00
NI-2008 Positive Ranks………………………………..	8[n]	9.88	79.00
CI-2008 Ties……...…..…..……………………….....	1[o]		
Total………..…………………………………..	35		

a. NI-2004 < CI-2004; b. NI-2004 > CI-2004; c. NI-2004 = CI-2004; d. NI-2005 < CI-2005; e NI-2005 > CI-2005; f. NI-2005 = CI-2005; g. NI-2006 < CI-2006; h. NI-2006 > CI-2006; i. NI-2006 = CI-2006; j. NI-2007 < CI-2007; k. NI-2007 > CI-2007; l. NI-2007 = CI-2007; m. NI-2008 < CI-2008; n. NI-2008 > CI-2008; o NI-2008 = CI-2008. This Table shows the sums and means of the ranks in the Wilcoxon Signed-Rank Test for Comparison of Net Income (NI) and Comprehensive Income (CI) for IBEX-35 Listed Companies in the years 2004-2008. These ranks will be the reference for the comparisons shown in Table 5.

As the comparisons by difference are performed with net income (NI) as minuend and comprehensive income (CI) as subtrahend, a positive rank evidently denotes a higher value of the first on to the second and vice versa.
Since a clear predominance of positive ranks is found only in 2005, and very slightly in 2006, the number of corporate groups for which comprehensive income (CI) exceeds net income (NI) is higher in these years only.

However, as a consequence of the strong negative impact of comprehensive income (CI) on net income (NI), negative ranks as well as their sums and medians largely exceed positive ranks in the years 2004, 2007, and especially in a year of serious crisis as was 2008.

The behavior of the positive and negative ranks that we have just analyzed lead to statistically significant differences between comprehensive income and net income in the years 2005, 2007, and 2008, with $p < 0.05$, particularly in 2008, with $p = 0.00$.

Table 5: Contrast Statistics for the Wilcoxon Signed-Rank Test

	NI-2004 CI-2004	NI-2005 CI-2005	NI-2006 CI-2006	NI-2007 CI-2007	NI-2008 CI-2008
Z	-0.299[a]	-3.386[b]	-1.291[a]	-2.530[a]	-3.736[a]
Asymp. Sig. (2-tailed)	0.765	0.001	0.197	0.011	0.000

a. Based on negative ranks. b. Based on positive ranks. *This Table shows the contrast statistics of the Wilcoxon Signed-Rank Test for Comparison of Net Income (NI) and Comprehensive Income (CI) for IBEX-35 Listed Companies in the period 2004-2008. As we are working with a 95% confidence level, the test's significance for each year is determined by p < 0.05.*

Given this empirical evidence, we can state that comprehensive income has a significant impact on net income in three of the five years studied, and especially in 2008, when there was a serious economic crisis and drop in the Stock Markets.

On the other hand, it is worth mentioning that Sousa's work (2008a) with a sample of ninety-two Spanish companies listed on the Madrid Stock Exchange —instead of the select group of IBEX-35 listed companies studied in this research— also evidenced statistically significant differences in the impact of comprehensive income on net income, specifically for the years 2004-2007. However, as we are proving, our research provides additional empirical evidence as it takes into account the crisis effect.

Likewise, Sousa and Carro (2009a), who worked with a different sample over a different period, looked at 136 European companies listed on the New York Stock Exchange and NASDAQ during the period 1999-2004, and they found a statistically significant impact of comprehensive income on net income for the years 1999, 2001, 2002, and 2004.

Taking into account the empirical evidence found in our research, as well as in the aforementioned studies, the statistically significant differences found in a large number of years for different samples and time periods are mainly due to the consideration of the new elements comprised in comprehensive income, namely the unrealized gains and losses in available-for-sale securities, adjustments associated with derivatives and cash flow hedges and certain foreign currency translation adjustments. This implies a much broader perspective that is more in tune with market reality than the traditional net income.

Therefore, a measurement of corporate equity performance shows the market impact much more clearly, as happened with the current crisis, if an all-inclusive concept of income is used as opposed to the more traditional net income measure. This also provides more information for users and particularly for investors, who are considered as primary users.

CONCLUSIONS

Comprehensive income is increasingly gaining importance as an indicator of corporate performance, especially with the revision of IAS 1 by the IASB in 2007. Thus, we are witness to a configuration of corporations' profits that is much more in tune with market reality than other measurements of profit such as the more traditional net income.

We have empirically studied the impact of comprehensive income on net income within the context of these trends in international financial information, using as a reference the corresponding consolidated information of the select group of Spanish IBEX-35 listed companies for the period 2004-2008.

When performing the contrasts with the Wilcoxon Signed-Rank Test, we find statistically significant differences between both ranks for the years 2005, 2007, and 2008 as $p < 0.05$, and specifically for 2008, with $p = 0.00$.

Given this empirical evidence, we can state that comprehensive income has a significant impact on net income in three of the five years studied, and especially in 2008, when there was a serious economic crisis and drop in the Stock Markets.

Therefore, it is now evidenced that the market impact is shown much more clearly if comprehensive income or an all-inclusive concept of income is used as opposed to the more traditional measure of net income, as has happened with the current serious crisis. This in turn provides more information for users and particularly for investors, who are considered as primary users in the English-speaking accounting models towards which the accounting models of the rest of the world are leaning.

Lastly, the empirical evidence provided in our research may entail another element to add to the current debate in international accounting literature and regulations [EFRAG-ICAC (2006), Cauwenberge and Beelde (2007), IASB (2009) and FASB (2009), among others] regarding the need for alternative measurements of corporate performance, such as comprehensive income, which is distant from the historical cost accounting model and represents a reference that is much more in tune with market reality than the traditional net income.

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RISK MANAGEMENT, ESSENTIAL CONDITION FOR ENSURING ORGANIZATIONS BUSINESS CONTINUITY IN THE CURRENT FINANCIAL CRISIS CONTEXT

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ABSTRACT

In the current financial crisis conditions, the economic environment is marked by deep uncertainty surrounding the activities of organizations. If the manager's intuition can help good management of simple and repetitive processes, it proves insufficient for the complex processes taking place within organizations. Organizations are not closed systems, they operate in an often hostile environment of uncertainty which should not be ignored. In this turbulent environment, implementing effective risk management process and developing business continuity plans enable managers to deal with these uncertainties and overcome the threats facing organizations.

JEL: L20, L30, M16, M40

 KEYWORDS: risk, risk management, business continuity plan, internal audit.

In the current financial crisis context, the economic environment is marked by deep uncertainty surrounding the activities of organizations. In this turbulent environment, implementing an effective risk management process and its continuous improvement allows managers to deal with these uncertainties and overcome the threats facing organizations. If the manager's intuition can help good management of simple and repetitive processes, it proves insufficient for the complex processes taking place within organizations. Organizations are not closed systems, they operate in an often hostile environment of uncertainty which should not be ignored. Facing difficulties, many obstacles and unwillingness of investors, may diminish the sense of initiative, they are known cases where managers of firms in difficulty abandon fight opting to liquidate the business, without trying one of its maintenance through business continuity plans.

The main problem with the current financial crisis was caused by the fact that investors desired obtaining higher returns, believing that the risks are controlled. In business, getting a higher return means you take more risks. The situation is difficult, having an economic domino effect. Multinational companies tend to move in geographical areas with cheap labor, risking the loss of outlets markets. There is also a risk normalization of crisis, from accepting the situation and going to consider that the normal occurrence of similar situations to those that generated the crisis.

State intervention became a reality, as essential in managing the crisis and restore confidence. Everyone agrees with the need to reform the financial system and economy, uncontrollable as per the ratio of the real and the speculative economy. Emergency measures consisted in strengthening the fundamentals of the system to prevent them from collapse. At the same time there is a distinction between decisions taken by various governments. England opted for partial nationalization of banks in difficulty, the state became co-associate with enhanced control capabilities, the State has funded banks in France, and Germany relied on re-launching investment but also consumption. In addition to these policies, governments are directly involved in business management counterparties, the meaning of state powered back in business. While each government tries to save its economy, and enshrines the most of this resource, international solidarity is gradually dissipates, relatively recent events confirm this claim. We consider the conflict between Great Britain and Ireland on British resident deposits in Irish banks (Ciocoiu N. (2008).

Temptation of governments to engage in the financial system is very high. Governments that have borrowed large sums of money banks are often the main shareholder, being tempted to dictate pricing policy. However, significant loans to the private sector during the global financial crisis have obliged many governments around the world. They may not have the funds to solve public problems. With extremely limited public resources, many governments are facing major difficulties in solving the pressing demands for public services. Many public sectors around the world have limited budgets to be provided to cope with growing demand for health and social services required of an aging population. According to a recent survey by Deloitte, this had as its objective, financial management in government: the transformation of the state enterprise through better financial management, 48% of global public officials consider that their organizations lack the capacity proper financial management. The Deloitte study, which gives a new perspective on global finances of more than 200 government departments from 28 countries, identifies inadequate risk management as one of the many challenges facing the financial departments of the public. For example, more than half of the officials who participated in the study acknowledged that in their organizations the power to audit their financial statements is at a level equal or below the basic level accepted as a benchmark in the financial sector. Slightly over one fourth of respondents reported that their organizations have advanced capabilities for identifying, managing and reporting of financial risks.

"According to our study, only 29% of respondents say their organizations have the capabilities to have passed the basic level in risk management", states study author William D. Eggers, Global Research Director, Public Sector. "This increases the probability of error and can mask the actual financial status of an organization".

In this context one must see the internal audit as an activity that allows obtaining a true picture of the internal reality of the organization in whole or predefined structures or processes. Internal audit helps the organization to achieve its objectives by assessing, through a systematic and methodical approach, its risk management processes, control and governance of the company, making proposals to strengthen their effectiveness. The ultimate objective of the audit process is to improve information used by the results to interested users ("Good Practice Guidelines" 2008).

Professional standards of I.I.A. 2100-1 place risk management as a major responsibility of the internal audit activity, as having the responsibility of power quality assessment of the risk management process. In the absence of such a process, internal audits can help create a process of risk management and control to enable risk management, without getting involved in the decision to implement it. Although important progress has been made in implementing an effective risk management process, however, is a long way to go until it can be said that all public sector organizations have an effective risk management approach as a central in the daily work of the organization.

The ability of organizations to manage risks, can be sustained and supported by government organizations that manages risk according to organizational procedures, decisions solid support necessary changes. Although it is the least visible part of the management system, decision making is the main engine. Decision is essential to maintain and develop the organization as a prerequisite for any action. Running organizations involves complex activities in which decision making is the foundation. One can not speak of good or poor management of the organization without according attention to decision making. The organization must respond to unexpected events that can occur both inside and outside the environment, which involves developing courses of action. Not only negative but also positive effects are pursued (e.g. opening of new opportunities which involves risk taking), all of which are presented in a complete form to decision makers. The entire existence of an organization is marked by numerous decisions, most of them taken in conditions of uncertainty and risk. Preparing and making managerial decisions require knowing the state of implementation of previous decisions and also the functionality and compliance processes. Achieving these goals is managed through the verification of specific research activities, which

give a true state of their organization structures and processes. Relevance and applicability of real-time decisions monitor their implementation, provided a competitive environment, often hostile, requires appropriate methods and techniques to provide the manager with full information on economic and financial situation of the organization. Organizing an effective risk management process is a necessity for organizations wishing to operate in an environment where manager's knowledge of information on potential risks, allows taking actions to prevent negative effects and making better decisions. Implementing a risk management requires time and resource consuming, but these efforts are warranted, in time, by creating early risk warning systems, optimizing internal processes and increasing efficiency and value creation.

To reduce the impact of risks from current financial and economic situation, enterprises, from the private sector but also the public sector, should develop means of analysis and risk management. Evaluation and monitoring of risks important decisions became inevitable stages of decision making in large public or private organizations. Globalization of markets, development of information and communication technologies and the internationalization of cultures caused great changes in the world. All these changes took place against a background of great uncertainties and risks that bring new challenges both in the public and private sectors ("Commission of the European Communities-Revision of Internal Control Standards and Underlying Framework" Brussels, 2007).

In business, the risks are complex and multiple, being speculative. Entrepreneurs assume certain risks in business at the start, but also during its course. The capacity of organizations to address risks, depends on awareness of risk, how risk reporting processes are implemented and developed. The key element for measuring the success of risk management within the organization is the outcome of these processes, but this does not mean taking into account only the losses but also the opportunities lost. So, a balanced assessment of the organization's ability to cope with risks involves an analysis of what worked so wrong, but of what worked well, to see if losses meet the organization's risk appetite or if they take advantage of the arose opportunities.

Risk management in the businesses, is a structured approach that involves strategy and processes, human resources, technology and knowledge. To adopt an appropriate risk policy is necessary to first assess the risks taken. Accountability makers involve a rigorous analysis of both the financial aspects but also legal, technological, cyclical aspects. In the current situation, regulators have an important role, they must assume responsibility to review the methodology used in the risk management process. Regarding market risk, it is clear that the methodology used should be amended to include an analysis of the behavior of markets in the extreme (Hillson, D., Murraz, R., 2006).

In the public sector, risk management is a process of growing naturally but there is a procedural framework, knowledge-related elements and processes that do not guarantee an appropriate method of treatment of risk within the organization. An effective risk management requires an organizational culture that supports an integrated approach to identifying and managing risks throughout the organization. Risk management can be a part of planning and decision making and governance of the organization.

An important issue relating to government organizations and risk management strategy is related to ensuring business continuity. It is possible that one may not materialize into a disaster. However, the probability component of risk requires us to manage uncertainty. Uncertainty can maintain long-term competitiveness and continuity of resources over time. This notion of continuity over time could be a natural response of deep crisis that forces us to walk and reinvent the trust and use the means to build.
Risk assessment requires the organization to understand the operating environment, constraints and threats that could result if the activity ceases (Manolescu, A., Mironescu, A., Matei, I., 2008),. The result of such a process requires the organization to develop business continuity plans in those areas deemed

necessary to maintain business. The objective of business continuity management process is to provide resources to support important activities where they may be affected by any events with destructive effect. Following a study by researchers in the field, the following items addresses to business continuity:
- Business continuity policy must be part of the organization's governance and risk management policies;
- Business continuity plans and processes help maintain activities in a contingency situation with destructive nature;
- Reporting incidents;
- Continuity of awareness and learning process.

Business continuity plan means all devices designed in a planned way and then implemented to ensure, according to various scenarios of crisis and after evidence of serious failures in the conduct of business critical processes, the continuity of these processes under the same conditions of volume, deadlines, and quality, compatible with legal, professional and economic enterprise.
The main objective of business continuity plan is to meet promises to customers that mean the commitments made by the company towards customers. Managers should be aware that in reality is to perform all business commitments to all partners and stakeholders who have helped building the business: investors, financial organizations, the public, employees, suppliers, customers. This objective being achieved, the business continuity plan will have the following purposes (Provi-Risk, 2009):

1. The most important aim is to ensure the maintenance company, minimizing financial impact, legal and material losses. Achieving this goal involves two aspects: mastery required security knowledge to ensure continuity of business by continuing production and acceptance of the lowest levels in a crisis.

2. Without regard to a crisis, business continuity plan is designed to promote the conquest of new markets providing clients' interests. Well designed business continuity plan has multiple advantages:
a. disseminates the concept of hierarchy in business activities;
b. productivity growth as less important processes will be addressed;
c. improving the means of production because they are more reliable in the business continuity plan;
d. a permanent concern of employees to work, their vulnerability and exposure to risks.
Regarding the relationship between risk management and business continuity plan, most specialists recognize the complementarities of these processes, while highlighting differences regarding:

Methods:
- Risk Management: Risk analysis;

- Business continuity plan: Analysis of the impact.

Parameters used:
- Risk management: Probability and impact;

- Business continuity plan: Impact and time.

Type of incident:
- Risk management: All types of events classified by type of risk;

- Business continuity plan: The events that cause business interruption.

The scale of the event:
- Risk management: All event costs;

- Business continuity plan: strategy to deal with incidents provided that threatens the survival of the enterprise.

Framework:
- Risk management: The main risks that may affect the objectives;

- Business continuity plan: It focuses primarily on incident management exceeding in most business skills.

Intensity:
- Risk management: All events, regardless of intensity;

- Business continuity plan: rapid and unexpected events.

Source: Good Practice Guidelines 2008 -Business Continuity Institute
Business continuity plan is a residual risk management tool, methodology based on methodological approach, and anticipation that characterizes the risk management process. This process calls for a structure for risk management, geared especially to the banking sector, being very sensitive to the risks to which it is exposed.

Develop a business continuity plan is a necessity caused by factors existing within the organization but also by the regulators of markets. First we have the customers whose purpose is to ensure that no key service will be interrupted brutally. Then we have investors whose objective is to delineate exposure to major risks. Finally we mention the shareholders who claim an effective business continuity plan to limit exposure to risk and control costs involved in implementation of this process. These constraints imposed by shareholders and investors in the governance of companies are a strong reason to prepare a set of best practices that go beyond existing regulations (Popescu N. 2004).

Business continuity management involves constraints, because it has a profound impact on the enterprise. The first obvious constraint is that related to the standardization of production means to enable interoperability. Business continuity plans involve high additional costs necessary for staff training, simulated critical situation, in order to overcome the risks that policy makers can not control (KPMG, 2008).
In most organizations there is a business continuity management plan, and the responsibilities and roles are clearly assigned and articulated. Business continuity plans should be based on an assessment impact, taking into account a critical assessment of the system. However, many organizations have still many problems to solve in order to ensure a well-developed, tested and documented business continuity plan. Although most organizations have an adequate business continuity plan, however they must supplement it with plans to support all sectors of activity that take place within the organization.

With regard to public sector institutions, these by their nature are required to maintain business continuity existing accounting rules are the means of ensuring transparency and reflecting how they are run.
In Romania, the introduction of risk management is comparatively recent. The role and importance of risk management in achieving organizations objectives is clear, but the implementation of this new management system in Romanian organizations is at an early stage. The complexity of operating environment in Romanian organizations, major challenges that they face today have increased the level of perception of risks. Although most managers realize the need for risk management, however they have a reduced attention towards creating systems to identify potential risks.

In connection with this case, Bill Bowman, coordinator of the Department of Audit and Deputy Senior Partner at KPMG Romania, commented: "One of the major risk is that public sector managers await the arrival of the crisis before taking action. But it might be too late and the only viable solution would be to make drastic cuts, painful, within public services. There is an alternative - to plan now radical changes in how public services provided to stabilize the situation and try to ensure continued funding of the most important public services."

Within full economic crisis that threatens many sectors, organizations should review their strategy facing its reinvention of new economic models needs to secure the future. In this context, the organization of effective risk management and development of business continuity plans is the solution for organizations wishing to operate in an environment where manager's knowledge of information on potential risks, allows taking actions to prevent negative effects and making better decisions.

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INTANGIBLE RESOURCES AS DETERMINANTS OF THE ACCELERATED INTERNATIONALIZATION OF THE JALISCO's SMEs.

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ABSTRACT

The aim of this research is to analyze the internationalization strategies followed by Jalisco's SMEs, and in particular to identify cases of early internationalization, looking for to deepen in the processes that allow the SME to operate in international markets, and in how it obtains and manages its key resources. For it we developed an analytical frame based on the resources-based view of the firm (RBV) and on two internationalization models, the Uppsala and the Born-Global, with the purpose of to allow the analysis of different typologies of internationalized SMEs. An interesting finding is that the accelerated internationalization is not an exclusive behavior of technology intensive or highly innovating companies, and that is possible to find born-global SMEs even in mature and traditional environment, thanks to the control of strategic intangible resources like the experience and relational capital of managers.

JEL: F23; M16.

KEYWORDS: Resource-Based View, Intangible Assets, Born-Global companies, SMEs.

INTRODUCTION

The present enterprise environment is characterized by a constant evolution in the technologies of production, information, communications and transports, by the fall of the walls and borders, the opening of new markets and the homogenization of the same and a greater mobility as much of the human capitals as financiers. This forces the companies, as much already established as those that are in formation process, to reflect on the form to make business and how of taking advantage of the prevailing conditions in a global context. However, and in spite of the economic and social importance of SMEs and the possible benefits that can provide the internationalization, just a minimal amount of the Mexican SMEs have internationalized some activities of their value chain. SMEs in Mexico represent most of the industrial structure (99.3% of the national companies are SMEs), in addition, generate the 88,9% of the jobs and contribute approximately with 36.3% of the total Gross Domestic Product (GDP), nevertheless, only around the 2,5% of these companies exports some part of their production (INEGI, 2009; SIEM, 2009).

LITERATURE REVISION

From the Eighties it has been emphasized that the origin of the enterprise success is determined by the possession of a competitive advantage that makes possible the obtaining of excess profit; understanding the competitive advantage as the capacity of the company to equip to its products or services of key attributes in the purchase decision of its clients objective who their competitors cannot imitate, situation that allows him to acquire a surcharge without losing quota of market or to enjoy lower costs.

Nevertheless, to count on a competitive advantage is not sufficient guarantee of the success; in addition it is still needed that this one is viable, in the long term. In this sense, so that a competitive advantage can be the base of the success of a company must own certain characteristics: to be valuable, rare, difficult to

imitate and difficult to replace (Barney, 1991) and must correspond with the preferences of the consumers of the objective market.

But, how can the company construct and maintain its competitive advantage, and how can uses this advantage in foreign markets? A suitable base to respond to these questions is the resources-base view of the firm (RBV) which indicates that, in turbulent times and of great changes as much in the technology as in the needs of the clients and the industry, the sustainable competitive advantage of the company must rely on the resources and capabilities that this owns.

Thus, the international performance, like a manifestation of the enterprise success, can be conceptualize mainly like a strategic answer, conditioned by the internal factors which the company posses (its resources and capabilities) (Valenzuela, 2000).

The phenomenon of the internationalization has been studied during several decades by a high number of investigators from different theoretical perspective. Nevertheless, between the investigators consensus does not exist on the most important characteristics to analyze and to explain the phenomenon of the internationalization (Welch & Luostarinen, 1988), reason why we can find manifolds theories that approach this phenomenon, each centered in one or several partial aspects of the same (Gallant, Galende & González, 1999; Vázquez & Vázquez, 2007).

For the present investigation we explored two possible answers of why and how the internationalization of the SMEs: the Uppsala model, whose presents the internationalization like a gradual and evolutionary process that follows the stages: not to export, to export of sporadic form, to export regularly via agents, to organize a commercial network to export and to settle down abroad, each one of these stages supposes a greater implication and commitment of the company (Johanson & Wiedershein-Paul, 1975) and the Born-Global approach that arises as a result of the existence of increasing number of companies, mainly SMEs, that present the basic characteristics to no longer begin international activities of a gradual and evolutionary way, as they suggested the traditional internationalization models but jeopardizing an important amount of resources since the foundation of the company (Oviatt & McDougall, 1994; Rialp, Rialp & Knight, 2005).

The presented theoretical frame we can come off the hypotheses of the investigation. First of all, we have:

H1: The possession of unique and valuable resources, of character mainly intangible, that support the competitive advantage will determine the strategy of internationalization and the exporting performance of the SME.

On the other hand, following theoretical the model exhibited, we have the following hypothesis:

H2: The internationalization of the company is reached following an evolutionary footpath, characterized by an increase in the resources it jeopardize, that requires of time and learning.

H3: The SME is able to export a significant proportion of its products to diverse countries since its foundation or in its first years of life thanks to its capacity to identify opportunities, their networks and relational capital and to the previous knowledge of its manager about foreign markets.

METHODOLOGY

We use a mixed methodology, in first term we applied a quantitative strategy (correlation analysis using a data base result of a survey applied to 56 managers of internationalized SMEs. The correlation coefficients are calculated between the variables: (1) average percentage of exports with respect to the

total sales; (2) total number of countries in which the company is selling its products; (3) number of total clients whom the company has in foreign markets and (4) maximum level of internationalization reaching by the company and other 17 variables related with the internationalization models presented before) and later a qualitative methodology (case study designed and orchestrated following the methodology raised by Yin (2003a, 2003b) applying the triangulation principle, for the contrast of the compiled information), in both cases, applied to companies of Jalisco, Mexico.

RESULTS

The correlation analysis show us that the variable with greater relation whit exports on total sales is that the internationalization has been adopted like positioning strategy, which also happens in the number of countries in which it operates the company and the number of clients who has abroad. This is indicative of which when the company considers as an objective reaching better competitive position and develops a strategy around this objective, the results of the internationalization tend to be better than when the exit to the foreigner occurs by extern situations, which agrees with the expositions of the born global approach.

Another factor of importance was the use of the Internet like a tool of businesses, which is a significant also in the number of countries in which it operates the company and in the number of clients who has abroad (where not only it influences like a tool for the sale, but also for the purchase). For the number of countries in which the company has presence, it emphasizes the importance of the company's relational capabilities (international alliances and suppliers, besides the agreements of R&D).

Finally, with regard to the level of international operations reached, we found that the aspects related to the management of the personnel become very important (performance evaluation and qualification) what implies that the know-how of the personnel is of much importance to obtain a greater internationalization (what also is reflected by the importance that gains the educative level of the director of the company).

Although the obtained results do not represent forceful evidences to accept or to reject the hypotheses of this investigation, they give an interesting view of the phenomena according with the raised models, being favored the expositions of the accelerated internationalization.

In the other hand, *the case study* was realized in "Metropolitans candies", a company located in Guadalajara, Jalisco, in the West of Mexico. At the request of the company managers, the information that could lead to the identification of themselves or of the company has been modified. If the reader wishes majors details about the case, contact with the authors. This is a median company with 240 employees, created in 2004, although the founders, the brothers Raul and Roberto Guzman Montes (Commercial Manager and Operations Manager, respectively), initiated their learning of the candies business since 1952, when their parents, Jose Guzman and Martha Montes, started a small and artisanal manufacturing candy company. In this business the Guzman brothers learned the techniques and basic processes of production and formed relations of friendship with some suppliers and clients.

The evidence revealed that the company has followed an accelerated internationalization process, as raises the born-global model. This, because of the company started exporting after two years of birth and they have stayed and inclusively increased their participation on the foreign markets, going for a 3% of its total sales in 2007 until more than 11% when we realized this investigation. Thus, it is necessary to identify the most important resources for the internationalization, using the born-global theoretical framework.

Vision of the managers with respect to the course that must follow the company: we could identify the search of the foreign markets like an objective from the same formation of the organization.

Previous experience in foreign markets: The evidence corroborates, that the previous experience of the managers/founders has a very positive impact in the potential to realize early exports.

Commitment and dedication of the managers with the internationalization: although the interviewed people indicated that a very serious commitment of managers with the exporting activity exists, nevertheless the lack of more aggressive campaigns of penetration to new markets or the practically null investment in publicity abroad causes that the evidence in this sense is not conclusive.

Importance of 'personal' and/or 'between companies' networks: The evidence showed the decisive paper that has meant for Metropolitan Candies the contacts that the Guzman brothers established in their parents company with suppliers, clients and inclusively governmental authorities.

Knowledge of the destiny market: with respect to this variable there were no evidences of which they have contributed of significant form in the internationalization of the company.

Differentiation of the product and/or technological innovations: the company cannot be defined like a highly-innovative; however in has developed some small innovations, for example the line of products BioSalud (caramels, trowels and confectionery oriented to health care) which has led to the differentiation of its products.

After all the previous one the H3 hypothesis, because can be accepted was forceful evidence that so that the company manages to penetrate in the markets foreign of accelerated form it is of great importance to count, with a differentiated product, with an ample relational capital and a directive equipment with knowledge of the external market is able to obtain the accelerated internationalization.

CONCLUSIONS

Companies internationalization seems to be a natural destiny in the present economic context, and this is a process that has effects, positive or negative, in all companies without concerning their size or geographic location or even if they are unconscious of such situation. In the case of the SME, this incursion in foreign markets it is more complicated, given his limitation in resources, nevertheless, exist cases of companies of this type that have obtained these incursions of successful way. In this sense, a model for the analysis of this type of organizations that combines the postulates of a model of evolutionary internationalization and one of internationalization considers here accelerated, with an approach using the RBV.

The obtained results indicate that the phenomenon of the born-global companies is not exclusively reserved to industrial sectors with an intensive use of technology or to the sector services, with an elevated use of the knowledge. In fact, a company in a traditional sector and that even counts on an artisan component, as is the candies one, seems to lodge to companies that can be catalogued within the group of international new ventures, to fulfill great part of the descriptive factors of this phenomenon; this is possible by the control of the company of some unique and valuable intangible resources, like the accumulated experience of the managers in the international businesses, the inter-enterprise and personal networks that have been able to construct, a constant search of the innovation and generally, and the relational capital which the organization has accumulated.

The following steps in this investigation must be directed towards the empirical revision of multiple cases of SMEs, of diverse sectors and sizes, that have managed to enter to international markets and to stay in them, and the design and application of a questionnaire that allow us to use a more sophisticated quantitative technique, in order to look for a possible theoretical generalization of the results, which at the end, could lead to the design of mechanisms for the replication of this type of successful experiences.

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LABOR MIGRATION IN THE GLOBAL ECONOMIC RECESSION - CASE STUDY: ROMANIA

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ABSTRACT

As a global phenomenon driven mostly by some individuals' financial reasons, labor migration is strongly affected by the current economic recession. Romania is not a major destination country for immigration yet, but it is rather a country of origin. The current crisis could negatively impact the national economy, due to the shortages in the financial remittances of the Romanian emigrants abroad. This article presents the possible consequences of the economic recession on the migration flows, in the destination countries and the countries of origin, with special references to Romania.

INTRODUCTION

Driven mostly by financial reasons, migration is negatively affected by the current global economic recession. The phenomenon should not be underestimated by a country like Romania, which has more than 10% of its population (two million people) working abroad (IOM, 2008).

The current crisis negatively affects the economies of the Western European countries which are a destination for the Romanian emigrants, such as: Italy, Spain, France, U.K., and Germany. This could trigger their return home, taking into account the lack of economic opportunities or the absence of social assistance for those who work illegally. The economic crises are known to negatively affect the circular migration.

Though there is no reliable information regarding Romanians' intentions to settle down abroad, it is believed that most of them decided to work abroad for a fixed-term period. In the current scenario, the specter of the recession can force them to return, putting an additional pressure on the Romanian economy which faces an increasing unemployment rate.

Migration generates turbulences on the labor market both in the destination and the origin countries. The illegal migrants have to suffer the most since they cannot receive social assistance benefits after losing their jobs. Locals' anti-immigration feelings are increasing since they fear losing their own jobs to the immigrants who are usually cheaper. The consequences of the economic crisis on migration depend directly on the nature, the depth and the duration of the recession.

CONSEQUENCES OF THE ECONOMIC CRISIS ON THE MIGRATION FLOWS

Factors Responsible for Migration Flows in Destination Countries

For most of the migrants the decision to migrate is purely economic (Papademetriou, 2009). This is based on their perception that in the destination country they can take advantage of superior social and economic opportunities. If the economies of both the origin and the destination countries are deteriorating, their decision to migrate stands, since they pay more interest for the better conditions

offered in the destination country. Despite the Romanian Government fears that all the Romanian emigrants will return and exert pressure on the labor market, only those who were badly affected came back home. They took into account the benefits of free accommodation in their own houses they left, the support of their relatives and the money saved abroad which can buy more in a country with a lower cost of living such as Romania.

Most of the Romanian emigrants chose to stay abroad taking advantage of the better economic conditions in Germany, Italy or France, comparing to the ones in Romania. The worst affected Romanian immigrants were probably the constructors from Spain, since this sector was negatively impacted there. Still, there is a lack of jobs in the construction sector in Romania, which suggests that they did not come back from abroad in large numbers. Romanians will probably return only if the Romanian economy grows faster than the European ones for a couple of years and incentives will be offered by the Government. This may happen if the government adopts a proper strategy in this regard while facing a shortage of labor in different sectors of the economy. Even in the recent booming years of the Romanian economy, known for shortages of personnel in construction and textile industry, Romanians did not return home.

Another factor that generates migration flows is the ratio between demand and offer for jobs in the destination country. During the last years, Spain and Greece faced a large shortage of labor in the construction sector which attracted numerous immigrants. The current crisis affected exactly this sector, which poses a great pressure on the labor market. For Romania, which is interested in developing major infrastructure projects, the return of its emigrants could be an advantage. Until recently, the infrastructure developers in Romania were forced to employ immigrants in order to finalize their projects.

Romania is a country less exposed to migration flows due to restrictive immigration legislation and complex bureaucratic procedures. The work authorizations are granted based on a very small annual quota. The quota for 2008 was 15.000 work authorizations, while for 2009, the number decreased drastically to 5000.

Factors Responsible for the Return of Emigrants in the Origin Country

The main factor in emigrants' decisions to return to their countries is the situation of the economies in both the country of origin and the destination country. If the economy in the origin country is badly affected, the return is highly improbable.

The migrants' intentions to settle for good or just to stay for a while in the destination country play an important role in their decisions to return home in face of an economic downturn. If their intentions were just to work for a while in order to earn more money, then they most probably will return sooner (Manolescu, A., Mironescu, A., Matei, I., 2008).

The decision to return takes into account the following factors: the importance of the immigrants' families and social connections in their origin and destination countries; the time spent abroad (the shorter the time, the higher the chances to return - the case of most of the Romanians who chose to migrate recently, after Romania became a EU member on January 1st, 2007); the cost of return (Cassarino, 2008) – which is low for the Romanians living in EU; the eligibility for obtaining social assistance (Papademetriou, 2009).

Migration Flows Affected by the Economic Recession

The unskilled immigrants are very much affected by the current economic recession since the costs for return are higher for them compared to the skilled immigrants (the higher the cost of return and the longer the distance from home, the weaker their intention to return).

For Romanians working in Western Europe the costs of return are low, since there are many low-cost and quick options for transportation. Some European countries such Spain decided to offer financial incentives in order to encourage immigrants to leave, but they did not deliver. Only 1.4% of the immigrants accepted a certain amount of money for returning to their country of origin (Latin American Herald Tribune, 2009).

Such decisions cannot affect Romanians since they are members of European Union which guarantees their access on the labor market. Moreover, unlike non-EU immigrants, they are not registered at the border, so they could go back any time.

Though the destination countries wish to ensure that jobs go to their own citizens first, particularly in times of recession, migrants will still be needed to fill jobs and contribute to economic growth and development. Since most of the developed countries are facing with ageing and declining populations, migrants should be part of the solution and not of the problem. (Swing, IOM, Migration, 2009)

Highly skilled immigrants are most probably to return to the origin country in case of losing their jobs. The phenomenon will be more evident for singles and those who did not develop close social relationship in the destination countries. This category benefited of higher wages, which can facilitate their return.

Individuals working in social and medical fields are less vulnerable to economic cycles. Romanians who activated as nurses or social workers will not be forced to return by the current economic circumstances.

Economic recessions did not have a negative impact on the highly skilled immigrants even in the past. They always managed to find new jobs in other areas related to their experience.

The illegal immigration is closely related to economic cycles. Deepening of the income gap between the developing and the developed countries will generate new migration flows from the poorer to the richer states. Therefore, in the current situation, most of the developed countries will ensure a better surveillance of their borders in order to stop illegal immigration.

The immigrants acting in humanitarian field or the family members of the residing immigrants will not be affected since their decision was not based on financial reasons. Romania can take advantage of this opportunity by simplifying the immigration procedures for family reunification. This can stop the labor immigrants from sending remittances back home to support their families. It will also increase governmental revenues through collecting more taxes for various expenses and education taxes paid by the immigrants' family members.

Student immigrants are very sensitive to economic conditions and exchange rates in both the origin and the destination country (Massey, 2003). The stock exchange downturn in developing countries known as large providers for immigration students (India and China) generated a cut down in the number of foreign students in universities from US or Western Europe (Lasanowski, 2007).

The economic crisis could be an important opportunity for Romania to attract more students since the education fees are very low comparing to other countries. In this regard, authorities should simplify the procedures for obtaining the right to study in Romania, which currently last six months. Moreover, since many foreign students come to Romania to study medicine, where Romania has a large deficit of medical staff, the government should encourage their staying after graduation by appropriate means.

The current intra-European migration started from Eastern Europe and it was encouraged by the free movement of persons after the EU enlargement. Eastern Europeans immigrants are sensitive to the

economic cycles and they could decide to return home during the recession. Since the situation in Romania deteriorated more than in Western Europe, most of the Romanian emigrants will decide not to come back, since they will not benefit of better job opportunities at home. Others who own houses or who can rely on the support of their relatives, families or their own savings could decide to come back and benefit of the lower cost of living in Romania.

Probably the most affected Romanian immigrants are the ones who used to work in the booming Spanish sector of construction. In the absence of other job opportunities they could come back and add pressure on the labor market. If the governmental programs for infrastructure will receive a green light, then they could be easily absorbed in the highway projects.

We can say that the longer the crisis the tougher the consequences for migration will be. Once the economic recession passes, the migration flows will start all over again based on the demand from developed countries; the demographic changes all over the world; the international competitiveness; and the magnet effect of other immigrants on their acquaintances back in their own countries.

THE CONSEQUENCES OF THE ECONOMIC RECESSION UPON THE IMMIGRANTS

Though more competitive, mobile and open for changes than the locals, the unskilled immigrants are the first ones to lose their jobs (Davis, 1996), especially since they usually depend on a single employer. During economic declines, their already low salaries are becoming even lower, while they are the ones who first lose their jobs (Dustmann, 2006).

The immigrants who work illegally are not eligible for social assistance and therefore they will have to rely on their own savings or support from their families during the recession.

THE CONSEQUENCES OF THE ECONOMIC RECESSION ON THE ORIGIN AND THE DESTINATION COUNTRIES

Despite many reports on the issue, there is no real proof regarding the way the presence of immigrants affects the locals' incomes or their jobs (Migration Policy Institute, 2008). Intuitively it could be said that the impact of immigration affects the labor market due to a higher demand for jobs and a higher labor competitiveness because immigrants are cheaper. In practice, this does not happen because immigrants face disadvantages during recession, and they change their jobs more often, being considered less reliable than the locals (Dustmann, 2006).

The circular migration of unskilled workers manifest in the opposite direction during recession: the emigrants return to their countries. This could be the case with many Romanian emigrants, but it is hard to make a clear picture in the absence of the Border Police registrations which were waived for the Romanian citizens following the EU accession. The only reliable data could be obtained only through research.

During periods of economic difficulties, politicians are more interested in underlying the negative effects posed by the presence of immigrants on the labor market and the social life; therefore increased social tensions and conflicts with the immigrants can be anticipated in all major destination countries. From the fiscal point of view, if the immigrants lose their jobs during the recession, the budget revenues should reduce. In practice this does not happen since a part of them work illegally. It is hard to asses the fiscal consequences of migration on the economy.

In Romania, though the immigration flows can be controlled, the main problem that the government should deal with is the return of the emigrants who can exert more pressure on the labor market. It is for

the Romanian authorities to decide how to approach this phenomenon in the current economic recession, but it should be known that apart from difficulties, a crisis can offer an equal number of opportunities for the economy.

CONCLUSIONS

Human and labor migration has the potential to enhance economic development - among both the migrants and the locals in both destination and origin countries.

The outcome of this phenomenon can be sometimes adverse, and therefore there is scope for significant improvements in policies and institutions at the national, regional and international levels (UNDP, 2009).

The immigration laws in most of the countries need scrutiny since migration can be a tool for human and economic development. These laws should focus on liberalizing and simplifying regular channels for migration; ensuring basic rights for migrants; reducing transaction costs for migrants financial remittances; making migration an integral part of the national strategies for economic development.

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ENVIRONMENTAL DAMAGES VALUATION – EXAMPLE OF CENTRAL EUROPE REGION

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ABSTRACT

There are many approaches to valuating environmental damages caused by anthropogenic and, especially, industrial activity. Methods of monetary valuation come from market valuation, valuation via real and hypothetical behavior of citizens or other methods of non-market valuation. Another option is to express status of environment in physical units and transforming to uniform base in form of aggregated indicators. Aggregated indicators are often used for evaluation (e.g. statistic-analytic methods, like regression analysis, cluster analysis, etc. and statistic-descriptive methods like experts' decisions, efficiency frontier method etc., Petri nets can be also used). Transfer of result from other conditions is also possible. The article presents results of long-term monitoring and examination of environmental damages in polluted area in Central Europe with utilization of market valuation and aggregated indicator of environmental quality. Advantages and disadvantages of selected decision-making techniques are also discussed.

JEL: Q51;Q56;Q01

KEYWORDS: Environmental damages, monetary valuation, region, Central Europe

INTRODUCTION

Valuation of environmental damages in certain region is a very complex task and quantification in monetary form covers only a part of total environmental damage. Even though many workplaces all over the world are engaged in the problem, transfer of results is, because of heterogeneous conditions, quite difficult. Complex valuation cannot be elaborated in one step, processing means approaching classification in steps and evaluating separate parts in more details. Purpose of evaluation is very important. There are a few different approaches, but the knowledge of changes in environment is vital.
Despite quite high quality knowledge of partial impacts of industrial activity on individual elements, synergic impacts of more than one pollutant, or more generally – causes, are not fully explored so far. Also very frequent event is cumulation of impacts distributed over a time period or delayed effect of pollutants. These cases cause evaluation risk, which consist in complicated relations within the environment.

APPROACHES TO ENVIRONMENTAL DAMAGES VALUATION

While valuating environmental damages, we cannot assess only economic aspect of the manifestation, but it is also important to consider multilateralism of damage manifestation and to estimate even non-economical damages.

More complex foreign approaches observe damages mainly caused by energetic resources (ExternE 1998, Wicke 1993 and others); in the field of environment the most elaborated is methodology of air pollution damages and in the field of harm on inhabitants it is the methodology on health damage.

Given problem needs us to observe not only absolute changes in environmental utilities, but in the batch-response sequence it would be preferable to express changes as incremental revenues, utilities, observed for discrete time period. Recognition can be done based on comparison of current or expected utilities

while external conditions are changing (industrial activity influence, national environmental policy intervention etc.) In literature (Pearce 1989, Garrod 1993, Kramer 2003, Callan 2004, Bateman 2004, Cherry 2008) we can find various concepts which result from valuation of quality of environment as a sum of utility value, possibility value and optional value. Each of these values can be, with actual knowledge state, estimated by using various methods. Basically the techniques used for evaluation in terms of economy can be divided into two categories: those, within which we can find a damage trend or evaluate through various costs categories and those, for which we have to seek for alternative solution. It is vital not only to express utility value, but also non-utility (possibility, optional values and others). There are many examples described in available literature, how we can economically evaluate even with significant risk and uncertainty.

RESULTS OF SELECTED REGION OBSERVATION

For a long-term observation we selected the Pardubice region in the Czech Republic, which is heavily populated and which belongs to one of most burdened regions due to high concentration of industry and heavy traffic. A combination of various methods was applied to evaluation. We tested methods: aggregated indicator (Říha 1995, Hrach 2006) of environmental quality between 1975 and 2005, analytic method of market estimation of damages and WTP method were applied to the given problem.

Environmental quality valuation of Pardubice region by TUKP aggregated indicator

We used multi-criteria analysis published by Říha (1995). Total environmental quality indicator (TUKP) in region was determined (Šrámková 1990, Obršálová 1999), further own calculations) for years 1975, 1985, 1995 and 2005. The indicator is constructed as aggregated with criteria transferred to non-dimensional expression and with utilization of their weights.

Following criteria were selected:

1. Harm to resources, 2. Environmental conditions, 3. Hygienic conditions, 4. Civic amenities, 5. Sulphur dioxide concentration, 6. Dissolved oxygen, 7. BSK_5, 8. Dissolved substances, 9. Suspended solids, 10. pH, 11.Regional water potential, 12.Water erosion, 13. Burdening with waste, 14. Burdening with noise, 15. Regional urbanization, 16. Recreational value of the region, 17. Green vegetation area, 18. Historical and cultural aspects, 19. Natural artifacts and protected areas, 20. Woods area, 21. Appropriation of land, 22. Oxygen production rate by natural ecosystem. 23. Cultural-educational significance of the region, 24. Terrain energy.

Table 1: TUKP for Pardubice region:

Year	TUKP	Year	TUKP	Year	TUKP	Year	TUKP
1975	182	**1985**	169	**1995**	196	**2005**	225

Calculation results describe environmental quality improvement.

Despite reservations against aggregated environmental quality indicator we recognize the advantage that we can include incomparable and TUKP can thus be criterion for decision making processes. In this case of region check the trend is apparent. Similar calculation can be used for evaluation of various regions.

Example of environmental damages calculation in selected region – analytically for individual environmental components

Standardized mortality in Pardubice region on account of respiratory diseases is 56.1 from 100000 citizens. Proportion of citizens in productive age is 40%,   in pre-productive age 30 %. From 20% (to 50

% (Obršálová 1999) can be accounted to air pollution. Value of Statistic Life (VOSL) was taken as a base and data about measurable damages published in Germany (Wicke 1986), studies were used. Calculations oriented on subsequent sequence dose – response is based on immissions. Estimation of proportion of industry on damages on health resulted from practice of disperse studies application. Each model expression is but only approximation of reality with usage of simplified input factors. When estimating damages caused by increased morbidity and mortality, we can – according to Garrod (1999)   start from the sum of emissions of individual pollutants. There is necessary to be very careful when transferring the results considering the fact that valuation of individual damages of health is not very transferable (contingent method - willingness to pay).

In our conditions it was impossible to start from statistic data from insurance companies, as standard statistics do not provide such data. Foreign research result from knowledge of damage equation and also from treat costs. In Germany (Wicke 1986) calculations resulted from number of citizens unable to work due to respiratory disease and from earnings of gainful workers.

Database land-cover CORINE was used as a base for estimating *damages on agricultural crops*. Calculation of losses was elaborated based on data on cultivated crops, harvest area, total harvest and yield per hectare according to Methodic guideline of Ministry of Agriculture No.1892/92-310 about Assertion of Damages Caused by Exhalations on Agricultural Land. According to data collected in sulphur dioxide and dustiness survey from last years they do not even reach I. exhalation zones (but for exceptions). Moreover, refunds are not even assessed to the big polluters. The same methodology was used to estimate losses on livestock caused by immissions.

Usage of measurable values gained from similar surveys in Germany assigns lowered values to the results. (Wicke 1986). We can use methodology of property evaluation for calculation of agricultural area depreciation. These methodologies adjust agricultural area depreciation caused by immissions load.

Woods within Pardubice region belong to endangered zone B and C. Zone B consists of wooded areas with significant emission load and with better territorial conditions, where damage on a full-grown spruce increases by one degree in 6 -10 years, immissions load is 30-60 μg $SO_2.m^{-3}$. Endangered zone C consists of forests with immissions load, where damage on a full-grown spruce increases by one degree in 11 to 15 years, immissions load 20 -30 μg $SO_2.m^{-3}$.

Conclusions of this survey point to ambiguity of SO_2 impact on damage of forests. Evaluation of defoliation and color changes does not give out specific symptoms (Pretel 1994). Changes related mainly to assimilation apparatus of woods are caused, besides pollution emission – which have primary effect, also by a number of other factors. Forest ecosystems react on changes with certain delay. As well as foreign researches evaluate influence of immissions on wooded areas, our conditions also do not allow to explicitly presume existence of imminent relation between   level of damage to the forests and concentrations of sulphur and nitrogen oxides (concentrations in both the Czech Republic and Europe drops). This problem is also related to the manner of assertion of amends for damage to forests, where dependency between pollutants and level of damage caused by certain polluter is ambiguous and calculation itself is problematic.

Damage estimation linked to *nonproductive function of forests* could be also problematic, because it would require a special and expensive survey for example by contingent valuation method. A part of the total damage amount is also damage from extraordinary measures (fertilization, drainage, replacement vegetation reconstruction), also damage investigation expenses (monitoring, bio-monitoring, experts evidence). In order to specify the estimation, we analyzed foreign resources. These sources indicate that prevailing opinion is not to express damages in numbers, considering the ambiguity of impact of immissions (Switzerland, Canada). Nevertheless, data from former Federal Republic of Germany, which

served as a base for analytical estimation, were published. This estimation is certainly very inaccurate. It results from measurable damage, does not consider territorial differences and differences in immissions concentrations.

Information on volume of constructions, installations etc. in territorial classification by type for *damages on property* were not available. Therefore, we had to start from measurable damages from similar foreign studies, which specify damages according to pollutant concentration and according to number of population (presumption – higher population density means higher value of total property in the area). Studies designate measurable values caused by corrosion. Alternative or additional representation of claim amount of real property would be possible by means of hedonic price. That price requires research of vast statistic sampling.

National veterinary service regularly observes residues in free-living animals. Only data on extraneous substances in animals within the Czech Republic was available. This information is important for many reasons. *Damage on animals* with some market price can be evaluated by loss caused by mortality or diseases. Other animals have to be evaluated in a nonmarket way (contingent method).

Damages caused by polluted water need to be categorized by pollution of source (surface, underground) or by application (drinking, supply, industrial, feed-water etc.). These damages have never been expressed in numbers. Eventual contamination can be evaluated with consideration of: cost of clearing (according to valid material costs, wages expenses and other calculation items), induced substituted costs (bottled water expenses etc.) and contingent technique of source evaluation (willingness to pay) and estimate of the price reduction. The territory concerned has specific problem – surface and underground water contamination as a result of chemical industry. Research center of ameliorations and soil protection conducted in 1996 detailed comparative research of influence of the Labe water usage for irrigation and its influence on vegetable and livestock production. Several alternatives of fodder and feed-water were determined. Conclusions of this survey show that inundation of water of Labe is much greater source of contamination than irrigation water from the Labe. That means that until the old burdens of Synthesia Company – chemical industry are eliminated, inundation of water of the Labe will keep increasing volume of pollutants in soil and it is necessary to monitor the volume of pollutants in soil, produced eatables, territory (Directive 2004/35/CE) and fair game.

More damages, which are not counted in, are damages caused by *loss of visibility*. Foreign sources state damages per one kilometer of lost sight and person a year. This data was obtained by contingent method; transfer to our specifications would be, however, problematic.

CONCLUSION

There are many problems with environmental damages estimation. Data collection interferes with statistic reporting, where statistic unit often does not cover territorial allocation needs. Gained values are often within quite a broad interval. Also the results of measurable damages transfer expressed in different currencies and years are very inaccurate. Transformation of evaluation means, according to Navrud (2007), application of monetary evaluation from partial studies to alternative or secondary decision making, often even in conditions geographically varied from original study elaboration. Within transferability problem we have to see: distortion caused by varied conditions with nonmarket valuation, transfer in different units, for example in case of damages to fishing caused by acid rain the dose-response function is determined by mortality units of fish population and utility is based on changes in behavior (reduced number of fishery days). Studies are often based on determination of average utility not in marginal schedules and they do not use methods transferable in area, region and population characteristics. Population characteristic can be significantly varied from demographic and social characteristics.

Transfer of results can be based on expert evaluation or meta-analysis. Caution on cultural diversity (e.g. frequency of seeing a doctor, preference of uniqueness and irreparability of certain goods etc.) is recommended. In spite of that fact the literature stated several examples and recommendation, how the results of individual studies can be used for different conditions.

Bateman (2006) discuss possibilities of contingent valuation and they designed criteria, when the result can be transferred to another environment: nonmarket goods have to be the same as those, which were originally evaluated; the population also has to be identical in both areas. In both cases it should be the same utility value measuring. These criteria are very strict.

A problem can also arise, when contingent method ex-post is used for evaluation and data is transferred to ex-ante situation, because aversion to risk can significantly influence opinion of the examined and also expected consumer surplus. Transferability of results with usage of statistic testing has been, during last years, developed on many workplaces.

Significant portion of uncertainty exists also in external costs determination. Uncertainty can have its cause in more than one scope: statistic uncertainty, uncertainty resulting from decision about used model (application does not have to be suitable for data, for which the model was designed and calibrated), uncertainty caused by incorrect selection or decision (for example aggregation of damages according to population groups with various preferences, discount rate choice etc.), uncertainty within the processes which will take place in the future (environmental protection trends, health, economic, social development which necessarily influence damages estimation etc.), human errors.

Dose-response approach cannot be used in all cases. For example determination of expenses associated with increased noise is – by means of this method – very difficult. It is impossible to express losses of production from all branches in numbers. Sometimes the losses of utility are in consumer sphere, thus easier to evaluate for example by means of individual behavior approach (substitute costs, re-accommodation etc.).

Another important thing is that contributions of individual sources of pollution from the Czech Republic and the world are very varied. While relative distribution of pollution sources from human activities emissions in the world (Onida 2004, EMEP/EEA 2009) was: traffic 50-60 %, energetics 10-15%, industrial technologies and industrial energetics 15-20%, municipal resources 10%, incinerators 5%, in our conditions the distribution is different. The transfer of results problem has gained on significance during last years, mainly considering European legislation and significant expenses associated with original researches.

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CPA'S DUTIES TOWARD FRAUD DETECTION AND REPORTING: TAIWAN REGULATIONS

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ABSTRACT

This paper aims to review CPAs' responsibilities for fraud detection and reporting. It will first explore, through literature analysis and review of the Taiwan regulation, the accounting professions' changing stand toward CPAs' responsibilities to detect and report fraud. In addition, The Taiwan's existing laws and profession promulgations on CPAs' fraud-related responsibilities will be examined and discussed. Finally, through examining the US Sarbanes-Oxley Act of 2002, the impact on Taiwan CPAs' duties in fraud detection and Taiwan government responses to such duties by expectations gap will be examined.

KEYWORDS: Auditor's Duties, Corporate Fraud Regulations, Audit Profession, Taiwan

INTRODUCTION

In Taiwan, the series of corporate failures since 2000, notably Chung Shing Bank and Procomp Informatics, is reminiscent of Enron and WorldCom in notoriety. Their collapse due to management's fraudulent or misrepresented financial statements typically occurs within a very short period of time such that shareholders have insufficient time to respond, resulting in huge investment losses

The question naturally arises: Who is to blame? Responsibilities placed by the Taiwan investing public on CPAs over the veracity and accuracy of financial statements have often been far above what the accountant himself deems he can handle. The claim traditionally made by Taiwan accountants is: "Fraud is very difficult to detect." Some insist this ought to be understandable (Cheng, 2004, Liao, 2006). Taiwan corporate businessmen are especially cunning and expert at camouflaging material they do not want you to see, making it virtually impossible for you to implicate them due to lack of direct evidence. But the public asks, "If you are unable to detect fraud, then what do we need you for?" Accountants rebut by contending that business collapse due to company fraud is corporate responsibility, not accountants', because undetected fraud does not equate to audit failure, and accountants only have to answer to audit failure. But from the point of view of financial statement users, their expectations can not be met, hence the gap persists (Liao, 2006; Ma, 2006a). And this seemingly impossible to eliminate expectation gap fluctuates with ever-changing external conditions- each time a big case involving fraudulent financial reporting erupts, the gap widens. If this gap continues to broaden to the point when public trust buckles, that would signify the start of the breakdown of capital market.

In relation to the audit expectations gap, the CPA's responsibility to detect fraud is probably at its widest when company failures are publicized amid insinuations of fraud and malpractice. This paper focuses upon CPAs' responsibilities for fraud detection and reporting. It will first explore, through historical analysis and review, the accounting professions' changing stand toward CPAs' responsibilities to detect and report fraud. In addition, The Taiwan's existing laws and profession promulgations on CPAs' fraud-related responsibilities will be examined and discussed. Finally, through examining the US Sarbanes-Oxley Act of 2002, the impact on Taiwan CPAs' duties in fraud detection and Taiwan government responses to such duties by expectations gap will be examined.

THE CPA'S RESPONSIBILITIES FOR FRAUD AS REGULATED BY LAW AND PROFESSIONAL GUIDELINE: HISTORICAL DEVELOPMENT

Law

The authorities governing the Taiwan CPAs were the Ministry of Finance and the Taiwan Securities and Future Exchange Committee (TSFEC) before the FSC has established on July 1 2004, which took over the charge of Taiwan CPAs. Three acts are particularly important for the Taiwanese CPAs, namely:
1. the Companies Act
2. the Certified Public Accountants (CPA) Act
3. the Securities and Exchange Act (SE Act)

According to paragraph 64 of the Taiwanese Company Act, the audit of financial statements should be performed by one or more external CPAs. The CPA(s) will be appointed by the general meeting of shareholders. It is mandatory that the CPA is a member of one of Taiwan's CPAs Unions.

Under SE Act's Article 36, any company issuing securities under the Law should announce to the public and register with the Competent Authority financial statements which have been duly audited and certified by a CPA, approved by the board of directors, and recognized by the supervisory committee. This statutory requirement gives CPAs the preferential right to audit the company's financial statements.

The CPA Act, introduced in 1945, also sets management and litigation rules for CPAs. CPAs cannot have any improper conduct or violate or neglect his professional responsibilities in the performance of an audit (Article 17). They should perform their service with due professional care. When conducting an audit, CPAs should avoid Concealing the financial information which they know to be directly detrimental to the right and interest of an interested parties, or making false or improper certification of the financial statements, and Issuing audit report on the financial statements which is sufficient to cause injury to the right and interest of his client or an interested parties, owing to his undue intent or negligence in the performance of their professional services (Article 24).

CPAs who violate any of the requirements ruled in the CPA Act or SE Act or Company Act face one of the following sanctions as a result of the litigation (Article 40 of CPA Act):
1. Warning.
   2. Reprimand.
   3. Suspension of practice for a period from two months up to two years.
   4. Expulsion.

Auditing Standards

In 1984, Taiwan's Accounting Research and Development Foundation (ARDF) took over the National Federation of Certified Public Accountants Association, which was responsible for the development of the 'accountancy profession' and had a number of committees dealing with matters such as education, ethics and peer review before 1984. ARDF has four committees: Financial Accounting Standards Committee (FASC), the Auditing Standards Committee (ASC), the Accounting System Committee, and the Education and Training Committee (ETC).

ASC, resembling the Auditing Standards Board (ASB) in the US, establishes generally accepted auditing standards (GAAS) in Taiwan. The standards-setting process includes problems identification, exposure draft preparation, public hearings, exposure draft revision, and the issuance of standards. Generally, the auditing standards in Taiwan follow those of the US. Before August 2002, the ASC has issued Statements

of Auditing Standards (SAS) 14 and SAS 29 regulate CPA responsibilities for fraud detection, reporting and prevention.

1. Taiwanese SAS 14

Taiwanese SAS 14 has two purposes:
  (1) to distinguish the responsibility of detection for fraud from errors which cause material misstatements of financial statements when CPAs conduct an audit
  (2) to provide guidelines to the CPA regarding the responsibility of considering fraud and error in an audit of the financial statements.

The core concept of Taiwanese SAS 14 is that responsibilities to prevent and detect fraud and errors lie upon company management, however, CPAs should plan and perform their audit works with due care so that material misstatements in the financial statements arising from fraud or error can be uncovered.

Although Taiwanese SAS 14 states that the responsibility for preventing and detecting fraud rests with management, it is the CPA's responsibility to design audit procedures based on the risk assessment, to obtain reasonable assurance that misstatements arising from fraud or error are detected which are material to the financial statements taken as a whole.

2. Taiwanese SAS 29

Taiwanese SAS 29, issued in 1996, deals with the CPA's consideration of laws and regulations in an audit of the financial statements. The number and variety of laws and regulations that may be applicable to an entity can be substantial. It is clear that special knowledge of all applicable laws and regulations is beyond the CPA's normal expertise. Therefore, based on Taiwanese SAS 29, the CPA is not and cannot be held responsible for preventing and detecting non-compliance with laws and regulations. This responsibility rests entirely with management (para 5). An annual audit may act as a deterrent (para 8).

With regard to the responsibility of the CPA for the detection of non-compliance with laws and regulations, however, the CPA should obtain a general understanding of the company's legal framework and its articles of incorporation. Furthermore, the CPA should adopt an attitude of due professional care and professional skepticism with regard to the risk of non-compliance. This is particularly applicable to laws and regulations that have a direct impact on the company's financial statements (para 7).

Since non-compliance with laws and regulations may have a material contingent effect on the financial position of the company, it is difficult to entirely exempt the CPA's responsibility in this respect. On the other hand, whether an act of non-compliance constitutes non-compliance in a legal sense is a legal determination by a court or Competent Authority, which is normally beyond the CPA's expertise (para 11). Based on his general knowledge of the company, its industry, and the applicable regulations, the CPA may consider whether legal assistance and advice is needed under the circumstances.

After obtaining the general understanding, it is the CPA's responsibility to perform procedures that are helpful in identifying instances of non-compliance with laws and regulations (para 13), such as:
  (1) Inquiring of management as to whether the entity is in compliance with such laws and regulations.
  (2) Inspecting correspondence with relevant licensing or regulatory authorities.

3. Promulgations and Legislations after 2006

Taiwan SAS 43 (2006)

On September 1, 2006, Taiwan's ASC, which as mentioned earlier is under ARDF, issued SAS 43- "The CPA's Responsibility to Consider Fraud in an Audit of Financial Statements", effective for audits of financial statement for periods ending on or after 31 December, 2006. Replacing 1987 SAS 14: "Fraud and Error" which has been around for over 20 years, it is now the corporate fraud standard for CPAs in Taiwan.

Rationale

Prior to 2006, SAS 14 is one of two audit standards, the only two in Taiwan, relating to corporate fraud. It has been around for over 20 years. No matter how much Taiwan's corporate enterprises have expanded in scope or complexity, or have undergone how many financial crises, the standards have never changed. In contrast, US has amended their corporate fraud audit standards numerous times. If Taiwan also experienced a similar series of corporate fraud cases as U.S. and if US finds it necessary to amend their audit standards, it stands to reason that SAS 14 must also be antiquated for Taiwan. Thus ASC proceeded in 2005 to revise SAS 14, and on September 1, 2006, issued SAS 43- "The CPA's Responsibility to Consider Fraud in an Audit of Financial Statements", effective for audits of financial statement for periods ending on or after 31 December, 2006. Replacing 1987 SAS 14: "Fraud and Error", it is now the corporate fraud standard for CPAs in Taiwan.

SAS 43 attempts to rectify SAS 14's deficiencies in such areas as fraud definition and CPA responsibilities. Paragraph 2 of SAS 14, in defining fraud as "intentional misrepresentation of financial information", used as illustrations "intentional misuse of accounting principles" and "misappropriation of assets". Yet the word "fraud" as elaborated in SAS 14, refers only to fraudulent financial reporting and not asset misappropriation. None of the its standards deal with assets misappropriation, hence it is inappropriate to use it as illustration.

With regards to CPA responsibilities, SAS 14's Item 4 is even more misleading. It states "... the planning and implementation of audit work is not designed to discover "fraud or error" per se, but (CPAs) should still maintain professional vigilance so that during the audit process, material misstatements of financial information due to "fraud or error" may be discovered".

The "fraud or error" mentioned in the first half of this quote pertains only to that stemming from asset misappropriation. It does not include fraudulent financial statements. Conversely, the "fraud or error" mentioned in the latter half of the quote refers exclusively to fraudulent financial statements and excludes fraudulent asset misappropriation. The same phrase "fraud or error" is used in two different contexts. When dispute arises, CPAs, citing Item 4's front half, claim the audit process is not designed to discover "fraud or error" per se; legal practitioners, on the other hand, cite Item 4's second half and stress that accountants are supposed to maintain an attitude of professional vigilance. Each side has its own argument basis. Therefore, to settle disputes once and for all, SAS 43 got rid of Item 4 and rephrased CPA responsibility as: "carry out audit work according to GAAS, to reasonably ascertain that financial statements overall contain no material misstatements due to fraud or error"(Item 21 first half), and, "to obtain reasonable certainty, CPA should maintain professional vigilance throughout the entire audit process and entertain the possibility that management may have exercised control override" (Item 22), thus clarifying that while CPA *attitude* should be one of professional vigilance, his *responsibility* goes only as far as certifying whether financial statements overall contained any material misstatements.

Besides making CPA responsibility more precise, SAS 43 differs from SAS 14 in these respects:
  (1) Target emphasis shifted from "fraud or error" to just "fraud
  (2) Clarify or alter previous definitions (SAS14 Item2) of such terms as employee fraud and management fraud.
  (3) Uses risk management concept to regulate risk of material misstatements resulting from fraud,

including method of assessment and response to assessment results.

(4) Different interpretation of "professional skepticism"

(5) Not only does SAS 43 contain 90 new provisions, its appendix includes 3 illustrations for handy reference by accountants and CPAs - Fraud Risk Factors Illustration, Audit Procedure Illustration for Material Misstatements Resulting from Fraud, Plausible Fraud Situations Illustration.

CPA Act Amendment (2007)

Rationale

Since its promulgation on June 30, 1945, the CPA Act in Taiwan has undergone nine separate revisions. This notwithstanding, following the rapid development of Taiwan's domestic economy and the concomitant expansion of accountants' official functions and duties, some of its regulations have become anachronistic over the years. Thereupon, improving CPAs' professional environment, bringing CPA specialty and expertise into full play, and raising CPA performance quality - all call for a thorough reexamination and rectification of the CPA Act. Moreover, in an effort to raise overall CPA standards in Taiwan, the Finance Division of the Advisory Committee for Economic Development reached a unanimous decision on August 29, 2001 to invite scholars, experts, and representatives from the business sector, under the auspices of the Treasury Department, to form the so-called "Reform Task Force for Business Enterprises' Robust CPA System".

One significant reform agenda of this task force is precisely the CPA Act amendment draft. The course, direction, and content of this amendment was arrived at through sectional discussions centering around the topic of "Strengthening External CPA Independence & Effectiveness", with input from both the academic and the business world (Huang and Lin, 2006).

Goal A. Establish desirable CPA practice environment

(1) Introduce accounting corporation structure in response to the development of Taiwan's capital market, internationalization of business enterprises, and large-scale trend of CPA firms- endowing them with corporation status helps to ensure their interminable operation, and keeps Taiwan in synchronization with international trends.

(2) Expand penalty sentencing regulations to forestall CPAs' reputation being tainted due to offenses committed by a few. The new penalty provisions, patterned after the Security Exchange Act, encompass broader territory ranging from reprimand citation, monetary fines, business closure, to the most serious business establishment permission.

(3) Investigation of accounting firms: This provision allows inspector officials from the Financial Supervisory Commission (FSC) to inspect accounting firms' business and related financial condition. Accounting firms may not dodge, obstruct, or refuse such inspections.

Goal B: Elevation of CPA audit qualities

(1) This amendment added provision that CPAs performing company consulting work or engaged in other non-audit work which could possibly influence CPA independence, may not accept job offers requiring the certification, approval, and validation of corporate financial reports.

(2) CPA business practice suspended if upgrade requirement not met after being notified of deadline by National CPA Association. CPA license registration revoked if business practice not restored after one year's time.

SOX 2002 IMPACT ON TAIWAN'S ACCOUNTANCY PROFESSION

Influenced by circumstances that led to the passage of SOX, Taiwan's FSC began to also take a closer look at the string of fraud cases in Taiwan involving publicly listed companies, this self-examination being an attempt to figure out ways of raising CPA audit standards and effecting a robust accountancy system in Taiwan.

As pointed out in the preceding section, one significant SOX reform is to place in the hands of PCAOB the power of regulating standards formerly handled by AICPA. Regrettably, Taiwan accountancy profession today still has not aggressively pursued the idea of employing an outside regulatory agency such as PCAOB to be its supervisor and overseer. It continues to rely for the most part on Taiwan CPA Association's self-regulatory functions. In fact, one of the highlights of the CPA Amendment Act proposed in 2004 is the fortification of CPA Association's self-regulating functions through the formation of the "National CPA Federation", to set standards for implementation of such critical areas as business activity assessment-evaluation, professional ethics & discipline, so that the investing public may be shielded from losses caused by management fraud or audit failure.

In Taiwan, the current audit standards regulating body is still ARDF. As a foundation, ARDF's limited income derives mainly from selling SAS publications and holding accountant professional training seminars. The pressure of having to seek revenue sources on its own not only hampers ARDF in its standard-setting efficiency, but also renders it ineffectual when it comes to promoting audit standards toward the direction of public good and interest. This is not conducive to the healthy development of Taiwan's accountancy profession. In Sarbox, listing companies share the expenses related to the regulation of accounting and audit standards. Not only is this in keeping with the principle of "users pay, nonusers no pay", the standards so regulated belong to common property and can be freely and widely perused and researched.

How the U.S. is able to institutionalize and legalize the revenue sources of a non-self-regulating organization such as PCAOB is a lesson Taiwan can learn from. Until that happens, Taiwan accountants will not be able to reap the benefits of such an overseeing agency the way their U.S. counterparts do.

In part inspired by the passage of the SOX Act in the U.S., Taiwan's CPA Act Amendment proposals, aside from improving CPA practice environment through the establishment of CPA corporations and the fortification of CPA associations' structure and functionality, also borrows from SOX such ideas as boosting CPA independence and prescribing severer punishments for CPA faults, while adding its own Taiwan-specific regulations on tightening accountants' professional qualifications and continuing education requirements, and prescribing more stringent penalties for unlicensed practitioners and those engaged in illicit accountancy trades.

Most importantly, the amendment borrows SOX's empowerment of PCAOB to conduct inspections of registered CPA firms. The amendment now allows Taiwan's FSC to send inspectors to investigate these firms' business and related financial condition. Accounting firms may not dodge, obstruct, or refuse such inspections.

It is anticipated that the above measures would in the long run bring about a robust practice environment for Taiwan's CPAs, boost CPA firms' interminable operations, raise CPA professional standards, and protect investors' interests, enabling Taiwan to ultimately hook up with U.S. and international auditing standards.

However, just like certain SOX sections are more controversial than others (e.g., 404), some provisions of the CPA Act amendment also sparked more debate than others from among Taiwan accounting

professionals, which dealt with CPA certification requirements and penalty sentencing. In particular, Taiwan CPA Association board chairman Chen Zhao Shen (Economic Daily News, July 15, 2003) argued that the service nature of accountants differs from professionals such as lawyers and architects; accordingly, the responsibility of each towards society should not be weighed equally. That FSC seeks to minimize societal risk through such regulation is understandable, but responsibility should not placed on the shoulders of accountants. "CPAs are not government employees", he continues, "how can they play the role of exposers and whistle-blowers?" It was also pointed out that listing companies' replacement of their CPAs itself is ground-breaking news. Making it obligatory for CPAs to divulge the reason behind their refusing certification is a big setback for the business enterprise in question. They claim this FSC regulation is too theoretical and fails to take into consideration practical implementation difficulties.

Further, CPA Association board member Zhang Wei Zhen (Economic Daily News, July 15, 2003) pointed out that the model this amendment is patterned on was designed for administering listed companies, but over 80% of CPA's do not handle these FSC-related activities; yet now the framework is encased on *all* CPA's - this makes it hard for many small-to-mid scale CPA firms to swallow and accept.

On these two counts I disagree. The accountancy profession is a very unique one in that the one who pays the CPA (business owner) and the one who reaps the benefit of the CPA's certification (investing public) are not the same person. The CPA's role involves public interest - although highly compensated by his commissioner to perform the audit, the CPA can not shirk from societal responsibility towards the audit consumer. Taiwan accountancy profession must give this some thought - while most accounting firms do not handle business affairs of publicly listed companies, nevertheless, can we therefore complacently assume that financial reports of small-to-mid scale businesses have little to do with the general public? As far as the role of the CPA is concerned, I couldn't concur more with National Taiwan ChengChi University accounting professor Ma Siu Ru's analogy when she says: "The CPA's primary role is that of CPA - to tell investors which companies' financial reports are sound. Although CPA Association, in expounding the CPA's role to outsiders, likens it to an 'entrepreneurial *doctor'*, in actuality, only when a CPA serves as administrative consultant to a business enterprise is he a doctor; as CPA, his role is more appropriately that of an 'entrepreneurial *policeman'*." (Huang and Lin 2006)

DISCUSSION

The Taiwan SAS 14 has remained unchanged until 2006. The standard statement only contained 17 paragraphs, and most of it is normative principles, lack of the details of procedures for fraud audit. However, auditing standards with regard to CPA's responsibility for fraud and errors changed. The public at large gave clear indications that they regarded the previous auditing standard as sub-standard. The accountancy profession responded by increasing the audit requirements in an attempt to bridge the expectation gap. On September 2006, Taiwan ASC issued the new SAS 43 under the recommendation by FSC in response of a series of corporate fraud from the year 2000.

CPAs have a responsibility to detect fraud only if the fraud may cause the financial statements to be materially misstated. The responsibility to detect material fraud is not explicitly included in the Taiwan auditing guidelines. However, the Taiwan regulatory bodies and government severely criticised the audit function due to numerous company failures and material fraud cases that remained undetected. However, it is expected of the CPA to issue an CPA's opinion about the true and fair ("fairly presented" in Chinese terms) presentation of the financial statements and results of company operations. It can be referred whether or not CPAs have the responsibility to detect material misstatements of the financial statements due to fraud or errors is questionable.

In the past, Taiwan accountancy profession has allowed a rather significant audit expectation gap to exist (Ma, 2006a), but following the outbreak of the Enron incidents and the passage of SOX, the profession

realized that the price such an expectation gap exacts ultimately had to be shouldered by accountants themselves, so recent auditing standards were designed to narrow such gap. The expanded SAS 43 of 2006, replacing the outdated SAS 14, was one step in this direction. Its main objective is summed up in its title: "The CPA's Responsibility to Consider Fraud in an Audit of Financial Statements". SAS 43 attempts to narrow the investing public's expectation gap as far as the CPA's fraud detection responsibilities are concerned, by communicating to them the following (Ma, 2006b):

"In their audit of financial statements, CPAs have a responsibility towards detecting fraud, but, in the event that they are unable to detect it, CPAs are not necessarily held responsible in the end. Whether or not they must take ultimate responsibility depends on whether they dutifully conformed to Generally Accepted Auditing Standards (GAAS) and were able to present evidence of this conformity, i.e. the audit work paper records. Naturally, circumstances surrounding auditee's commission of fraud are also prime considerations. These include: tactics used, position held, accomplices' degrees of involvement, and, with regard to faking account figures - the frequency, scope, dollar amount, etc".

From its wording, one can readily see that SAS 43 lets accountants assume the responsibility of audit failure; however, business enterprise collapse caused by company management's malfunctioning internal control system is *not* part of that responsibility. By pointing out this distinction between audit failure and corporate failure, SAS 43's intent is clear- to rectify the public's conception, rather, misconception, of the audit function. Thus, instead of aligning audit objectives to public expectations, SAS 43 is designed in a way to manage the expectation gap on Taiwan accounting profession's own terms, as it is widely accepted that one way to narrow this gap is through education and exposure, so that financial statement users and the public do not have an overblown view of the audit function.

As mentioned above, the role played by the accountant during the audit process is that of a watchdog, not a doctor. When a CPA completes his audit report, he is in effect making a *second* declaration (the report itself) to establish the accuracy of the *first* declaration (the one made by company management, namely the financial statements). This he declares to the investing public- he himself is not offering new information, but merely raising the credibility of old information supplied to him. But with more and more complex operating environment and transaction modes, CPAs today really need a deeper understanding and insight into corporate management's motives, circumstances, and tactics when it comes to fraudulent financial statements. An external CPA who understands the special business and operating nature of the client he serves can better design the proper audit procedure and gather the appropriate audit evidence. This has always been a major challenge for Taiwan CPAs engaged in audit work.

The predicament Taiwan accountancy profession finds itself in today is not unique to Taiwan; it is a widespread worldwide phenomenon. Following the 2004 Procomp Informatics fraud incident, the Taiwan government and accountant supervisory agency, no different from other countries' response to Enron, scrambled to restore public confidence in the accounting profession. To four of Procomp's past and present engagement CPAs, the then newly formed FSC meted out its severest penalty: 2-year suspension (FSC 2005). At the same time, it began to call for a serious look into the CPA Act and corporate governance.

Meanwhile, the Taiwan accountancy profession continues to find ways to reduce the expectation gap. Admittedly, some of the suggested measures have already been tried out in other countries. One, for example, involves tightening the internal control system of publicly listed companies, the argument being that, since the role a CPA plays in certifying company financial statements is not one of internal audit, in reality it is not possible for him to offer a 100% assurance of the auditee's overall financial reporting system. The key to financial statements' veracity and accuracy lies in the preparers of these company

documents themselves. If strong corporate governance is in place, the company's board oversees management functions and holds management fraud intentions in check. When the occasion calls for it, board and company CEO can effectively intervene and present authentic company financial statements.

Another suggestion made is to strengthen both Taiwan accountancy profession self-regulation as well as non-self-regulation. To accomplish the latter, an external independent supervisory agency must be established to oversee Taiwan's accounting industry, its powers to include setting audit and accounting standards that align with public expectations. To accomplish the former, Taiwan CPA Association's various committees must not just be comprised of accounting professionals but include distinguished members from diverse sectors of society. Through their involvement, financial statement audit procedures can be made more transparent and public awareness heightened, so that CPAs in their financial audit and standards-setting capacities can, while functioning under a self-regulatory institution, better conform to the principles of what is termed "commonly accepted".

SAS 43, issued in September 2006, has at least been around for over a year. In contrast, Taiwan's CPA Act Amendment, though passed by the Executive Yuan in 2004, was not enacted into legislation by Taiwan's Congress until December 2007, so its effects will not be felt for some time. In particular, under the new amendment, FSC, a governmental agency, is now empowered to send its delegated inspectors to carry on investigations of accounting firms. Ostensibly to put the public's mind to rest that questionable firms and fraud perpetrators will be eventually brought to justice, one might reasonably put two and two together and question whether this might be an attempt on the part of the state to intervene, in the hope that the audit expectation gap may be held in check. Unfortunately, given its brief period of enforcement, barely under a month when this part of the thesis was written, it is too premature at this point in time to assess the amendment's repercussions in this respect. Taking into consideration the unique business and political conditions in Taiwan, and how rapid the political atmosphere in Taiwan can change, especially with the new president elected in March, 2008, only a repeat research study at a later time can actually confirm any of these speculations.

SUMMARY

In relation to the CPA's responsibility to detect fraud, the audit expectations gap is at its widest when CPAs are unable to discover the financial statements fraud or malpractice during their audit. Clamoring cries of "Where was the CPA?" infer that, by failing to discover significant fraud, he could not have done his job properly.

According to the accountancy profession, the auditor's report is the prime reporting vehicle used by CPAs to inform the users of financial statements about the results of the audit. In the report, the CPA included his opinion on the fairness of the presentation of financial statements. This is the public role of CPAs. The CPA has also a private role, the professional responsibility towards the audited companies or the specific groups of users of the audited financial statements. If the financial statements contained material misstatements which may be the result of fraud, the CPA should qualify his opinion on these financial statements. In fact, according to the accountancy profession, the CPA's report is normally issued after the completion of the audit work. If fraud or an illegal act has occurred, the CPA's report may be released too late to establish an early warning. Therefore, a legal early warning system where CPAs have to communicate directly to the government may facilitate the prosecution of potential fraud or illegal activities.

Legislation and professionally promulgated auditing guidelines with regard to the responsibilities of CPAs for fraud in Taiwan were discussed in the paper. It is argued that CPAs have no explicit responsibility to prevent fraud, but it is CPAs' responsibility to detect the material misstatements of financial statements due to fraud. The focus is merely on how CPAs issue an opinion about the true and

fair presentation of the financial statements and the results of the company's operations. In short, the literature review provides overwhelming evidence that what the public wants, the audit profession is not providing.

Unlike the early 20th century placed CPA responsibilities primarily on detecting financial statement errors and fraud within the corporations (Porter, 1997), such responsibilities have shifted to attesting the "true and fair" presentation of the financial statements. Humphrey *et al* (1993) suggested that the changes in CPA responsibilities are "reflective of the conflicting, political nature of a self-regulated accounting profession". The phenomenon of downplaying CPAs' responsibilities by the accounting profession resulted from its pursuit of professional interests and its attempts to manage the interplay between its own interests and any competing public responsibilities and obligations (Humphrey *et al* 1993, Power 1995). This downplayed responsibility seemingly impossible to eliminate expectations gap. If this gap continues to broaden to the point when public trust buckles, that would signify the start of the breakdown of capital market and credibility of accountancy profession.

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APPLICATION OF MULTICRITERIAL PERFOMANCE MEASUREMENT AND THEIR INFLUENCE ON CORPORATE GOVERNANCE– EMPIRICAL STUDY IN CZECH REPUBLIC

Libuse Soljakova, University of Economics, Prague

ABSTRACT

This paper outcomes from empirical research that aim was to verify in the first stage whether companies in the Czech Republic have accepted the idea of "multicriteria conception of performance measurement", relation between non-financial and financial measures, between long-term and short-term, between external and internal, between required results and indicators influencing their achievement. In the second stage the businesses that have accepted this concept have been subject to an analysis in respect of benefits and limitations of this conception.

The questionnaire research has clearly shown a shift from the traditional nearly exclusive orientation of businesses in the Czech Republic to profit or its measurement by contributed capital in order to measure performance by a larger array of indicators. On the other hand financial indicators continue to have a dominant importance and the use of non-financial measures is not at such level, which would be desirable. Companies underestimate mutual relations between particular measures.

It is evident from the results of the research that nearly 90% of companies have established a hierarchy of measures for particular managerial levels. However, a detailed analysis has shown that logical connections between them exist only in half of them (50%). Far worse results have been achieved in connection with indicators of value drivers, which are identified and used only by 20% of companies. According to the results of the questionnaire 34% of companies distinguish between long-term and short-term measures, if we bear in mind also logical connections between these measures i.e. it is not formal differentiation we will get only 27.5% of respondents. Or nearly three quarters of companies (72.5%) have no integrity of long-term and short-term targets, not even at the level of basic measures of performance measurement.

Most of companies consider the application of multicriterial performance measure as performance added. The main indicators influencing benefits of multicriteria approach are transformation of top financial measures of performance measurement to business units . Through detailed analytical structure of the profit in the income statement (distinguishment of the profit and sales of performance) and breakdown of assets in the balance sheet for a specific purpose (distinguishment of assets subject to the process of performance driving) and their consistent connections competence and responsibility for two basic fields of asset (capital) enhancement – responsibility for main business activities and financial and investment activities of the company can be separated.

The effectiveness of used measures of performance management depends on to which extent the set up measures may influence basic indicators of the development of financial management of the company i.e. indicators, which are important for the development and influenceable by the managerial level given. On the other hand, effectiveness of used measures does not depend on their formal form.

The inconsistence and late diagnosis are the main limitation of the multicriterial performance measures.

INTRODUCTION AND LITERATURE REVIEW

Managers select measures, which provide relevant information about basic strategic resources and critical indicators of success. Through company management and measurement of basic critical indicators of success performance of the company is positively influenced. The target of this study is to find how important is the relationship between the importance of performance measures and company performance i.e. whether the measures of performance are mediating variables in the relationship between the importance of strategic resources and performance.

The most important measures of company performance measurement are the financial measures, which enable us to measure the rate of enhancement of capital invested by owners (investors). (Ittner and Larcker - 1995), Lev (2001). Despite the fact that financial measures have been subject to criticism in the last twenty years the target of these discussions is not how to replace these measures but how to improve their informative quality. (Kaplan a Norton -1996) The pros of financial measures are their objectiveness (they are verified by the market) and synthetic expression (they enable us to measure the final result for a company as a whole). Paradoxically these basic characters, pros of financial measures, concurrently restrict their ability for two reasons.

Profit and measures derived there from through which the rate of input (capital, assets) enhancement is measured in the period under review are the so-called output measures ("delayed indicators") (Expert public uses terms such as "delayed indicators" and "driving forces of growth". These terms were used first and specified by the authors of management conception Balanced Scorecard, R.S.Kaplan and D.P.Norton). By means of profit results of previous success and decisions made in the period under review are measured (profit from sale of "existing performance to "existing" customers, assessment of the market position, assessment of the "existing" financial assets etc.). That is why it is necessary to complete the financial measures by other measures, which will enable us to assess and express the so-called driving forces of the future development of the company (leading indicators). These supplementary measures, both of the financial and particularly non-financial should assess causal connections between the development of synthetic financial measures (financial perspectives) and the development in other fields of business activities, in its other perspectives (customer, internal process, learning and growth). Indicators which influence the position of the company in relation to customers (benefit for the customer) may be measured in this way, they enable us to assess the speed, reliability and innovation of internal processes, qualification prerequisites of employees, their loyalty and thus reduce the rate of uncertainty of company future developments. An important idea in the preparation of a system of measures to measure performance of the company is knowledge that unless nowadays the future success in the market can be measured that at least indicators, which influence the success, can be measured.

The aim of empirical research was to verify in the first stage whether companies in the Czech Republic have accepted the idea of "multicriteria conception of performance measurement", relation between non-financial and financial measures, between long-term and short-term, between external and internal, between required results and indicators influencing their achievement. In the second stage the businesses that have accepted this concept have been subject to an analysis in respect of benefits and limitations of this conception.

METHODOLOGY

Empirical research has been done in the form of questionnaires. The questionnaire with mostly closed and spectrum questions has been distributed to a sample of 300 medium-sized companies (50 – 500 employees) having their registered offices in the Czech Republic, which have been randomly selected. Finally questions of 60 respondents have been processed. The sample of companies includes businesses from various fields (See Figure 1). The questionnaire included mostly closed questions while respondents

had concurrently some ´space´ to add their comments and opinions. The results of the questionnaire research have been processed by statistical methods. In the second stage managers have been contacted directly, there were discussions with managers about particular levels of corporate hierarchy.

Figure 1: Respondent Structure According to the Business Area

Respondents structure according business branch
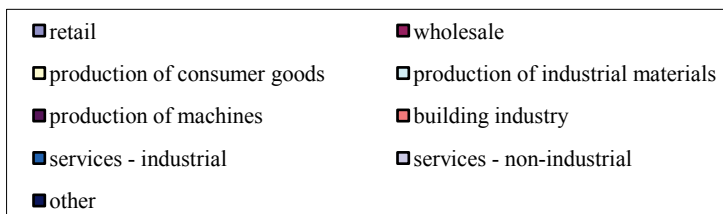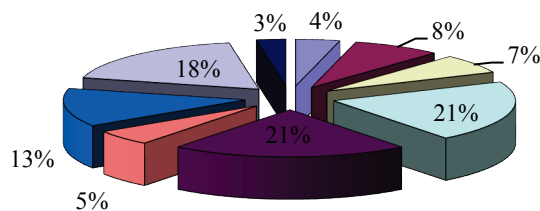
Resource of data for questionnaire research

Development of Hypothesis

The empirical research developed the following main hypothesis:
Hypothesis 1: At the beginning of the 21st century in connection with criticism of financial measures most medium-sized companies have accepted the conception of multicriteria measurement of performance based on interconnection of
- financial and non-financial measures
- long-term and short-term measures
- required results and indicators which influence them

Hypothesis 2: Companies which have accepted the enlarged conception of performance measurement consider it after 5 years of functioning as beneficial and they are successful in achieving the respective performance.

Hypothesis 3: Companies, which have accepted multicriteria conception of performance management, consider inconsistence and late diagnosis of problems as the largest limitaion.

Hypothesis 1:
At the beginning of the 21st century in connection with criticism of financial measures most medium-sized companies have accepted the conception of multicriteria measurement of performance based on interconnection of
- financial and non-financial measures
- long-term and short-term measures
- required results and indicators which influence them

The questionnaire research has clearly shown a shift from the traditional nearly exclusive orientation of businesses in the Czech Republic to profit or its measurement by contributed capital in order to measure performance by a larger array of indicators (Simons - 2000). On the other hand financial indicators continue to have a dominant importance and the use of non-financial measures is not at such level, which would be desirable. The main scopes of problems are connected with the current level and focus of information systems:

The performance measures are particularly oriented to tactical and operating management, which arises from the conception of one year as a basic period for which tasks are determined and fulfilment is assessed. Managers are usually affected by consequences if the fulfilment of annual tasks is not sufficient, which supports negotiations the primary tasks of which is to fulfil operational and tactical tasks and not immediate reactions to changes and development in business environment, which may fundamentally influence the strategic development of the business.

The performance measures are primarily focused on the financial management without sufficient integrity, natural and quantitative characteristics. Mostly the traditional connection of financial information and material activity (expressed usually by the volume and structure of products) is not sufficient. Connection of controlling information with further qualitative characteristics – market position, satisfaction of clients and employees, quality of products is missing. These indicators are measured and assessed often separately without any clearly set up rules of collection and processing and without any connection to financial information of controlling, which may result in a lower rate of reliability and objectiveness of information and particularly to their mutual inconsistency.

The performance measures put the main stress on reasons and responsibility for achieved results and not on indicators, which influence the long-term development, thoroughly analyze results achieved in the period under review by particular product (how particular products ´help´ make profit) and according to the responsibility (who is responsible for the results). However, there is no information about contribution to the fulfillment of strategic targets, taking other particularly the above-mentioned soft indicators into account – quality of performance, satisfaction of clients, market position, satisfaction of employees etc. (Widener - 2004)

The performance measures characterize internal performance of the company and do not assess comparative position in relation to external environment. This is given in particular by the fact that most information is provided in relation to the company itself, analyses costs and prices of products, their development in time, comparison of actual and standard value for a particular company but not their development in relation to external environment and competition. External information often exists separately and similarly as qualitative characteristics they are not connected to the information system of the company.

It is evident from results of questionnaire research (Table 1, Figure 2) that the most utilised indicators for the financial management are financial indicators in absolute terms (in 89.5% of companies, which have filled in the questionnaire). Among these indicators the most used is EBIT (earnings before interest and taxation) (58.73%) while the less used is the EVA indicator (11.1%). These results confirm generally the theoretical conclusions concerning comparison of the informative capability of indicators to measure performance. The EVA indicator is a top synthetic criterion from owners´ position; EBIT measures the internal ability of the company to earn income.

It is evident from the review that companies use in the field of management more indicators in absolute terms (89.5%) than indicators in relative terms (60.2%). The indicators in absolute terms are more understandable and if a concrete activity is assessed they are also comparable in time. Under otherwise

identical circumstances i.e. under given amount of tied capital (fixed assets and working capital in use) both profit and enhancement of contributed capital are higher in absolute terms.

Financial (financial) indicators in relative terms are used less frequently than indicators in absolute terms, only in 60.2% of companies, which have taken part in research. As regards natural indicators, which are used in 34.92% of companies under review, mostly those indicators are used, which measure loyalty of customers (20.63%) and the speed and quality of technological process (17.46%).

Table 1: Relative Frequency of Companies Using Performance Measures

Measures	%
Absolute financial measures	89,50%
EBIT	58,73%
EBITDA	20,63%
EVA	11,11%
Net income after taxes	38,10%
Income before taxes	6,35%
Relative financial measures	60,20%
ROE	39,68%
ROA	28,57%
ROI	19,05%
ROCE	7,94%
ROS	22,22%
Return on expenses	28,57%
Non-financial measures	34,92%
Regarding the market position and customers	20,63%
Regarding the inovation of products	9,52%
Regarding the internal proces (quality, time..)	17,46%
Regarding the satisfation and qualification of employees	12,70%

Data resources for questionnaire research, own calculations

Figure 2: Relative Frequency of Companies Using Particular Measures
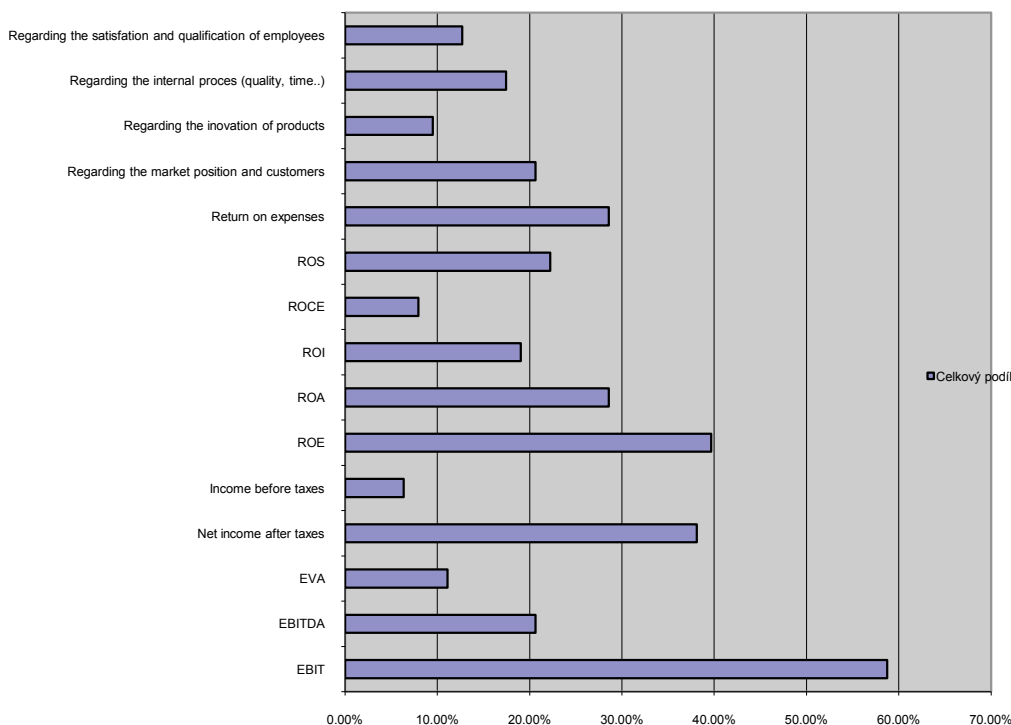
Data resources for questionnaire research, own calculations

The above-mentioned results are also influenced by selection of the sample, which included medium-sized companies. These companies understand their goal: to survive in the competitive environment controlled by dominant players in the market who significantly influence management and manners of medium-sized companies and make sufficient profit and funds, which will enable them to do so. Their management and behaviour are significantly influenced by these dominant entities to manners of which they have to react ad hoc.

A relatively smaller size of the company makes an impression that it is enough to assess a number of non-financial measures intuitively, based on own experience. Furthermore, it is often costly for such companies to assess non-financial and concurrently external measures; their information systems are not so sophisticated to enable it.

Only a small part of companies connects their system of performance measures with seeking factors of financial and performance drivers and casual relationships between them and particularly their specification and "description" by concrete financial measures including their impact on the financial of top performance indicators, profitability of capital.

Finding the chain of relations: reason – consequence that will result in the fulfilment of strategic goals and subsequent implementation of this chain into the company management system is only one of the main BSC ideas. In a simplified fashion these relations can be characterised as set out below:

- Abilities and qualification of employees influence the speed, quality and cost of activities carried out by the company;
- Level of activities carried out by the company influences the ability of the company to supply products the characters and quality of which are accepted by customers fast and thus satisfy customer's needs, have prerequisites for their maintenance and acquisition of new ones;
- Ability to acquire customers and carry out effectively activities is reflected in financial (financial) results.

As regards implementation of BSC efforts should be taken to identify these casual connections, specify further key indicators, which make these relations move, suggest manners and measures of the assessment (Kaplan and Anderson - 2007) and determine both their existing and target levels.

Connections have been identified in research first of all according to the fact whether companies have established a certain hierarchy of measures for particular managerial levels from the top one up to the lowest one and furthermore, whether there are logical relations between these measures. Second, these connections have been assessed according to the fact whether companies identify indicators of value drivers and connect measures to these indicators.

Notwithstanding that there is unambiguously an evident shift to multicriteria access, connection of measures is not unambiguous. Companies underestimate mutual relations between individual measures.
It is evident from the results of the research that nearly 90% of companies have established a hierarchy of measures for particular managerial levels. However, a detailed analysis has shown that logical connections between them exist only in half of them (50%). Far worse results have been achieved in connection with indicators of value drivers, which are identified and used only by 20% of companies.

In the part focused on connection of required results and indicators, which influence them, evidence has been given that comparison of desirable and real results and their analysis is critical are for the financial management of most companies. This analysis is rather made ´technically´ and separately by particular performance, department, market segment, and required results and indicators, which influence them.

They often do not accommodate to the development in the period given and do not provide for connections between particular indicators – seeking driving and casual forces inside the company.
Connections between long- and short-term measures, which have been assured according to the fact whether companies distinguish measures used to measure long-term performance and to prepare long-term plans and budgets and measures used for short-term measurement of performance for tactical and operational budgets and assessment of their performance, and furthermore it has been checked whether there are logical relations between these measures.

According to the results of the questionnaire 34% of companies distinguish between long-term and short-term measures, if we bear in mind also logical connections between these measures i.e. it is not formal differentiation we will get only 27.5 % of respondents. Or nearly three quarters of companies (72.5%) have no integrity of long-term and short-term targets, not even at the level of basic measures of performance measurement.

Figure 3: Balances of Measures
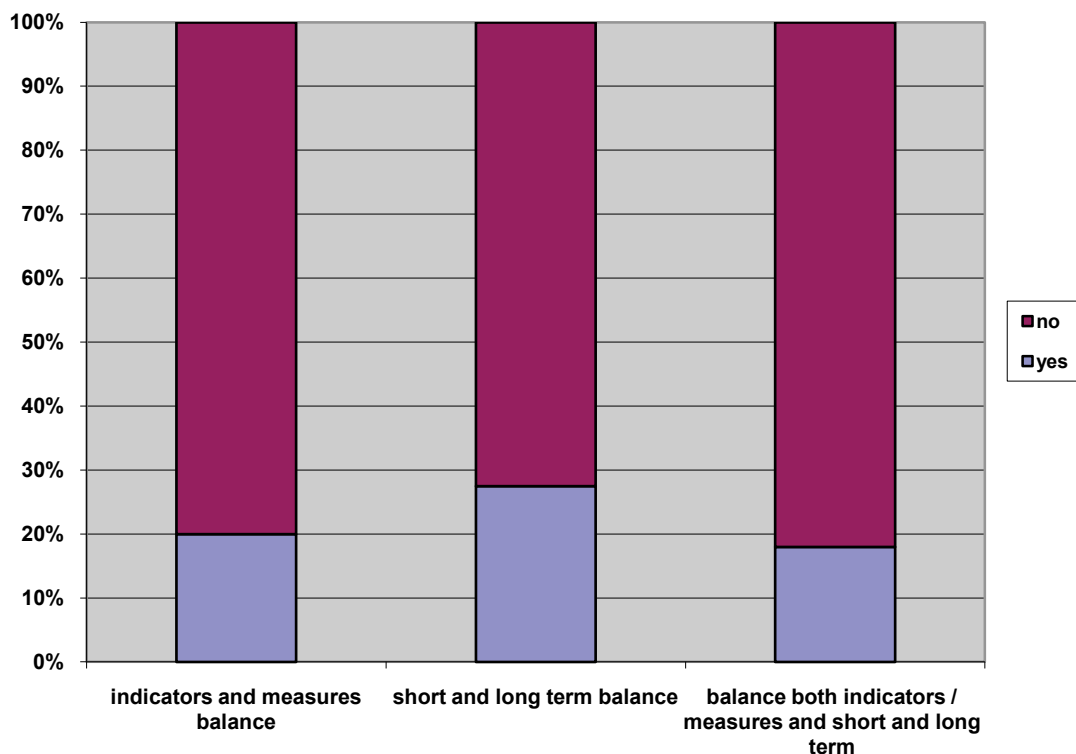
Hypothesis 2: Companies which have accepted the enlarged conception of performance measurement consider it after 5 years of functioning as beneficial and they are successful in achieving the respective performance.

On sample of 8 companies, which have accepted the multicriteria conception of performance (Kaplan and Norton - 2000), experience and benefits of this system have been analysed. Based on information about the method of implementation, providing and use of results we can deduce that:

- 5 of participated companies consider this approach to be unambiguously positive, which contributes to the fulfilment of targets and improvement of performances

- one company has withdrawn from the system, particularly because top management and owner's representatives were not interested
- during implementation of this project two companies changed the owner and substantial changes in the company structure and business activities as well as targets were made so that it is impossible to assess benefits.

The research was made by direct interviewing managers at various managerial levels, from the top management to the lowest levels (in total 60 managers have been contacted). They consider as main factors influencing benefits of multicriteria approach set out below:

First, An important question of setting up measures of company performance management is the method of transformation of top financial performance measures (from the position of owners or top management) to a system of measures for management middle and low level – departments and business units. (Otley - 1999) Through detailed analytical structure of the profit in the income statement (distinguishment of the profit and sales of products) and breakdown of assets in the balance sheet for a specific purpose (distinguishment of assets subject to providing products and services) and their consistent connections competence and responsibility for two basic fields of asset (capital) enhancement – responsibility for main business activities and financial and investment activities of the company can be separated.

Second, criteria of performance management are an important communication tool (Kaplan, Norton - 2000) of management the efficiency of which depends particularly on influenceability of indicators, which are reflected in the development of assessed measures and furthermore on understandability of the method of their determination.

Third, the effectiveness of used measures of performance management depends on to which extent the set up measures may influence basic indicators of the development of financial management of the company i.e. indicators, which are important for the development and influenceable by the managerial level given. On the other hand, effectiveness of used measures does not depend on their formal form.

Positive understanding the criteria of performance measurement decreases with lower level of competence and responsibility of managers. This conception is mostly positively understood by top managers, most sceptical and negative voices come from managers at a lower level, which naturally arises from their positions.

Top management has only limited capacity of their attention for solution of concrete questions; while they select portfolio of measurements, which provide for necessary information how the company is healthy, they give more importance to such measures, which give relevant information about basic strategic resources and critical indicators of success.

The direct question whether they think that the multicriteria system of performance measurement may result in higher performance was positively answered by 48 managers, of 15, and 34 medium and lower (of the total 45 respondents). 38 managers, of which 14 top and 24 medium and lower, have confirmed the allegation that it would be impossible to achieve current results without implementation of this system.

Hypothesis 3: Companies, which have accepted multicriteria conception of performance management, consider inconsistence and late diagnosis of problems as the largest restriction.

The interviewed have identified the following limitations
- Non-consistency of measures 72 %

- Diagnostic not pro-active character 70 %
- Bad understandability and problem of interpretation 48 %
- Problems with reliable and objective determination 32 %
- Insufficient flexibility 30 %

Research confirmed that the inconsistence and late diagnosis are the main limitation of the multicriterial performance measures. It is interesting that in connection with inconsistency managers have spoken about two different consequences. First, inconsistence has also a positive so that it does not route behaviour of managers ´blindly´ in one direction but forces them to seek compromises and rational activity in order to achieve a certain level of all measures. Second, inconsistency may result in resignation of managers to this system because they know that everything is not fulfilled but however much they try they fulfil at least something.
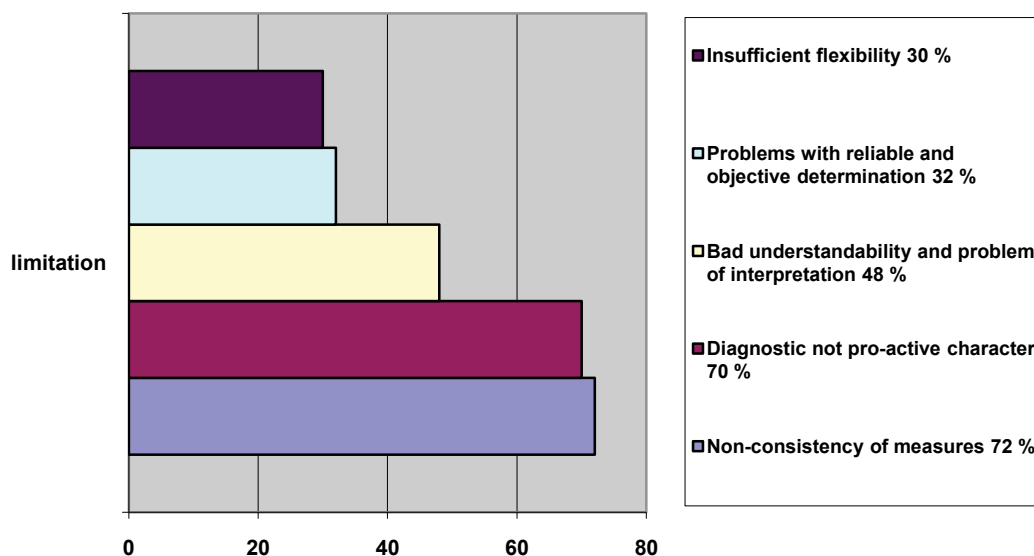
CONCLUSIONS

The questionnaire research has clearly shown a shift from the traditional nearly exclusive orientation of businesses in the Czech Republic to profit or its measurement by contributed capital in order to measure performance by a larger array of indicators. On the other hand financial indicators continue to have a dominant importance and the use of non-financial measures is not at such level, which would be desirable. Companies underestimate mutual relations between particular measures.

It is evident from the results of the research that nearly 90% of companies have established a hierarchy of measures for particular managerial levels. However, a detailed analysis has shown that logical connections between them exist only in half of them (50%). Far worse results have been achieved in connection with indicators of value drivers, which are identified and used only by 20% of companies.

According to the results of the questionnaire 34% of companies distinguish between long-term and short-term measures, if we bear in mind also logical connections between these measures i.e. it is not formal differentiation we will get only 27.5% of respondents. Or nearly three quarters of companies (72.5%) have no integrity of long-term and short-term targets, not even at the level of basic measures of performance measurement.

Most of companies consider the application of multicriterial performance measure as performance added. The main indicators influencing benefits of multicriteria approach are transformation of top financial measures of performance measurement to business units . Through detailed analytical structure of the profit in the income statement (distinguishment of the profit and sales of performance) and breakdown of assets in the balance sheet for a specific purpose (distinguishment of assets subject to the process of performance driving) and their consistent connections competence and responsibility for two basic fields of asset (capital) enhancement – responsibility for main business activities and financial and investment activities of the company can be separated.

The effectiveness of used measures of performance management depends on to which extent the set up measures may influence basic indicators of the development of financial management of the company i.e. indicators, which are important for the development and influenceable by the managerial level given. On the other hand, effectiveness of used measures does not depend on their formal form.

The inconsistence and late diagnosis are the main limitation of the multicriterial performance measures.

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BIOGRAPHY

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VARIETY ENTERPRISES CORPORATION:CAPITAL BUDGETING DECISION

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ABSTRACT

The capital budgeting decision is one of the most important financial decisions in business firms. In this case study, Variety Enterprises Corporation (VEC) evaluates the feasibility of a special manufacturing system to produce a new product. To determine if the project is profitable, VEC must first determine its weighted average cost of capital to finance the project. The simple payback period, discounted payback period, net present value (NPV), internal rate of return (IRR), and modified internal rate of return (MIRR) techniques are used to study the profitability of the project. MIRR is a relatively new capital budgeting technique, which assumes that the reinvestment rate of the project's intermediary cash flows is the firm's cost of capital. The stand-alone risk of the project is evaluated with the sensitivity analysis and scenario analysis techniques assuming that manufacturing the new product would not affect the current market risk of the company. The case would give students an opportunity to use the theoretical profitability and risk analysis techniques explained in standard finance textbooks in a real-world setting.

E-GOVERNMENT AND IT-BASED ECONOMY MODEL – AN EFFECTIVE THEORY? (ALBANIA MINISTRY OF FINANCE – CASE OF TREASURY SYSTEM)

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ABSTRACT

Following the development of the Internet and IT and their continuously growing implementation in all fields of the contemporary society, the economic entities are provided with unlimited opportunities for improving their effectiveness and efficiency, as well as for achieving higher competitiveness on the global market. As moving from an industrial to information society will bring us soon in the path of knowledge based economy.

Adapting internet in finance and government, new types of business models are being developed. The globalization of the world economy and the fast growth of e-business create new opportunities and hence new strategies for international business.

Should Albania be the proper case of following the model that it's based on it? Are we ready to follow up on this way? How much effective we can be? What are the Albanian experiences on this model? What we propone? These, are some of the main questions that the authors intend to gives answer. This paper is based in a detailed treatment of theory and comparing the results and discussion with Albanian case, but not only. There are treat also some other cases.

This research explores the significance and contribution of Information Technology (IT) in creating and improving a knowledge based economy, through contributing in finance and government. More focus will be deliver on financial system, especially on commercial banks. This new technological development in the financial industry is known as "e-finance" in the literature.

Technology is faster improving the productivity of all financial institutions, as commercial banks, insurance companies, and other specialized financial institutions (e.g., pension funds, mortgage, and leasing companies, etc.). The major businesses of commercial banks include loans (commercial and consumer loans), deposits and financial investment (long term and short term). The insurance industry consists of property insurance, health care insurance, life insurance, and other little categorized. As we know, the new innovation in banking such as internet banking does not compare

Some attention will have to e-government, as the second path which support e-business in a global setting. The use of IT has fundamentally improved the quality of government services and financial institutions. This dramatic development, known as e-finance and e-government, has become a focal point of practice in many countries with aim of developing a economy based on the knowledge.

KEYWORDS: IT-based economy, e-Government, e-Finance, ICT, Albania, Treasury System

INTRODUCTION

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 IT (Information Technologies), a further and faster expansion of internationalization and globalization processes can be

witnessed. 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 companies of all size.

"Information and Communications Technology" refers to all technologies and services that enable information to be accessed, stored, processed, transformed, and disseminated, including the transmission or communication of voice, image, and/or data over a variety of transmission media and exchange of information and communication services.

Information system are usually applied in the newly developed industries. Moreover, the use of IT may spur the further integration of the financial institutional markets across nations. During the last decade, information technology has profoundly changed the landscape of financial markets and even the governments, becoming and transforming in this way many economies in different countries. The use of IT has fundamentally improved the quality of government services and financial institutions. This dramatic development, known as e-finance and e-government, has become a focal point of practice in many countries with aim of developing a economy based on the knowledge.

TECHNOLOGICAL CHANGE AND ECONOMIC DEVELOPMENT

Globalization is helping in internationalization of financial institutions and governments. Many countries have joined the European Economic Union and the World Trade Organizations. Also, services, goods are allowed to move easily across the national boundaries, meaning that international harmonization of regulation in financial markets is expected (White, 2000). The diffusion of e-finance technology across nations further speeds up to the transmission of information in different countries. This means that, the global financial markets could become more unified than before due to the progress of e-finance. (Claessesn, 2004). Therefore, an investigation of the international market's integration of financial intermediaries along with the development of Information Technology is important. Also, IT has brought the "*technological change*" among the financial institutions. This concept is too broad to capture the contribution of IT. Therefore, it is critical to evaluate the impact of IT on the financial industry. We should say that it is important to investigate and evaluate the impact of IT on financial markets, institutions, government and services *across different nations*, given that the world economy is increasingly globalizing (Figure 1)

Figure1: Relationships among IT, E-Commerce, and E-Finance
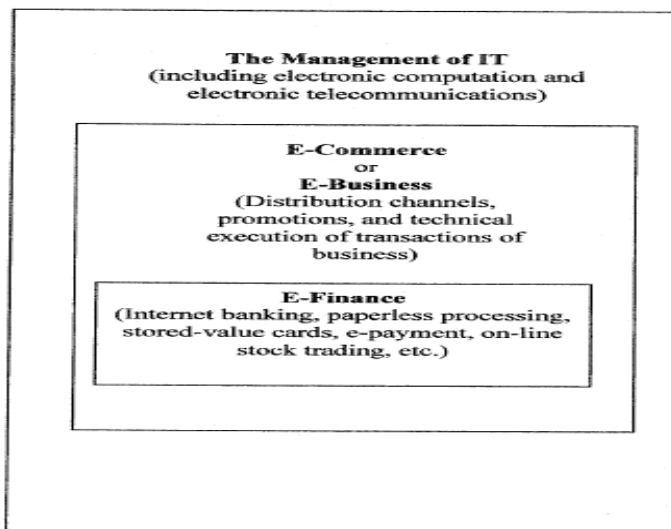
How much should invest on IT the financial institutions? What result for the literature is that *financial institutions are the major customer of IT,* justifying substantial IT investment has become necessary and important. There are some advantages from the presence of IT in financial markets. IT is:

1. cost saving,
2. labor saving, and
3. capital using.

<u>Financial Institutions, It and Their Impact in Improving E-Government</u>

Technology is faster improving the productivity of all financial institutions, as commercial banks, insurance companies, and other specialized financial institutions (e.g., pension funds, mortgage, and leasing companies, etc.). The major businesses of **commercial banks** include loans (commercial and consumer loans), deposits and financial investment (long term and short term). The **insurance industry** consists of property insurance, health care insurance, life insurance, and other little categorized. As we know, the new innovation in banking such as internet banking does not compare with insurance company.

The nature of heterogeneity of insurance products may cause the insurance industry to be more "brain intensive" than "capital intensive" in the use of information technology. The slow adaption to the e-finance technology in the insurance industry reflects the fact that transaction, interactions between policyholders and insurers are less frequent in insurances.

There are some strong reasons which explain the independence of all financial institutions from IT:

1. IT improves the profit efficiencies of financial institutions for all countries which insist to follow a model of knowledge based economy;
2. The impact of IT is very significant for commercial bank.
3. There are several policy implications for the commercial banks in Albania, insurance companies, governments, IT vendors, and international organizations.
4. In order to explore how IT improves the performance of financial institutions in Albania, they must adapt some methods and models, or even to apply the multivariate analysis to test whether the financial institutional markets are integrated. There are several statistical methods, discuss their underlying economic theories and explain how to use and explore the productivity of financial institutions. For instance, multivariate analysis (i.e., MANOVA) is used to test the international market integration hypothesis.
5. IT investment improves the efficiency across nations, even though IT managers are not aware of the linkage of IT to the profit generation. The level of improvement it depends by level of development. The time-varying patterns of the effects of IT and COM further signal the upward trend of the IT industries.

E- GOVERNMENT AND INCENTIVES IN ECONOMIC DEVELOPMENT

Adoption of IT and the global computer networks for conducting business activities is known as e-business. The phenomenon of e-commerce is simply, the driving force of the new economy where everybody is connected everywhere and anytime. It overcomes the geographical and time constraints and serves as a great equalizer by creating a single competing field for all (small and large firms, experienced and inexperienced, domestic and foreign). In a word, e-business or e-commerce drives globalization.

E-commerce is not just buying and selling of goods and services, but also servicing customers, collaborating with business partners and conducting electronic transactions within an organization (Turban and King, 2003). As e-commerce matures and its tools and applications improve, greater

attention is being given to its use to improve the business of public institutions and government (country, state, county and city).

E-government is a vital part of e-commerce. The application of information and communication technology is one of the major prerequisites for increasing efficiency in state administration business operations. Information technology represents the foundation and encourages restructuring of business processes in state administration. It also provides interactive services on the Internet, that is, creates an electronic public administration.

Some of the most outstanding benefits could be summarized as follows:
- E-government makes it easier for citizens to become involved in and make their contribution to government-related issues;
- It improves the delivery of many public services, including online transactions and the dissemination of information about the operations carried out by the Administration;
- It can additionally help to improve the communication between citizens and the government, enabling the former to have a more direct involvement in the decisions that must be made by the latter.

Involvement of E-Government in the Process of Development

E-government means using IT to provide citizens with an improved access to information related to public administrations. In addition to the traditional approach, which sought to meet internal operation needs and solve problems associated with efficiency and costs, e-government focuses on the potential of external interactions and emphasizes the importance that citizens assign to customer service, convenience and user- friendliness (Gonzalez, Gasco and Llopis, 2007). In short, e-government is the application of information technology and e-commerce to the processes of government.

E-government includes four major categories (Siau and Long, 2006):

1. government to citizens (G2C),
2. government to employees (G2E),
3. government to government (G2G)
4. government to business (G2B).

While G2C and G2E imply an interaction between the government and individuals, G2B and G2G focus on the interaction and cooperation between the government and organizations (Gonzalez, Gasco and Llopis, 2007).

The internet and the new IT can offer public services with different interaction levels as the degree of maturity of e-government increases (Layne and Lee, 2001). 4 stages are identified:

Stage 1 - *Information: online information about public services*. At the lowest level, information about the public service is created. This information is later categorized, indexed and distributed to citizens, through the internet, for instance.

Stage 2 - *Interaction: downloading of forms*. Communication in two directions starts to be implemented at the second level: web pages, e-mails or other means are available to the citizen not only to receive information but also to contact public administrations.

Stage 3 - *Two-way interaction:* processing of forms, including authentication. This stage includes the possibility to carry out transactions, both between different public administrations and between public

administrations and citizens. An example of this third level would be the possibility to request local services, filling in forms, applying for licenses, etc.

Stage 4 - *Transaction*: full case handling, decision and delivery (payment)

E-BASED ECONOMY AS A SYSTEM THAT IS BASED ON E-GOVERNMENT AND IT

Economic growth has always been the core problem of international economies, a global issue, which leads many academics to explore the economic growth of knowledge-based economy involving international economic transactions. Constructing such models of economy means first of all to develop based on human capital rather than physical capital. This model needs R&D investment as the driving force for growth, but all this must be done through the paths of Information Technology, because is the sector of IT which implement the model.
Innovation is been considered as a bridge settle between the new economy and IT, or is the point from which start IT and end user is new economy. From the history of Industrial Revolutions, it is known that technological innovation reflects a force which drive globalization, because technology innovation has reduced market frictions and provided significant impetus to the process of broadening world markets.

One of the main characteristics of new economy, economy based on the knowledge, is a focus on increasing globalization and expanding IT. We are in the information age. People are often frightened of technological change. Yet the world would be much more frightening without innovation. In traditional growth theory, or growth accounting theory, economies have limited resources of capital and labor. Therefore, without better ways to use these resources, growth would soon run out of steam. Traditional models of growth developed in the 1950s concentrated largely on inputs of capital and labor, and had nothing to say about the technological change. A new growth theory needs knowledge responding to market incentives such as improved profit opportunities or better education. Economic incentives for innovation have strengthened in recent years. Raising finance for innovation has become easier, and a bigger global market has increased the likely return.

The E- Government Impact in E-Based Economy

The Government of the Republic of Albania considers the development of the information society and the use and deployment of ICT in the country as one of the highest priorities in achieving higher living standards and economic growth. ICT should be used to create employment, to improve working conditions, and to motivate highly educated individuals to remain in the country. National and local needs will be important factors to be considered during the development of the Information Society in Albania.

Information and technology brings the economy closer to the model of perfect competition, but governments still retain an important role in ensuring that the opportunities offered by IT are fully exploited. IT is very important for each government, for each economy. IT is necessary important for government to do all basic things, because it increases the rewards for doing so. For example, open markets help to speed up technology transfer, and education increases a country's ability to absorb knowledge. One economic important rule is that new technology is not a tool which cures every economic ill. To have all the benefits from IT, governments need to pursue sound policies.

IT Contribution in Increased Knowledge

The use of information technologies (IT) is an essential component of modern day societies and economies. IT is required for modern businesses and governments to operate efficiently and enhance service delivery to the public and to the private sector among others. People also require IT so that they

can take advantage of these efficiencies and services in order to improve their quality of life and become more self-sufficient.

Economies are increasingly based on knowledge input, which has always been the main source of long term growth. More significantly, the endogenous growth approach since the late 1980s is based on the creation of knowledge in human beings, so called "human capital". It is difficult to measure this innovative input output for modeling a knowledge based economy. What literature reflects is regard to the fact that the technological innovation is driving the globalization process and involves the increasing integration of national economic systems, which are necessary and reasonable world market oriented. What follows from the literature review concern that *computer using, or computer dependent industries as finance, insurance and real estate and other services have continued to lag in productivity growth.*

Oliner and Sichel (1994) examined how much computing equipment have contributed to economic growth since 1970 and has arrived at three main results:
1. Under the assumption used for the baseline growth accounting, the contribution of computer hardware in gross output was low between 1970 and 1992.
2. Their estimate of adding software and computer services labor approximately doubles the contribution of hardware.
3. Continued rapid growth in the stock of computer hardware and software probably will not generate a substantial upturn in computing services' contribution to output growth, unless there is a dramatic surge in the rate of return earned by computers.

There are two important factors as the sources of the increased knowledge:
1. First, it is population growth. The other is that the rising real per capita income has made it possible specialized in the production of knowledge. A larger population leads to greater creation of knowledge. First, the larger the population is, the greater the benefit in productivity results from new knowledge.
2. Second, with a larger population, there are more individuals capable of making a significant discovery in knowledge.

Lastly, the new economy is also a knowledge economy based on the application of human know how to all output that is produced. In the new model economy, more and more of the economy's added value will be created by brain power rather than brawn, and creating new products and adapting existing products will form the future. With knowledge becoming the key source, there is only a world economy, even though the individual organization can operate in a national, regional, or local setting.

ALBANIA MINISTRY OF FINANCE –CASE OF TREASURY SYSTEM

Albania has been undergoing radical changes and transitions since the dissolution of communism at the beginning of the 1990s. Although still comparatively isolated from international cooperative initiatives and lacking adequate institutions and support structures, the main actors carrying out research and development projects are the Academy of Sciences and higher education institutions. Higher education and science are mostly treated separately, and PhD programmers are often disorganized. Further progress in the reorganization of research institutes, the creation of national research centers, the introduction of standards and performance indicators, and the improvement of the infrastructure and legal framework are absolutely necessary.

Scientific research activities in Albania *are very limited*, primarily due to the lack of infrastructure and the insufficiency of financial resources. A considerable number of qualified specialists have left scientific research institutions and most of them have emigrated abroad. Specialized ICT departments in particular have suffered considerably from the "brain drain." For the same reason, public institutions encounter major difficulties to find the specialists necessary for the daily maintenance of ICT infrastructure and

systems. The academic community has been ignored and, as a result, has not been involved in important ICT projects. This not only penalizes such projects by not involving independent specialists from academic circles, but it also penalizes specialists themselves by driving them toward emigration. ICT specialists are demotivated by low salaries, which undermine the entire public scientific research work system in Albania. This leads to serious, albeit hidden, consequences for the system of scientific research institutions, bearing long-term negative effects.

The Albanian National ICT Strategy was created from a project co-financed by the Open Society Institute, the UN Department of Economic and Social Affairs, and UNDP Albania. All the documents prepared by national or local bodies' aims to introduce and clarify impact that IT has on government, business or financial systems. These documents describe the general goals and define a number of strategic actions that serve to achieve these general goals. For this purpose, the strategy is subdivided into five parts, and fourteen individual goals. The parts describe the major strategic areas to be addressed, and are directed to different target groups in the country:

1. *Part I:* Government as Promoter, Legislator and User of ICT, is directed at the government, and addresses the needs for suitable ICT institutional structures, policy definitions and introduction of e-government services.
2. *Part II*: Use of ICT for Education, Research, Health and Social Services, aims at deploying ICT for the direct benefit of citizens.
3. *Part III*: Building Infrastructure needed for an Open Information Society, addresses the need to deliver the infrastructure necessary for the information society.
4. *Part IV*: Generating Economic Growth in the Private Sector addresses the need to promote the private sector to embrace the tools of the information society.
5. *Part V:* Ensuring Relevance of ICT Strategy within a Regional and European Context focuses on the need to ensure ICT policy cooperation on a supranational level.

The following table describes the sections and the key goals of the Albanian National Information and Communication Technology Policy (tab.1).

Section	Goals
I. Government as Promoter, Legislator and User of ICT	1. Pro-Active, Well-Coordinated National ICT Policies
	2. Creation of ICT-Supportive Legislative Environment
	3. More effective, transparent, responsive government and public services: • Sub-goal 3.1: E-government services of government institutions at central level • Sub-goal 3.2: E-government services of administrations at regional and local levels
II. Use of ICT for Education, Research, Health and Social Services	4. Promoting basic computer literacy – ICT Education for all.
	5. Creating a cadre of advanced ICT specialists – Education and Research in the ICT Domain.
	6. ICT in Health and Social Services
	7. Supporting development of locally relevant content and applications
III. Building Infrastructure needed for an Open Information Society	8. Creation of a competitive, liberalized telecommunications sector.
	9. Development of inexpensive, fast and secure ICT infrastructure throughout Albania.
IV. Accelerating Economic Growth in the Private Sector	10. Development of the ICT Sector as a Production Sector.
	11. Supporting Electronic Business.
V. Ensuring Relevance of ICT Strategy within a Regional and European Context	12. Active participation in SEE regional Initiatives.
	13. Active participation in EU Initiatives.
	14. Monitoring of Albanian ICT Developments in Regional and European Context.

Case of Albania

The Albanian government and especially IT department Sector is supporting the Public Financial Management System, creating in this way an *efficient e-based economic model,* as a system which is:

▶ provide support for all public finance operations,
▶ collect accurate, timely, complete, reliable and consistent information on all financial events,
▶ provide adequate management reporting,
▶ support government-wide and agency policy decisions,
▶ provide complete audit trail / auditable financial statements

This system is composing by some core elements which have their direct impact on core treasury system and other public financial management system. This creates a bridge between economic world, finance and IT. Also, combination of above components is referred to as integrated PFMS. On of the outputs that support the whole the creation and modulating of e-based economy is referred to the public financial management cycle as following (figure 2):

Figure 2: Public Finance Management Cycle
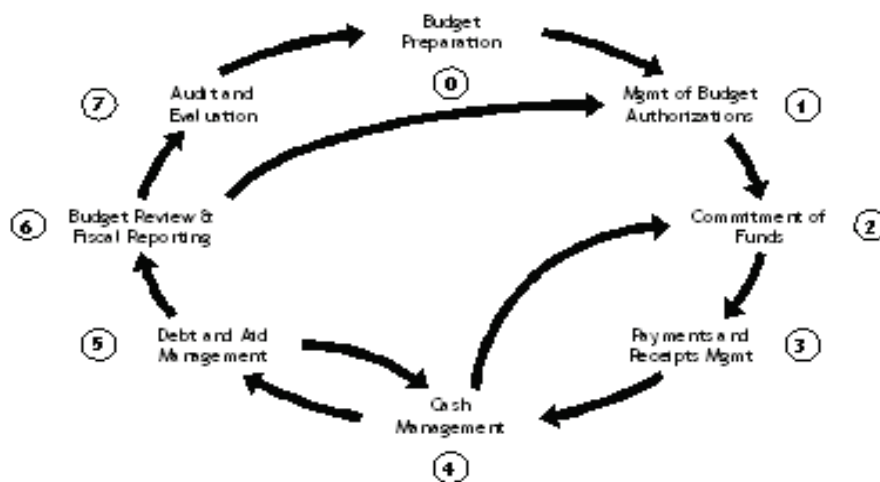
Also, in this case are include usage of some modules as ORACLE Financial Applications (fig.3) that goes on budgeting, purchasing, payables, fixed asset management, cash management, financial statement generator, or even in the spreadsheet tools, etc.

integration and implementation. The first phase start with development of application software, supporting the central servers and field hardware, with technical support systems, and finalizing the system safety or security and business solutions, and finalizing with web publishing or web portal. The main operations are shown in the following (Figure 4):

Figure 3: AmoFTS System Architecture
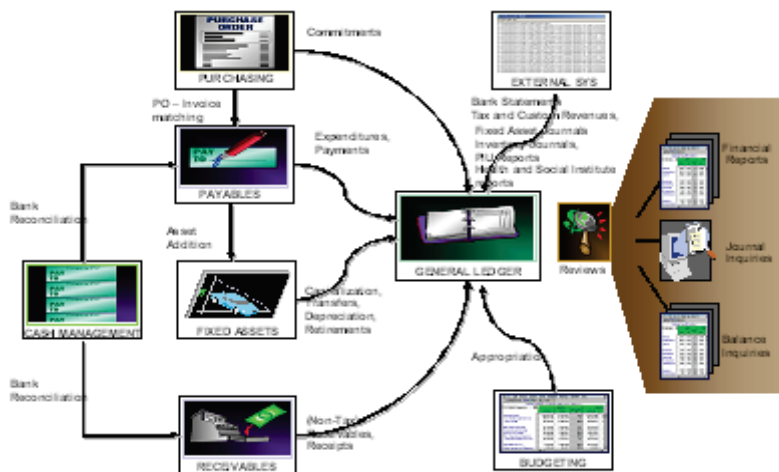
Application process needs monitor systems which will look for design phase, procurement phase, system

Figure 4: The Operations of the Procurement System
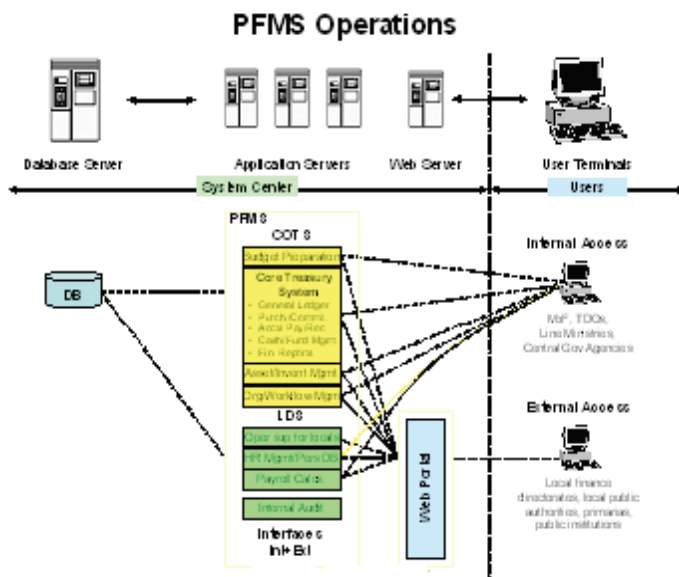
OVERVIEW OF ALBANIAN ICT SECTOR

Research in ICT in Albania has not been a main focus. The ICT sector in Albania has had considerable growth during the last years. It is notable to mention the number of ICT companies created and active in the last five years. In the last three years, the liberalization of the telecommunication market has been followed by the foundation of several telecom operators. The following chart provides an overview of the revenue of ICT Sector by Segment.

Figure 5: Revenue of the Albanian ICT Sectors by Segments
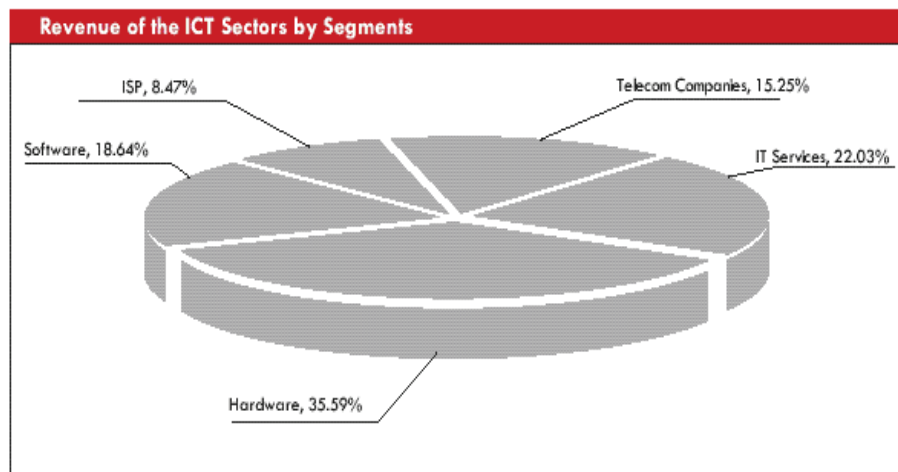
Compared to the world trend, the Albanian economy is characterized with low level of usage IT and the Internet. The companies are insufficiently utilizing the opportunities provided by the contemporary technologies in terms of improving their efficiency and their inclusion in the global information society. The current situation in the country is due to the lack of complete legal framework, international standards, competitive prices of the telecommunication (internet) services in the country, as well as the lack of founds, knowledge, skills, adequate strategy, good management etc. The weak relative position of the IT sector of the Republic of Macedonia reflects the poor development of the country's economy and a low overall purchasing power.

According to the Internet World Stats in comparison to the other countries from the Balkan region as well as countries with EU candidate status, Croatia is very high on the scale with 32.9%, and Albania is at the end of the scale with minimal 6.1%.

The Internet in Albania is mostly used for the following purposes:
- Internet user, were using Internet for communication (receiving/sending e-mails and communication like Chat, MSN, telephoning),
- searching information and requesting on-net services and for playing or downloading games, pictures, music
- Internet for training and education (i.e. for acquiring knowledge, consultancies, training/courses offered or following online courses)
- e-government for finding information, downloading official forms or sending filled in forms
- e-banking or offered/ sold goods/services via Internet
- Persons that used the Internet ordered/bought goods or services online for private purpose.

Understanding the importance of being a part of the global (information) society, all segments banking, insurance companies, government, etc), in the Albanian society are involved in the adoption of IT in their operating as well as everyday activities. Although the figures show low level, the raising trend is what worth fostering and supporting with different projects and activities. With its aspiration to become an EU member country Albania needs to adhere to the "…strategic goal: to become a dynamic and competitive knowledge based economy in the region..."

Figure 6: Internet Penetration in Selected Countries (in %), 2007
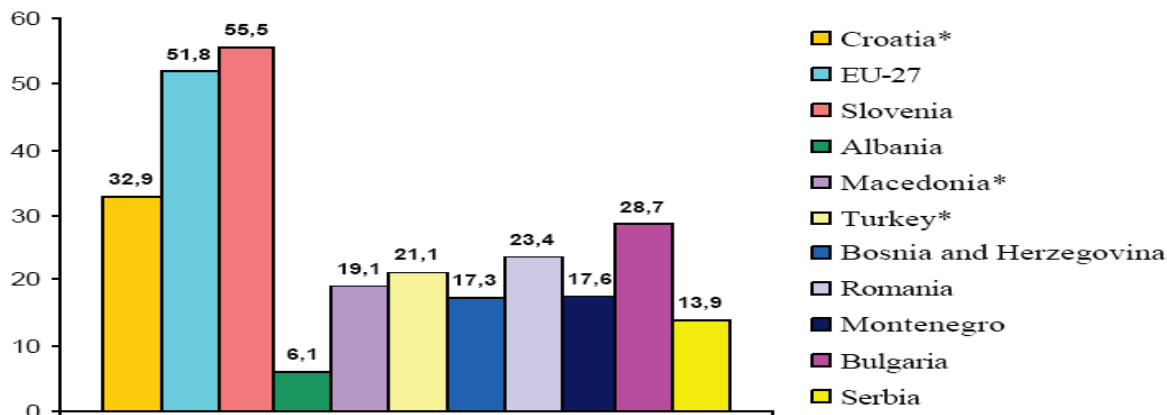
CONCLUSIONS

Macroeconomic indicators show a *positive growth rate* for Albania in recent years. While performance has been impressive, however, there are concerns regarding the sustainability of high rates of economic growth. In particular, the Albanian government should note with caution important changes in the distribution of GDP according to economic activity. The government should allocate a greater share for *investments in infrastructure,* especially in the sectors of education, health and the environment. Improvement in these areas will serve to increase the quality of human capital by improving life expectancies, living conditions and skill levels.

The private sector's investment level in IT in Albania is still low. SMEs, or rather micro-enterprises (entities with fewer than five employees), make up the vast majority of private businesses. Their survival strategy focuses on labor intensive, low-cost production. Against this background, IT falls almost entirely under public responsibility. Overall, there are very few private institutions, and these few operate mostly in the field of Human, Social and Political sciences but their personnel structures and their financial and cooperation procedures are not stable. However, in the field of information technology, the private sector became dominant by establishing market activities with some relevance to research and development.

Several small companies operating in the IT area were established thanks to local initiatives and are run by Albanian engineers specializing in IT. The majority of products are imported from abroad. However, there is a strong tendency and increase in the IT sector to *adapt products to local needs*, such as being adapted to the local language. There are a variety of choices with regard to equipment and programs, which are accessible and affordable for the majority of small and medium enterprises as well as for many individuals. The average annual investment in IT is about more than 2.5-3 million USD (or 2.2 million Euro) and all IT revenues total about 20 million USD (or 15 million Euro).

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WEATHER AND EARNINGS RESPONSE COEFFICIENTS: INTERNATIONAL EVIDENCE

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ABSTRACT

This paper examines the relationship between investor mood and investor response to a firm's quarterly earnings announcements worldwide. The proxy for investor sentiment used in this paper is the daily cloudiness/sunshine measure followed by the literature used in the fields of psychology and behavioral finance. Using data from more than 165,000 quarterly earnings announcements in 20 countries from 1990 to 2006, we find that market cumulative abnormal returns are associated with unexpected earnings and sunshine measures. Specifically, we find that the magnitude of this effect is asymmetric between good and bad news; investors respond more negatively to bad earnings news when they are in bad moods than in good moods, and vice versa. In other words, investors tend to overreact to negative/positive earnings surprises when sentiment is low/high. Moreover, the mood effect diminishes for well-structured countries—those having higher financial information transparency or a common-law system. That is, the extent to which an investor's response to a firm's quarterly earnings announcements is influenced by mood is less for higher financial information transparency or common-law system countries. Our results provide evidence supporting the hypothesis that an investor's sentiments affect individual responses to corporate earnings announcements and the role of institutions in alleviating the mood effect.

KEYWORDS: earnings response coefficients, information transparency, investor mood, legal regime

MODELS OF CORPORATE GOVERNANCE IN LIMITED BY SHARES COMPANIES WITH PARTICULAR REFERENCE TO THE DUALISTIC SYSTEM

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ABSTRACT

The Corporate Law Reform has introduced into our law system the possibility for limited by shares companies to choose between three different models of corporate governance: the traditional system, the dualistic system and the monistic system. The alternatives introduced by this reform are the expression of experiences lived in the various countries of economy and of market and give to companies the possibility to choose between various corporate governance models. It's up to the partners to choose the most appropriate model on the basis of the company's characteristics. After analysing the general characteristics of each model, this paper focuses on executing an analysis of the differences between the Italian dualistic system and the German dualistic system.

INTRODUCTION

The Corporate Law Reform, that was approved with the legislative decrees n. 5 and 6 of January 17 2003 and that became effective in 2004, introduced into our legal order the possibility for limited by shares companies to choose between three different models of corporate governance: the traditional system that was already present before the reform, the dualistic system with German origins, and the monistic system with Anglo-Saxon origins. It initially seemed that the debate regarding the three systems of corporate governance was destined to remain at an academic level. On the contrary, this debate has been recently enriched after the radical revision of the structures of administration and control that was performed by important companies of the banking sectors, becoming a subject of confrontation also under the operative aspect.

The alternatives introduced by the reform express the experiences that have been lived in the various countries. With respect to the other countries, the Italian corporate law appears to be the law system that gives the widest possibility to choose between the various models of corporate governance. The articles of association, when the company is constituted or after a variation, can introduce one of the two forms of administration indicated as dualistic and monistic. It is up to the partners to choose the most appropriate model for the particular characteristics of the company. If no choice is made, the traditional model remains effective.

The various commentators have asked themselves if the articles of association can provide for two or three forms, leaving the choice to the ordinary meeting. The answer is no because law attributes the choice to the articles of association, that is extraordinary meeting. Nevertheless, it doesn't seem that the new systems have particular characteristics that make management and control easier, and for these reasons, they may not have much success among the operators. The ordinary model (or traditional model) will probably be the most preferred by limited by shares companies. Companies are currently reluctant in trying to be ht first to experiment the new procedures of which the significance is unknown and of which there are no interpretations, experiences, and case law pronouncements. It is hard to understand the reasons on the basis of which the legislator chose to introduce these two new forms of administration.

The adoption of one of the alternative forms means having the possibility of organizing without having to respect the legal restrictions of the classic form. The reasons for the introduction of these new models haven't been sufficiently cleared and the indications that have been given don't correspond to the law dictation, and that should be respected (Vicentini, 2006). The idea inspires to the discipline of the European company, but it remains an inspiration, in a different context, that doesn't justify by itself the regulation accepted by the reform. Under the aspect of the dictation of reform law, the following elements are important:

    a. The flexibility of the traditional form, that allows to articulate the concrete solutions in very different ways, in order to respect pratical needs;

    b. The same traditional form has been changed and these changes have altered the guarantee principles that where considered fundamental in the past, and that currently orientate the evolution of foreign legislations in the direction of improving the corporate governance;

    c. Nonetheless, we realise that the guarantees offered by the traditional systems remain the surest; they are often neglected or subverted in the other forms, that brings us to conclude that the choice depends on the intention of escaping from restrictions that are imposed by the classic form as a means of public order:

Perhaps it was better redefining the discipline of the classic form, eliminating all of those severe measures that are now considered anachronistic in the philosophy of the radicalism of the market, without making recourse to the other three forms. With only one article, there could have been the chance to give to the articles of association the competence to:

    a. Eliminate the board of auditors at the condition of instituting in the board of directors an independent board for control;

    b. Give the competence of the approving the financial statement to the board of directors in place of the meeting, provided that the members of the executive committee are not directors; with the faculty of committee to granting delegations to the single members of the executive committee. In this way, the other models would have been absorbed in the traditional model (Vicentini, 2006).

The introduction of the new models of administration represents the uncritical reproduction of models that have already been experimented abroad, often criticizied in their countries of origin, but they are introduced in our legal order only for the particular interest that they provoke. The reform has abolished the general obligation of supervision; it has made the means of knowledge even less appropriate; it has reduced the responsibilities of the directors; it has accentuated the means of defence against actions of responsibility. The weakness is also in the limitations in the exercising of the actions of responsibilities, that is reserved to the assembly or to qualified minorities. The reform has also reduced the fiduciary restrictions.

This is how things are for the classic administration, but this orientation is even more marked in the other two alternative forms of administration. The classic, dualistic and monistic models, as well as other articulations, are forms and organizational techniques that are useful in relation to the powers of conducting supervision, that is in relation to the will of the legislator to make effective the fiduciary restriction.

THE ORDINARY MODEL (OR TRADITIONAL MODEL)

The ordinary system (also known as the latin system), reproduces the old organization structure and it contains the presence of a directing board and of a controlling board constituted respectively by a board of directors or a sole director, and by a board of auditors. The traditional model is the only system in

which the directing board can also be not collegial. The traditional system of administration and control is applied when the articles of association don't indicate a different system. The traditional system has also been reviewed by the 2003 reform but it hasn't been modified very much. The discipline of the civil code before the reform is applicable to it.

The composition of the two boards doesn't differ in the number of components, but the reform establishes that only one effective members and one substitute must be registered in the register of auditors that is held at the Ministry of Justice (with the exception of the case indicated at art. 2409-bis c.c.) while the remaining members can be chosen among the members of the professional registers or among role university professors of economic and juridical subjects.

It also contains a mechanism of autonomous auditing that can be assigned to:

1. A single auditor or to a trust company (obligatory for listed companies) that are registered in the register that is held at the Ministry of Justice;
2. The board of auditors but only in the case of unlisted companies and that don't prepare consolidated financial statements. In listed companies, auditing has to be made by trust companies.

The causes of ineligibility have been increased with respect to the past provisions. The new provisions include both the quality of director and the presence of working relationships or other financial o personal relationships that can endanger independence also with regards to controlling and controlled companies. In particular, the provision makes reference to:

1. Working relationships;
2. Continuative consultancy relationships;
3. Paid supply of services;
4. Other financial and personal relationships.

It is established that auditors remain in office for three accounting periods. The new discipline establishes the cessation of auditors for expiration. Their term starts from the moment in which the board has been formed. The auditors must reunite no more than once every quarter year, but every 90 days and must attend the meetings of the board of directors and the general meetings. The reform extends the powers of the board of auditors that can ask for information about controlled companies; another new important provision assigns to the board of auditors the possibility to legally challenge the deliberations of the board of directors that are not congruent with the law or with the articles of association. However, this is a legal control and not a merit control. The object of the control of the board of auditors has been remarkably changed. It is no longer in charge of the control of accounting regularity and of the correspondence between the financial statement and the information contained in the accounting books (including the quarter year control of the cash consistence ad of the existence of values and shares that are property of the company o that have been received as a pledge, caution or custody). In particular, the auditors must verify the existence of internal procedures and the level of credibility of the accounting system. Responsibility has also changed and it is no longer an agency's responsibility. It is now a professional responsibility that is required by the particular kind of role and by their specific competences.

THE MONISTIC MODEL

In the monistic model, the company's administration is assigned to a collegial board of directors, while management control is a competence of a management control board elected in the ambit of the board of directors. Accounting control is assigned to an external board (auditor or trust company). The competence of nominating the board of directors and appointing the board od auditors is assigned to the general meeting.

Article 2409-sexiesdecies c.c., a completely new provision, introduces the monistic model into our law system. The monistic model is perhaps the most innovative that has been introduced by the reform. This system can be used by companies that express the decision to implement it in their articles of association. If no choice has been expressed in the articles of association, the traditional discipline is applied, based on the traditional dichotomy: board of directors and board of auditors. Control and management powers are centralized in one board, that is the board of directors which elects among its members a committee with the competence of controlling management.

The monistic system establishes an administration model that is pretty much the same as the traditional one,. The main differences are the possibility of assigning the administration to a sole director and the elimination of the board of auditors. This board is substituted by a "committee for management control" elected by the board of directors among its members and composed of directors that don't carry out management activities. The must possess the independence requirements established for auditors as well as having at least one member chosen among the auditors registered in the register of auditors held by the Ministry of Justice (art. 2409-octiesdecies, 3rd paragraph c.c.).

In the monistic system, accounting control is always assigned to a single auditor or to a trust company, which are obligatory if the company uses the rick capital market. The provisions applicable art contained in art. 2409-sexiesdecies the other following articles. The provisions applicable to the board of directors are the same as those applied to the board of directors in the ordinary system (in the articles 2380-bis and following). The provisions applicable to the committee of control are the same as those applied to the board of auditors (in the articles 2397 an following).

According to the old provisions, the election of this board was a competence of the board of directors without the possibility to delegate it to others. Article 2392 established that they were "responsible in solid if they didn't supervise the general tendency of management". They are also responsible in solid for illegitimate acts committed by the other directors for the fact that they didn't intervene to prevent the finalization of these compromising acts or to minimize the damaging consequences. It is not the case to think that the new provisions want to subtract from the directors the activity of control, which is one of the most delicate functions of the board. While in the traditional model the general meeting elects both the boards of administration and control, in this particular model of governance, the controllers are elected by those who are controlled.

In order to guarantee the efficacy of this system of control despite the presence of this anomaly, law has introduced the independent director that derives and evolves in Anglo-Saxon systems and that has been introduced in Italy with article 2409-septiesdecies c.c. independent directors pursue the company's interest, not the interest of the managers, of the majority or of the minority and have access to information exactly as other directors. In particular, the independent director mustn't have a number of shares of the company that allows him to control it or that may interfere on his independence. At the same time, he mustn't have hold other offices that put him in a situation of conflict of interests with the company. He also can't be a director of the company in those periods of time that allow the establishment of relationships that debase his independence. He also can't be or been a dependent of the company or of an affiliate of ht company, nor can he be a relative of a dependant, director or controlling shareholder of the company. This type of model seems to be more appropriate for limited by share companies. Companies that work in large international markets, particularly in the American market, will have a particular reason to choose this model because they have the chance to adopt the prevailing governance model in those markets even if our committee of control has less powers than the American audit committee that nominates, controls and revokes the trust company, while the nomination and revoking powers of the trust company are competences of the general meeting in our system.

In conclusion, we can say that this model is the innovation introduced by the reform. In fact, the establishment of a control committee among the members of the board of directors, even though its members are independent directors, represents something really new. It is obvious that these independent directors will deliberate on operations for which they are also responsible as controllers, and that will weaken the controlling power. The monistic system, as well as the dualistic one, inspired to the Statute of the European Company and executes a simplified governance model that is more flexible than other alternative models where there is a tendency to favour the circulation of information between the administrative board and the controlling board, of cutting costs and time and to obtain high transparency between the boards of administration and control.

THE DUALISTIC MODEL

The dualistic model was born in Germany at the end of the 1800s after the abolishment of the State Authorization for the establishment of companies of commercial activities and with the objective of stopping some financial scandals that happened in that period of time. This is the only administration and control system used in Germany for limited by share companies.

Even though it kept the "double board" and the related division of responsibilities, this model was reviewed at the end of the period following World War 2 in concomitance the establishment in Germany of the so-called social economy of market. That was inspired to principles of social justice and solidarity. With this model, there has been an evolution from a model in which management guidance and control of the work of managers were assigned to the board of directors, to one that presents the characteristic of the presence of two collegial boards: the board of supervision (Aufsichtsrat) and the board of management (Vorstand). The first has essentially controlling functions of management and functions of consultation and verification with reference to the political strategies of the company; the second one has the exclusive responsibility of management and of the finalization of all of the operations necessary for the execution of the business purpose. That consists in putting between the general meeting and the administrative board (that is called Board of Management) an intermediate organ elected by the general meeting and that is called board of supervision. In Italy, the dualistic system of administration and control finds its discipline in the articles 2409octies41 quinquisdecies of the civil code with cross-references to the traditional provisions and to the closing laws of the articles 2380 c.c. and 223 septies disp. Att. c.c. The merger of Intesa and San Paolo Imi is the most important Italian example of the transition from the traditional model based on the presence of the board of directors (or sole director) and the board of auditors, to the dualistic model, based on the presence of a board of supervision and a board of management.

This experience seems to be able to repeat itself in other contexts in a short time and not only in the financial world. In Italy, there is a present time a strong tendency to experiment this model of administration and control that was born in Germany and now in use in other European countries such as France, the Netherlands and Finland. But in these countries, as well as in Italy, it is only optional, at least for the moment. This option seems to be appropriate for limited by shares companies where there are no partners that play the role of managing capital, or because it is a public company, that is a company with capital divided among many small shareholders or concentrated in the hands of professional investors, such as mutual funds not interested in directing, or because it is a company that, although it has few shareholders, have lack of partners able to execute direction, for example when the block of shares belongs to the co-heirs of the founder of the company, that are dedicated to other types of professions. In these types of cases, the dualistic system exonerates the general meeting from some competences such as: the choice of directors and the approval of the financial statement, that require partners that are capable or willing to focus on entrepreneurial evaluations and decisions, assigning them to an board that makes these decisions and evaluations and that at the same time executes the legality and efficiency control of the companies.

The articles of association establish that if the financial statement isn't approved or if one third of the members of the board of management or of the members of the board of supervision require it, the financial statement will be approved by the general meeting. The dual formula is in a situation of crisis in Germany in this period, where it is traditional for the main companies.

In France, where there articles of association have the possibility to choose since a pretty long time, the dualistic system introduces the presence of the executive committee with the board of management, substantially in the same way as in Italy. In this system, the most important functions that were previously competences of the general meeting are now assigned to the board of supervision. The immediate consequence is the interposition between partners and the administration of an board composed of specialists able to execute the ordinary competences that were once reserved to the general meeting. In this model of governance, the decisional powers of partners are mediated and reduced to choices such as: the definition of the guidelines of the economic program of the company, the structural changes of the company, the nomination of the board of supervision.

COMPARISON BETWEEN THE DUALISTIC MODEL, THE ORDINARY MODEL AND THE MONISTIC MODEL

In the dualistic system, the board of supervision has a composition similar to the composition of the board of auditors. Its members needn't necessarily be partners of the company, but they can't be less than three with at least two substitutes and they remain in office for three accounting periods. They expire with the approval of the financial statement of the last accounting period. At least one of its effective members and one of its substitutes must be chosen among the auditors that are registered in the register of auditors held by the Ministry of Justice. The guarantees of impartiality and independence of the members of the board of supervision are less rigorous with respect to those that are adopted by the auditors, in fact, the general meeting can revoke, even without a fair cause, (the lack of a fair cause is sufficient to have the right to be compensated) with a majority of at least one fifth of capital stock, nor does the decision do revocation must be approved by the court of law.

This justifies the fact that a connivance between the majority in general meeting and managers, that avoids the control of the board of supervision, is in this case hard to realise, because the first controls the managers. It's not possible to presume that majority that is accomplice with the mangers revokes the members of the board of supervision when these members find out about their evil deeds. It is easy to understand that the board of supervision has competences that are a combination of some competences that are assigned to the general meeting in the ordinary system such as the nomination an revocation of the members of the board of management, the approval of the financial statement, the resolution of the action of responsibility against the members of the board of management, and competences that are assigned to the board of auditors in the ordinary system such as the legality control and the efficiency control as stated at art. 2403 paragraph 1, the presentation of claim to the law court ex art. 2409 c.c., reports to the general meeting at least once a year on the activities of supervision that are executed as well as on those actions that are considered censurable. Some of these competences belong to both the general meeting and to the board of management, such as the resolution of the action of responsibility against the members of the board of management. Others are peculiar to the board of supervision, such as: the approval of the financial statement or (if it indicated in the articles of association) la deliberation relating strategic, industrial and financial plans of the company.

This is a competence that only concerns high level administration and it only has the function of orientating the board of management, which is not obliged by the deliberations of the board of supervision with reference to strategic planning. The competence indicated in art. 2409 terdecies paragraph 1 lett. f-bis also has the function of suggesting that the articles of association impose the use of the programming method for company management because it is considered to be the method that assures

the highest level management efficiency. Under this point of view, the competence indicated in the articles of association with reference to planning is related to the board of control's role that concerns not only the control of legality but also management efficiency. On the other hand, the other competence of high level administration, that is the one indicated at art. 2381 3rd paragraph that consists in "evaluating the appropriateness of organizational, administrative and accounting structure of the company" wasn't expressly assigned to the board of supervision; this aspect is supervised by the board of management, because it was recalled by art 2409 terdecies paragraph 1 lett. c and by art. 2403 that regards the board of auditors' duties.

While the auditors are obligated to attend the board of directors' meetings (art. 2405 c.c.), members of the board of supervision can abstain (art. 2409 terdecies 4th paragraph c.c.). For listed companies, there is the obligation on the basis of which at least one member of the board of supervision to be present. The board of management has received the exclusive competence of company management on the basis of the general cross-reference to the provisions regarding directors contained in art. 2380 3rd paragraph c.c. it can delegate some of its competences to one or to more than one of its members, respecting the provisions contained in art. 2381 paragraphs 3, 4, and 5. The counsellors execute the publicity deeds indicated in art. 2383 paragraph 4 c.c. with the effects indicated in paragraph 5; the representation power is assigned to them by the articles of association when they are nominated and their representation is general; the eventual limitations to the representation powers are disciplined in the same ways as they for directors; in any case, art, 2385 c.c. applied to the renunciation, the cooptation mechanism indicated in art 2386 c.c. is not applied, but the provisions regarding the general meeting deliberations and the legal challenges that they receive are applied as well as those that regard the directors' responsibility and those in art. 2409 c.c. One can't be simultaneously member of the board of supervision and member of the board of management. Regarding the system of incompatibility, the provisions contained in art 2399 1st paragraph lett. c) c..c (regarding the board of auditors) are applied.

The accounting control is executed by an auditor or by trust company. They are subject to the provisions of the ordinary system, including the provision on the revocation only for fair cause and only if approved by the court of law. The minorities have the guarantees indicated at art. 2409 c.c., and these guarantees can even reach the nomination of a judiciary director with the use of the general meetings' powers. The board of supervisions' deliberation are also regulated by cross reference to the provisions present in art. 2388 that regulate the board of directors deliberations. The legal challenges of deliberations that approve the financial statement is subject to the limiting provision indicated at art. 2434-bis c.c.; but it can also be legally challenged by partners according to art 2377 c.c. The approval of the financial statement and the deliberation on the distribution of profits, that both belong to the general meeting the ordinary system (art. 2433 c.c.), are dissociated here. The first is a competence of the board of supervision (except the provision in art. 2409 terdecies 2nd paragraph) while the second competence remains in the hands of the general meeting.

The question we should ask to ourselves is: if there are no profits in the financial statement, must the board of supervision still convoke the general meeting according to art. 2364-bis num. 4 c.c.? We believe that the answer is yes: the general meeting takes note of the result, and can eventually deliberate an action of responsibility ex art. 2364-bis n. 3 against the members of the board of management. The board of supervision is an board destined to operate collegially. There aren't any provisions in the dualistic system that correspond to those in the ordinary system that give individual powers of control the board of auditors' members.

The doctrine and for certain aspects also the jurisprudence have demonstrated that the dualistic system is predominantly used by listed companies and this caused an intensification of control for the necessity of protecting more general interests relating to the correct working of the stock market. As a consequence, even the members of the board of supervisors have powers of individual action, so they can request by

themselves news to the members of the board of management, also with reference to controlled companies, about the trend of the company's operations or on particular business deals, and can ask the president to convoke the whole board, indicating which subjects must be discussed. Moreover, the board of supervision or a delegated member can execute at any moment inspections and controlling actions, exchange information with the correspondent boards of controlled companies about administration and control systems and about the overall trend of company activity. Nothing impedes that the articles of association establish a similar discipline for unlisted companies. Regarding the comparison with the monistic model, we have already had the occasion to see that its particular characteristic is the concentration of administration and control in one board.

This board, whose members are elected by the general meeting, is the board of directors: one third of its components must have the rigorous requirements of independence established for the auditors by art. 2399 paragraph 1 c.c., and eventually the ulterior requirements of independence established by the behaviour codes edited by the associations for categories or by management companies of regulated markets, to whom the articles of association refer to. Among its members, and in particular among its members that have the requirements of independence and lacking of managing functions, not even in the controlling o controlled companies, the board of directors nominates the members of the audit committee, that works as an autonomous collegial committee, analogous to the board of auditors, whose provisions adopted and recalled.

Not even the components of the audit committee have got individual powers of control of the management that correspond to those of the auditors, unless the articles of association assign theses powers to them. However, in listed companies the members of committee can exercise individually powers equivalent to those of the members of the board of supervision; these competences can also be exercised collegially by the committee. The monistic system allows those who are in charge of management to participate in management decisions, since they are part of the board of directors and express their votes in board deliberations. This allows the controllers to acquire wide information about the management mechanisms of the company that is under their control, and for this reason, they are put in the condition to of doing the work more efficaciously; this allows the management to pay more attention to the aspects of legality and efficiency since the verification of these two aspects is simultaneous with respect to the deliberations of the board and allows the prevention of illegality and inefficiencies (Bünger, 2006).

COMPARISON BETWEEN THE ITALIAN DUALISTIC MODEL AND THE GERMAN DUALISTIC MODEL

In order to achieve a better comprehension, it is very useful to make comparisons between the Italian dualistic model and the German version of that model. The qualification as a dualistic model derives from the distribution of management and control between a board of management/Vorstand and a board of supervision/Aufsichtsrat.

A company's organization is completed by the general meeting/Hauptversammlung whose importance for governance is residual with respect to the traditional system. The similarities and differences with respect to the German system are remarkable. If we analyse the competence and the organizational structure of each board in the Italian model, we can see some differences under the aspects of the inspiring principles and under the aspect of the competences that are assigned to them.
Both systems assign to the board of supervision/Aufsichtsrat the faculty of revoking the nomination of a member of the board of management/Vorstand in any moment, producing the effect of making the counsellors lose their power to acting on behalf of the company.

The possibilities for the partners to interfere in the management of the company, (except the case in which they themselves are directly elected as members of the board of management/Vorstand and the case in which the general meeting can exercise a right only with an authorization), are substantially limited to the choice of the people and the related right to revoke). The two systems have some differences regarding the directors' responsibility towards both the company and third parties. Both systems establish that the responsibility in solid of directors towards the company for the violation of any of their duties that are assigned to them by law or by the articles of association every time they haven't operate with the necessary diligence. The two systems face in different ways, but with identical results, the problem of identifying the cases in which a director is exempted from responsibility in solid. This problem is expressively faced by art 2392 paragraphs 1 and 3 of the civil code.

While the board of supervision, according to the provisions of the civil code, is predominantly a board with an economic objective that plays the role of supervisor over the board of management's activities, the Aufsichtsrat, according to German law, was instituted not only to play the same role of supervisor, but also play a role of "social justice". This second function, even though it is expressively declared, is necessary to satisfy in abstract a sentiment of justice to be carried out through participation and to prevent internal conflicts because decisions made with more consent and more participation, even by employees, are less susceptible to be contested in the company. The German dualistic system is an expression of a market of economy based on the social aspect that favours consensual decisions to the detriment of open conflict. The two systems also have differences regarding personal requirements, in particular le cause of ineligibility, of members of the board of supervision/Aufsichtsrat.

While Italian law establishes that at least one effective member of the board of supervision must be registered in the proper register of auditors, German law doesn't impose any professional restriction. Nevertheless, the causes of ineligibility represent a more relevant subject. According to the combination of art. 2409-duodecies paragraph 10 letter c) and art. 2399 paragraph 1 letter c) of the new civil code, "whom is related to the company, (...) to the controlled companies (...) by means of a working relationship or by means of a continuative relationship of consultancy or by a paid service, or by other patrimonial relationships that compromise independence" (among the others) can't be elected counsellor of supervision.

Both systems establish not only a legality control of the company's actions undertaken by the board of management/Vorstand, but also a control of usefulness, that is of the correct administration (§ 4th paragraph AktG/art. 2409-terdecies lit. together with art 2403 c.c.).

It necessary to notice that Italian law allows the assignment of the power to adjust the social statute to law provisions, to the board of supervision or to the board of management (art. 2365 c.c.). The Hauptversammlung hasn't got original rights regarding company management. Il § 119 2nd paragraph assigns to Vorstand the possibility to subject the a decision regarding management to the approval of the Hauptversammlung. Italian law, although not expressively establishing this possibility, is not contrary to the provisions of the articles of association that establish the general meeting's right to approve some managerial acts before they get adopted.

Although the basic structure is the same, the two dualistic systems present some important differences. In this context, the Italian system appears to be more personal and at the same time more corporative because it requires more independence of the board of supervision and of the company in general with respect to eventual controlling companies. Moreover, the concept of company representation by workers, that is a fundamental aspect of governance of a German Aktiengesellschaft, is completely absent in the Italian dualistic system.

Deliberations concerning strategic, industrial and financial plans of a company (if they are indicated in the articles of association according to art 2409 terdecies paragraph 1 lett.f-bis) make the Italian board of supervision different from the German one. In fact, the Italian board of supervision has management competence. It is important to remark that the presence of one or more independent directors in the board of management is an another aspect that makes the Italian dualistic system different form the German one, where in the correspondent Vorstand there are only the executive managers of the company or the group that are not independent. It is also true that in Italy, the role of independent managers is often emphasized. But we should ask ourselves if these directors are really independent and if they have the necessary autonomy in actions and in judgment, considering that they are nominated (like other directors) by controlling partners or, in the case of the dual system, by the representatives of these partners (that is , by the board of supervision's components) (Bünger, 2006).

CRITICALITY OF THE DUALISTIC MODEL

Companies are reluctant in inserting into the acts of association the alternative models of corporate governance o to experiment new procedures of which the significance is unknown and of which there are no interpretations, experiences, and case law pronouncements. Control doesn't improve with the introduction with the new dualistic and monistic systems of control. In particular, the dualistic system doesn't go into the direction of simplifying management processes and company control. In fact, law establishes for this particular model a very articulated system, more complex than the one that is in force that risks to be less efficient than the one that is in vigour o, in any case, that risks not to bring any advantages neither to management nor to control. We can't draw any definitive judgments that only time and experience can determine.

The framework outlined with reference to the dualistic system, brings about many doubts about the real advantages that can derive from its implementation. This may bring us to ask ourselves if it is worthy to prefer it to the traditional model, that is without a doubt clearer in identifying the management and control competences as well as simpler with reference to the decision making process. The ratio can't be trying to increase reliability. On the contrary, the fact that the nomination of the controlled board (board of management) is a competence of the controlling board (board of supervision) represents the particular circumstance in which both the competences of nomination and control are assigned to the same subjects. The most important change with respect to the traditional model seems to be the name change: from board of auditors to board o supervision, since the functions are very similar, except the inopportune role regarding the directors. In every case, we underline the necessity for companies that use the dual system to adopt appropriate mechanisms of check and balances which can guarantee, through a clear distinction between the various roles, the efficacy of control on one hand and profitability of management on the other.

But even before, it's necessary to avoid pletoric compositions of company boards, in which the result causes an increase of costs which are only partially justified by the necessity of simplifying the aggregation processes. The appropriateness and the equilibrium of corporate governance structures are essential. The Governor of the Bank of Italy, with reference to the dualistic model, underlined the risk "of a not clear distinction of roles and responsibilities between company boards, with consequent detriment of efficiency and rapidity of decisions". This problem has been recently affirmed in the new vigilance provisions regarding organization and corporate governance of banks that have been recently issued by the Bank of Italy. In these provisions, it is remarked that the necessity that the assignment of supervision duties to the Board of supervision isn't so important to conduce to an excessive interference in company management in order to avoid, on one hand, distorting the board of supervision's function and, on the other hand, limiting the management board's autonomy. Another problem present in this system consists in the assignment to the board of supervision of extra-managerial competences, able to influence the efficacy of the activity of vigilance and control that are assigned to the board. The board of

supervision would have to evaluate if certain situations, respect law and the articles of association, as well as the correct administration principles.

There's no doubt that to find a remedy for these criticalities regarding the system, appropriate regulating and organizational cautions are required. Only recently there has been an adoption of the dualistic system by some big banking institutions: from San Paolo to the Popular Bank of Verona-Bpi, to the Lombarda-BPU Bank. The possibility that this model can be chosen not only in the credit sector, has recalled the attention of operators on the new model improperly called "German". The attention was so intense to provoke a lively debate on the advantages and disadvantages of this system. A closer look allows us to see that every contribution that tried to underline the characteristics and limits of the model was followed by another contribution in which the model was defended and the advantages underlined (Marchetti, 2008).

Although the model's critics have remarked all of its critical aspects, they have been in the most part of the various cases liquidated by the party of those who were in favour of it. It's very curious that a constructive debate hasn't come about on the basis of the same criticized provisions. The choice should be the result of a serene evaluation of the characteristics of each model, also on the basis of the desired objectives, therefore analysing costs and benefits of each model (Bünger, 2006).

FINAL REMARKS

We can conclude saying that it isn't easy to imagine which are the juridical reasons that advise the adoption of the dualistic system of organization, that doesn't enforce the legality guarantees and management opportunities, nor does it satisfy the needs of co-management with the syndicate, as in Germany. At the same time, we can't forget that our traditional administration system was and still is among the most flexible, and therefore the needs that the new dualistic system could satisfy, could have been satisfied by authorizing by law statute modifications. The suspect that the choice is determined by extra-juridical matters is very strong and at this point it seems that the fears and perplexities expressed by the managers' association regarding this organizational model are justified at least on the basis of how it is regulated today. Therefore, it seems that on the basis of the cost-benefit analysis, the costs generated by the dualistic model are higher than the benefits produced by this model, supposing that among the objectives that one wants to pursue, guaranteeing an appropriate protection to saving shareholders isn't considered a secondary objective.

On the basis of these considerations, it seems that confidence shown towards the dualistic model is the result of an evaluation that appropriately considers the protection of minorities. Even though we acknowledge to the dualistic model the merit of favouring aggregations between banks, it's also obvious that there is a strong risk of a not clear distinction of roles and responsibilities.

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THE IMPACT OF TAX EVASION ON THE ROMANIAN ECONOMY AND HOW TO COMBAT IT THROUGH THE FISCAL POLICY

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ABSTRACT

In the financial crisis, the fiscal escapists faced with a phenomenon which may take widespread because of carnal temptation to circumvent the taxpayer subject to the law its income or assets. Spirit of tax evasion is merely one form of human selfishness and is born of the simple game of interest, whatever the size of the tax charged. Some analysts of tax evazionismului fit the natural tendency phenomenon, man's instinctual to protect property and, in general, property interests. This mentality exists even in the most honest man who will not hesitate even slightly, you will be given an opportunity, to escape from his duties towards the treasury. The phenomenon itself has been subject to hundreds of questions. Analysis over analysis, synthesis from synthesis, the most thorough studies made by economists and analysts from leading academics, fiscalişti, followed by as many inaccurate conclusions, presented the phenomenon of tax evasion and causes it generates the same and face. He developed a whole bunch of measures and laws to combat it and limit its harmful effects. However, tax evasion is proving difficult to heal disease. The purpose of the paper is to show that it is impossible to eradicate this scourge in order to accept that and reduce it to a reasonable limit is a very good result.

INTRODUCTION

Business crime, laundering of capital, tax evasion as trafficking narcotics, corruption, etc.. are not new phenomena. These activities have been developed over a long period of time. However they have now taken a very large thus jeopardizing the economic and social stability at all levels - regional, national and international - and are the seeds of serious political repercussions in certain states and democracies with less strong or weak bases.

The phenomenon of "laundering" money came as a logical consequence of the existence of a Crime profit oriented, characterized by a degree of sophistication, the existence mainly in economically developed societies and equipped with developed financial and banking systems. Besides "washing" money is an expression of American origin, originally used by organized crime structures to describe the lawful business reinvesting money from the illicit business, using for this purpose complex domestic and international financial circuits.

The international community was faced with an economy underground large scale, characterized by "infiltration" of financial markets by organized crime structures in their attempt to take control of important national and international economic sectors.

Studies have found that "wash" money from illegal operations is only one aspect of a comprehensive process based on global financial transactions, to continue growing. International financial markets include daily transactions worth over 175 billion dollars of which only a small fraction appear to be illegal operations. The rest is based on speculative capital, or semi-liquid, short-term investment and that, as a rule, guarantees anonymity to investors.

The complexity and extent of this phenomenon is likely to discourage any attempt to control state and create conditions for concealment of money from illegal operations.

TRENDS PHENOMENON MONEY LAUNDERING INTERNATIONALY

In the paper "International Monetary laundering Guide to Law and Practice" washing capital is defined as "criminal procedure by which the crime is hidden and transformed by means of attempts to insert them into the financial system in order to impart appearance of legal capital".

Now wash the capital is characterized by:
- A trace increasing recourse to more sophisticated techniques and practices of washing;
- Investment in increasingly large benefits obtained from terrorist activities, drug trafficking and other illicit activities, in legal business to capitalize these funds and to disguise their movements;
- The internationalization of money laundering networks operating in more countries and financial centers;
- Deliberate mixing of illegal products from criminal acts to remove the traces where the authorities responsible for investigating acts of this kind of business.

Most of the washing systems of capital transfers is based on complex financial product designed to transfer crime in foreign banks, often through "tax havens". Capital using, apparently, three main channels for "washing". A relatively small illicit funds are immediately reinvested in illegal activities in order to continue and to grow. A higher proportion is invested in sectors which easily past barriers, high rates of return or a highly competitive level (construction, agriculture, trade in detail, the third sector, etc.). Most of capital generally strong currency, exports to other countries. For security and efficiency in management, business empower criminals of financial experts to carry out washing operations international capital regulation based on exploiting differences between the financial and banking countries and jurisdictions.

Key stages of the washing cycle are: placement, storage and integration. Recycling of capital into the financial system may take place during the three phases, using banks, other financial service activities and commercial activities.

If the financial system, historically, banks have always been the main driver of capital used for washing. It is drawn to the most common form, that is the result of numerous transactions deposit in cash in the banking system or by changing the cash with other valuables such as shares and financial instruments to bearer.

In general, disguise illegal amassing funds complex layers of financial transactions is made through international comparisons and sales of securities, foreign currency exchange trading and comparing materials and by depositing securities guaranteed loans. These activities are often carried out as neoneros at this stage because the main objective is to obliterate the capital turning several times, often, a dependent territory of a jurisdiction in another.

Thus, experts have advised on some patterns whose presence indicate money laundering in the banking sector. One of these patterns is to use the accounts under false names or on behalf of others for other beneficiaries. The last category involves a class of agents that wash money made from Legal Counsel, lawyers and accountants. It also entails ghost companies. In all cases, accounts are used to facilitate storage or transfer of illicit funds. Layers often complex transactions involving multiple accounts on behalf of several persons, businesses or companies ghost.

Experts have noted several features samples for money laundering through such accounts. For example, the transactions reflected in the accounts, often show higher values than would be expected from that business saver account. In addition, documentation provided to support the transactions, loan agreements, collateral, sales and purchase contracts and letters of credit, often false or legal deficiencies.

Another threat identified by some delegates - as indicated by the FATF report - Task financial battle against money laundering - the use of representative offices of foreign banks. They may offer important advantages for money laundering. In some countries, representative offices represent deposits and their transfer to a local bank, without deconspire identity of the depositor or beneficiary.

In connection with the method previously emphasized, other old washing techniques continue to be prominent in banking. Telephone transfers remain a primary means of money laundering, with all stages of the process. The transactions are structured, however, even where there is high demands cash registers and large cash deposits are made but in some areas, particularly people and groups connected with the former Soviet Union and Eastern Bloc.

Are predominant and traditional techniques of money laundering in the non-banking sector. Non-bank financial institutions and businesses still nonfinanciare offers many ways to introduce attractive earnings of illicit financial channels. Some delegates reported a significant change in money laundering activities from traditional banking sector into non-banking financial sector and into the professions and business nonfinanciare.

Bureaux de change have become increasingly used for money laundering. Experts have noted an apparent increase in proportion to the work of washing. Criminal elements continue to be attracted to bureaux de change to their work tend not to be strictly regulated or other traditional financial institutions.

Another important trend is that of a class of professionals in facilitating money laundering. There is a significant increase in the number of Legal Counsel, lawyers, accountants, financial advisors, notaries and other trusted persons whose services is assistance for money laundering. Among the techniques used was seen to be using client accounts to place and Legal Counsel and attorneys cover funds. This method provides client lawyer privilege of anonymity.

One of the oldest techniques of money laundering in the form contract is increasing. A number of experts have reported an appreciable volume increased cash moving abroad covered. Smuggling can be done either by physical transportation of currency or monetary instruments or by concealing cash on board ships that go across the border. Criminals have shown an increased ability in these operations, often purchasing businesses engaged in transportation of goods and hiding dirty money within these goods.

Experts have also detected significant amounts of money stored, especially at ports and border regions - a phenomenon previously considered as a step smuggling. Both trends have been attributed in part to the success of measures intended to counteract money laundering in banks and other financial institutions.

Besides the above techniques, the market appeared other means of payment known as "cyber payments" are not merely surrogates of some cash, intended to propose an alternative transaction. An essential component of technology "cyber payments" is a use "smart cards" - credit cards containing a microchip with a codified value. The cards can be read by the terminal deducted from the total amount of each transaction amount stored. When one card face value is consumed, it can be recharged by ATM, phone, wallet or personal computer or power can give it. The term "cyber payments" also includes systems' electronic bank "that amount is held in a personal computer and transferred electronically via the Internet.

Currently, electronic payments are not restricted, they can be used in retail and some transactions may be conducted in several currencies. Moreover the values stored electronic payments can be accessed and transferred without the help of financial institutions.

Clearly, this technology offers huge benefits for both business and government as the pirate. Instant access to banking services in different places can increase and reduce operating costs. Unfortunately, the same advantages that electronic payments they generate for legitimate trade to acquire and criminal elements.

Also found that trends were identified and suspected money laundering in the insurance sector. Continue to be enhanced insurance contracts of all kinds. Those who wash money then buy this product and return it with a discount. Contracts with insurance premium still have an advantage and can be used as collateral for loans from financial institutions. There is the possibility that the securities field to be used for money laundering, in comparison with the insurance industry, the area is limited.

CONCLUSIONS

Tax evasion will undoubtedly be a problem under any tax system. It is a major and growing problem under the current tax system, despite very substantial efforts and increasingly harsh treatment of the taxpaying public. In the current economic and financial crisis are predicted a significant increase of crime in the financial, banking and capital markets. The wave of fraud has turned the U.S. and has spread rapidly across Europe.

Business develops financial swindlers posing as banks, are investors, banks show that institutions provide low interest savings made and require large loan guarantees and try to involve banks in their relations with the suspect to legitimize it to customers.

The means of combating such fraud is not sufficiently developed. The most important means to combat fraud phenomena are legal means to combat "money laundering". The fight against fraud, scams, deceit was brought into the current national and European parliamentarians, who established responsibilities of national governments and organizations antifraud community, emphasizing the role of cooperation between the structures.

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THE PRESENTATION OF INTELLECTUAL CAPITAL IN CONTEXT OF FINANCIAL CRISIS: STAKES, ACHIEVEMENTS AND LIMITATIONS

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ABSTRACT

A paradox of intangible assets is that the more incorporates, the more volatile is its valuation. In other words, conventional financial statements and management reports presently provide insufficient information on the intellectual capital that really contributes to a company's success. That increased importance of intellectual capital to business competitiveness has driven changes in the accounting treatment of intangibles and accounting standards who try to improve disclosures about them. The purpose of the paper is to present the effects of recent amendments to the assessment and accounting for intellectual capital and tries to determine the advantages and limitations on the new treatment of intangible assets in context of the financial crisis. This analysis is to respond to the following question: Could this be a manifestation of inadequate competence or of stubborn unwillingness to yield to the precepts of the mandated reporting framework – comforted by a sense that meaningful rebuke is unlikely? Could this be a signal that policy makers have promulgated standards so complex, unwieldy and conceptually challenged that any hope of systematic compliance, still less the production of serviceable information via their application is no more than a mirage - a false impossible shore?

INTRODUCTION

The ongoing financial crisis has again and again been inspiring numerous discussions in the media, professional and academic communities about the role of financial accounting and audit in corporate governance and management of other organizations.

Intangible assets are best characterized by their lack of physical substance. Since long ago people have been interested above all in physical assets in the form of land, dwellings, clothes, food and weapons while the non-existent property was to be seen only in connection with physical matter. Later, it became clear that the enterprise is not just a simple sum of physically sizeable assets but it also contains a volume of intangible assets in the form of patents, know-how, goodwill, licenses, copyrights, research and development findings, software etc., which is necessary for its economic activity. In order to be included in the value of the company (in the account balance of the property) it was necessary to determine the rules for its recognition, evaluation, accounting and reporting. Intangible assets were traditionally to be seen only in connection with tangible assets and as a separate group in the balance of enterprises they were segregated as lately as in the recent past.

On the other hand, in the context of the economic crises, intangible assets represent only a fraction of long-term assets, which is influenced also by the accounting methods that do not recognize certain intangible assets, although involved in the creation of economic benefits to the company.

It is clear that the value of assets of the enterprise shown in the account balance will be shaped depending on the accounting principles such as the true and fair view, the prudence principle and criteria of assets and liabilities acknowledgement (Richard 2005). The generally true prerequisite for the presentment of assets in accounting in accordance with those principles is the condition of reliable valuation of assets and liabilities of the company. The international (IFRS) and the numerous still functioning national

accounting systems produce large quantities of information for all potential users. Questions are often asked what causes the profound differences between the accounting and the market value of companies. Analyses and research results in this area often speak about very different ways of human capital management, differences in customer relationships, use of information technologies, employee knowledge or specific corporate organizational cultures. All these "invisible" resources have recently been named intangible assets or intellectual capital in literature.

LITERATURE REVIEW

Surveys of intangible assets and intellectual capital are classified in many different ways. Pursuant to the study (Kaufmann, Schneider, 2004) of available publications on the terminology used intangible assets may be divided into four basic groups:
- Most authors use the basic term intangible assets, or intangibles, such as B. Lev, F. Gu, L. Canibano, P. Sanches, K. E. Sweiby.
- Some groups of authors use the term intellectual capital; they are J. H. Daum and others.
- The third group of authors slightly modifies the above two basic approaches and uses for example intangible resources, intellectual property, immaterial values – see for example O. Granstrand, T. Gunter, C. Kriegbaum and currently especially P. Sullivan.
- The last group does not introduce any special term and only uses the general word knowledge

As follows from the above classification, the basic terms and definitions in this area are not yet generally accepted.

Sullivan (2000, p. 228) submits a working definition of intellectual capita in the following wording: "…knowledge that can be converted into profit". In his opinion intellectual capital consists of two components - human capital and intellectual assets.

Baruch Lev in his famous work "Intangibles – Management, Measurement and Reporting" of 2000 states on page 5: "An intangible asset is a claim to future benefits that does not have a physical or financial embodiment. A patent, a brand, and a unique organizational structure (for example, an Internet-based supply chain) that generate cost savings are intangible assets".

According to Sweiby (1997, p. 18) "the difference between the marked value of a publicly held company and its official net book value is the value of its intangible assets. In most companies, the value of intangible assets exceeds the value of tangible assets."

Intangible assets are also often defined by a list of their assumed properties, by classification or sorting.

Like in the case of the basic terms and definitions the authors of publications about intangible assets /intellectual capital have not yet reached too much agreement about their sorting, classification or categorization. All classifications in effect remain very abstract, thus not offering a real instrument for management and use of the intangible assets by corporate managers.

A classification which – guessing from the number of quotations – has more significantly influenced other researchers was published in 1997 by L. Edvinsson. This classification is the simplest, and only consists of two basic categories: Human capital and Organizational, or Structural capital. Some publications do not provide any classification at all, or state that a classification would be very difficult.

Other authors, with Sweiby, 1997, being one of the most often mentioned and quoted, divide intangible assets to three basic groups or levels: employee competence, internal structure and external structure.

Studies analyzing publications on intangible assets mostly deal with works by American and Western European authors.

There are also two more detailed and more specified classifications, which are quite exceptional in this area:

- The first is the basic categorization developed by the American Financial Accounting Standard Board for the purpose of accounting reporting and already mentioned in the first part of the article, in the section on the accounting statement systems. This categorization distinguishes seven basic categories of intangible assets based on: technologies, customers, market, employees, contracts, organization and company status,
- The second classification by the German working group investigating intangible assets in accounting for Schmalebach Society includes human, customer, supplier, investment, process, allocation and innovation capital (Kaufmann, Schneider, 2004).

CHANGES AND TRENDS IN ACCOUNTING INTELLECTUAL CAPITAL

Terms like intangible assets and intellectual capital have been subject of increasing interest of scientists and practical experts. This trend corresponds to the development of the competitive business environment, which has discovered the importance of knowledge as a separate commodity allowing for coping with resource limitations. Also the differences between the market and the accounting value of companies suggests that significant reasons for these differences are "intangible or invisible" in many cases.

An issue gaining increasing importance nowadays relates to pinpointing some methods and indicators able to gauge how the intangibles affect the current economic situation. The obvious impact that the intangibles, the intellectual property, has over the companies' performances led the latter's managers to strive towards measuring these intangibles due to the fact that they no longer trust the decisions taken based on traditional tangible data. Changing a way of thinking built, for centuries, on a certain understanding of the notion of value, are not, however, a trifle. Attempts to do it are still experimental, meaning that any solution suggesting new concepts, new indicators for evaluating the efficiency of intangibles, new operational measuring should be seen with interest, promoted and tried. Changes include:

- improvements in financial markets that have made it easier to finance large investments, that means the capital intensity is no longer a defense against competition;
- the large fall in communications and production costs, thanks to the spread of information and communication technologies.

Features of intangible asset defined by the publication IAS 38 Intangible Assets as issued at 1 January 2009 are as follows:

- Identifiable – the asset is separable from the company, may be sold, leased etc. or comes from contractual or other legal rights,
- Controllable – the company is entitled for economic benefits following from the asset and can restrict third party access to these benefits,
- Bringing future economic benefits – usually revenues from sale or cost saving.

In the same time the implementation of International Financial Reporting Standards (IFRS) has led to frequent comments that its present 'fair value-based standards'. While IFRS have long required the use of fair value to measure the cost of assets or liabilities (in other words, the consideration paid or assumed),

the IASB has begun to require that assets and liabilities should be measured at initial recognition at fair value even when this amount differs from cost (i.e. the fair value of the consideration given or received). So, some specialists bring into question the understanding and application of existing national Generally Accepted Accounting Principles (GAAP) and historical cost accounting.

Thus, in traditional accounting systems, if an intangible asset does not meet the criteria above, then it will not appear in the accounting books of the company. However, as time passed, the traditional accounting concepts and systems became improper for the purposes of the new company models form the post-industrial economy (organizations based on knowledge, immaterial, with a low number of employees with high qualification).

In order to face the new challenges arisen, many companies, mainly in Northern European countries, focused on the concept of Intellectual Capital (IC) and on adopting instruments for classification and identification of new value determinants. For the same purpose, some specific linguistic terms started to be used, like "Intangibles Report" or "Intellectual Capital Report" (meaning various models of identifying and presenting intangible assets).

The wide definition of the basic terms and classification shows the large variability in the opinions of researchers on appreciation and reporting of intangible assets. A survey first published in 1997 by Sweiby and several times updated uses the essential classification into four basic groups.

Methods allowing for appreciation of intangible assets in currency units (from the Return On Assets Methods and the Market Capitalization Methods groups) are conveniently used in whole business mergers and acquisitions. They may also be used for comparisons of different companies within the same industry. As they are for the most part based on accounting principles they facilitate communication with accounting and finance experts. The main advantages of the Direct Intellectual Capital methods and the Scorecard Methods include the possibility to create a more complex and impressive image of status of the organization and are more often used by non-profit organizations and public legal entities (Sweiby, 2007).

According to Boedker (2007), Ricceri and Guthrie (2008) "a growing number of reporting frameworks and measurement models have sought to address the changing information requirements of business executive and financial markets. Internationally, the last decade has seen the proliferation of a variety of reporting frameworks and models".

The problem arises when choosing the most adequate models in order to meet the demands of the users of accounting information on the one hand and to observe the accounting principles and fundamentals on the other hand.

Issuers and users of financial sheets argue that, when measuring and presenting accounting information, the most widely used is the historical cost, although it has weak parts. This is usually combined with other evaluation methods. Moreover, the trend is towards using the current cost as an answer to the inability of the accounting model based on historical cost to solve problems related to the effect of modifying the price of monetary assets.

But an important factor determining companies to invest in intangibles is their will to reduce the degree of uncertainty of their business and, also, to keep and gain benefits from demand or costs as compared to the competition. We are talking about the fact that, usually, any benefit generated by the standard, tangible capital is easily imitated by competitors. In the same time, money which companies invest in intangibles, rather their results, are specific (for example: skills and abilities of human resources, organizational culture, credibility, renown, customer relations etc.) and very hard, almost impossible to imitate. Thus,

intangibles become an important way to obtain a competitive benefit and to help companies face the quick changes encountered on the market.

The challenge facing the boards in developing an improved accounting standard for internally developed intangible assets is that the conventional cost-based accounting model seems unsuited for the task - at least for initial recognition. These assets typically arise over time, often over long periods, without a specific recognition event occurring. Cost accumulation models do not work very well when you do not know whether you have an asset for which costs should be accumulated. Then when you do believe an asset exists, it is often extremely difficult if not impossible to trace the specific past costs that may have been associated with the creation of the asset. A fair value model, on the other hand, can provide an accounting measure for these assets, both at initial recognition and subsequently – the amount for which the asset could be exchanged in a current transaction. Notwithstanding the off-expressed concerns about the reliability of such fair value measures in the absence of market evidence, fair values of internally developed intangible assets are determined and reported in the financial statements whenever business combinations take place.

CONCLUSIONS

In conclusion is likely that the IASB will continue to use fair values as the means of ensuring that transactions are represented faithfully in the financial statements and in impairment testing. Any significant extension of the use of fair values for the subsequent measurement of assets and liabilities is likely to meet strong resistance both in the IASB itself as well as its constituency Those who resist, however, should bear in mind that the current reliance on historical cost-based amounts provides less relevant information and omits some assets and, possibly, liabilities from the financial statements. And those who criticize the limited use of fair values in IFRS should question their application of national GAAP and whether previous financial statements really had the qualities they claimed.

The current lacks of investment in intellectual capital have several consequences. If we can develop a better way to account for such investments, we will achieve a more efficient allocation of resources and benefits will accrue to the economy. As a result it is some problems of credibility and meaningfulness vis-à-vis these new reports. Also the intangibles phenomena represented by the date which can be in conflict with their reliability.

In the actual economic crises context the role of the management is to create a company value over the value of generic assets. Today the success of the company depends on the management ability to change human capital (the potential value) into an intangible assets of the company (like as brand, patent, trade secrets, copyright etc.).

Today, IFRS and specific national modifications also deal with the question of compatibility of the standards within the EU. This question should be resolved by the Common Consolidated Corporate Tax Base project that is to be finished by 2011. The EU aims at creating a unified approach as far as establishing one's income tax is concerned; the individual member countries would be in charge of establishing the rate then.

Moreover, it is visible that some of the models for evaluating intellectual capital are built on the same principles and use the same indicators, only their names being different. This fact proves that the area is in its first stages and no one wants to give up their own nomenclature by borrowing the results of the work of others, as long as no method is generally valid. Reasoning further, an important aspect for this research area is elaborating a common set of definitions and indicators which can be easily generalized.

Facing multiple challenges, like: striving towards conceptualizing the area; attempting to measuring the intangibles; establishing cause-effect relations; proving the truthfulness of some approximate variables, many companies with a system of managing the intellectual capital happen to use within it some individual indicators whose relevance is not fully justified.

The trend of the growing importance of intangible resources is obvious. The intellectual capital community and also the financial and accounting community are the movements than can explore this uncharted territory.

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CRISIS MANAGEMENT IN THE PUBLIC ADMINISTRATION

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ABSTRACT

The crisis is a part of life economic society. It is a time (one period) of failure in business, which requires sustainable solutions, designed to ensure a change or revitalize damaged systems and processes. The reasons are complex crisis and their resolution into management functionality - economic, system and process. Although seisures have been studied rigorously, not known and, especially, can not provide the full and timely in all cases it generates, not even the key. The paper wants to show that solving this problem is possible only through a proper system of crisis management. But crisis management training system can be charged without developing a crisis management concept, accepted and recognized by society, forms, methods and mechanisms which form the essence of them. Therefore, now is the current and growing importance of crisis management in solving the crisis in public administration management.

INTRODUCERE

Public organization is a structural segment relatively separate economic system generally. The criteria for such separations are: economic independence, work organization (existence of internal and external environment), availability of specialized infrastructure, the possibility of recognizing the total income of public administration bodies.

As a public organization can be considered separate company, organization, company, bank, company (insurance, travel, etc..) And structural units of public administration system. Reality shows that crises reflect their rates of development of each organization in hand, sometimes do not coincide with the pace of social development or development of other organizations. Each organization has its development potential and conditions of its output and co-development is subject to cyclical legităţilor entire social and economic system. Therefore the public organization works continuously both external factors, determine the impact of general business cycles and internal ones, which depend on their cycles and the development of the crisis.

Decision-making in crisis management implies the need for strict verification measures, namely further analysis of the dynamic state of the company. This is subject to changing system, which depends gradientele small enough to change management efforts. Analyzing the crisis phenomena in the business and from the fact that it is subject ciclitităţii, chart the organization's lifecycle stage is flexible state of crisis.

In terms of action the organization causes the onset of the crisis within it can be divided into internal and external. The external are determined by economic status, activity state, the state branch of the organization part time, and the impact of stihii. Occurrence of crisis in public organization problem must be addressed by the systemic position. Any organization is an integral system composed of components, parts, parts. interdependent. Co-development organization, even if quantitative growth, not change the general nature of its integrity, if, of course, there is no destruction.

System in its life cycle process can be either steady state or the unstable state. Thus, to recognize the crisis, have found the time symptoms, determine the factors that speak about the possible intervention of crisis situation and clarify its causes. As a means of discovery of the responses to the crisis in the organization is considered intuition and experience, analyze and diagnose the state of things. Such means should be applied at all stages of existence of public organizations by public organization management, because the trader may enter the deep crisis in the flowering stage or when a relatively favorable external economic situation.

LITERATURE REVEW

Today the notion of crisis is understood an overheating of the social system and economic contradictions what threatens stability. Crisis phenomena opposite attitude changed radically over the last three centuries. We about to delineate three periods. The first period begins with the eighteenth century and continued until the mid twentieth century 30. During this time it was thought that economic crises are not possible under capitalism (JS Michell G.-B. Say, Ricardo D), but if they still are wearing a fortuity (G.-Ş. Simondi, R. Robertus).

Since the mid 30 to 60 years of the twentieth century economic theory's spread Keyns fact that economic crises, under capitalism, are inevitable and they are based on the type of market characteristic, the negative effects of crisis have mitigated through direct state in the economy in order to stimulate demand.

Top of the third period was generated by the functioning of the global changes in 60 -70 years of the twentieth century. During this time there is awareness of the need to change constantly in order regulării crisis economic problems. In this period were determined external factors (endogenous) and the internal (exogenous) ciclităţii of market economy and was determined importance of the role of mitigating the negative effects of crisis by the state and enterprises. The cycles are differentiated by the nature of origin and duration, but all together make a cyclical spiral of economic development. Therefore we conclude that a destructive phase is not an evil of society, but a condition of an upward movement in economic development.

Thus, the crisis is an inevitable phenomenon and regular market economy. Accordingly, there is always the danger of crisis, even when he is not. In this context, there are two problems: determination of the crisis and avoid them. The first problem is more difficult because the observation at the right time of the crisis, determine early symptoms, understanding its nature, means practically avoid it.

MANAGEMENT CRISIS IN PUBLIC ADMINISTRATION

Crises requires a strategic approach. The organizational stress conditions, from top-management requires a resourcefulness and flexibility in application of various strategies, which aim to end the crisis. In this work it is important to determine-type strategy applied in a specific situation, taking into account the future perspective. Usually the standard of business highlights the following strategies: growth, stability, output:
-    strategy for growth: growth focused (increasing sales of existing products), concentric growth (widening market segments), the amendment increases (serving new customers).
-    stability strategy: break (intentionally slowing sales growth), to promote conservative (promotion programs triggered pending success) without changes (freeze the situation, stopping the investment opportunities), low income (cease making investments in product).
-    exit strategy: minimizing costs (setting the minimum level of consumer spending), partially refused the operational independence (from human resources, maintenance, finance), partial sale of assets (share in business or physical assets), bankruptcy, liquidation.

For organizations in crisis, but hopes to achieve success in the future, it is recommended to implement growth strategy. And failure to plan strategically oriented application should exit strategy. Regarding the strategy of stability, it can be applied only in short steps of operation of the organization in crisis conditions and is used to accumulate resources to perform that action. Arts general manager of organizations in crisis, is to determine goals, resources, mechanisms and prognosis of life to reach those goals. Such a mechanism may be the strategic plan, which is not always prepared for a long period. A characteristic feature of the strategic plan is that to achieve goals, the plan is appropriate functions of each subdivision in different situations. I mean each subdivision must have a "formula on its own behavior, then to act according to environmental changes (internal and external). So but the general manager, as a strategist, to produce the continuous formula of behavior "of the levels below managers (heads of directorates, departments), for the enterprise effectively to achieve goals.

This strategy forms the crisis, which is a special program document, which contains in addition to goals and resources, forms and rules for management of subdivisions in a dynamic environment (forms of behavior in different situations, management algorithms, programmed decisions). Hence it is clear and the period for which the strategy is developed. It may be different, including not more than a year.

It is also important that there formulas behavior of staff (a co-worker or group of employees) in different situations. In this context and crisis strategy should contain a set of formulas as (approaches, mechanisms) managers made decisions in different situations, which would allow rapid achievement of its functions. Such logic allows highlighting business strategy both long and short. The main advantage of strategic management - is the speed of receipt of the decision to lower management levels avoiding the links above (exceptions are the procedures coordinated long-term). Ie this property is the strategy applied in crisis management when decisions must be immediately received different levels of the hierarchy, the changing environmental conditions. These moments allow to attribute largely to crisis management, strategic management rather than operational management (including more than meets technology to achieve strategic plans).

As for choosing the main strategy of crisis management in government the best value is "differentiation strategy". The organization in crisis has a lot of surplus funds, and employees free, this does not allow that in the short term to achieve the minimum cost base and become a leader in low cost. Meanwhile, the existence of surplus potentially allows quick to take action on amendments to operating quality (consumer) products, in accordance with the preferences of different consumer groups, as increasing sales and profits considerably enlarged. Combining the above-mentioned strategies (leading to low cost and differentiation) in crisis management, not only will double the effect, but also may reduce growth. Therefore, it is preferable to choose a single strategy, in our case - "differentiation strategy".

In essence, the strategy is a multidimensional category that describes the technology running the organization to achieve, achieve certain goals.

CONCLUSION

Removing the organization of the state of crisis (crisis prophylactic), requires a strategic approach to crisis management. The document then must lead manager, should be the strategic plan - made aware of each subdivision.

The main feature of document (curriculum, plan, etc..) Strategic crisis is the existence of the content of specific directives, specific schemes for managers of different levels - developed in several variants, depending on the characteristics of internal and external environment. The crisis management of a large-scale organizations, the most preferred type of strategy which is less expensive, is "differentiation

strategy", which is to modify operating parameters as required by traditional production (consumer market).

Strategy is a crisis of government originality, because it is appropriate for a system of individual, different from other strategies.

One of the functions of strategic management is forecasting ongoing and systematic evaluation of the factors of crisis, and developing mechanisms to neutralize them. One of the most expensive, but the most effective methods of strategic management of crisis is shaping the evolution and development crisis in the basis of their mechanisms to overcome.

Today in the globalized any actions and events play an increasingly important role. Therefore, increasing the importance of ensuring that is far from crisis to resolve both the macro and microeconomic level as well.

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A SYSTEM ENGINEERING MODELING AND SIMULATION ANALYSIS OF THE U.S. ECONOMY TO DETERMINE PROJECTIONS OF MANDATORY EXPENSES AND INTEREST ON THE U.S. DEBT AND THEIR EFFECT ON THE STABILITY AND PROSPERITY OF THE U.S. ECONOMIC SYSTEM

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ABSTRACT

This paper takes a first order look at various mandatory programs to understand future cost projections. Cost for the three major mandatory programs; Social Security, Medicare and Medicaid have increased at a rate much higher than the Gross Domestic Product (GDP), and thus revenue. As a result, these programs account for a larger portion of the U.S. budget. As projections continue to rise relative to available revenue, a lower level of funds will be available for other programs or the U.S. debt will continue to increase further exacerbating the problem. Social Security is projected to begin running a deficit in 2016, under intermediate assumptions, but with unemployment at 10.2% and an increased number of claims; Social Security will most likely see a deficit much sooner. Medicare Hospital Insurance (HI) currently operates in a deficit and that deficit is projected to grow with each passing year. In 2018, projections indicate that spending on mandatory expenses and interest will account for 85% of the U.S. revenue. Projections indicate that the U.S. will continue operating on a deficit thereby further increasing the total U.S. debt.

The U.S. debt has grown by an average of 7-8% per year over the last 40-years. As the U.S. debt continues to rise, interest on the growing debt will consume a larger portion of the U.S. budget. Furthermore, as the total U.S. debt approaches the yearly GDP (in 2010 the total U.S. debt is projected to be 97% of the GDP), the risk of rising interest rates becomes a bigger risk and concern. This paper shows that even a small increase in interest rates have a big impact on the overall budget. This paper shows that the practice of continuing to increase the U.S. debt at a rate higher than the GDP/revenue increases is simply unsustainable.

INTRODUCTION

Over the last several decades mandatory spending, primarily Social Security, Medicare and Medicare have been consuming a larger portion of Federal spending. In 1966, Social Security, Medicare and Medicaid accounted for 16% of Federal spending. In 1986 and 2006, these same programs accounted for 30% and 40% of Federal spending, respectively. In 2008, Social Security, Medicare and Medicaid accounted for 54% of the $2,983 billion in Federal spending. With 80 million baby boomers hitting retirement age beginning in 2008, projections indicate that these mandatory programs will see even bigger demands.

US GROSS DOMESTIC PRODUCT/ REVENUE

For the last 30 years, the annual U.S. revenue has averaged 18.7% of the Gross Domestic Product (GDP). The 2010 U.S. Budget assumes an average annual GDP increase of 4.92% from 2010 through 2019 with the increase tapering down to 4.45 % from 2014- 2019. For this paper, GDP and revenue are taken from the U.S. Budget for years 2009-2019. GDP is projected to increase 4.6% per year for years 2020-2035

consistent with GDP increase contained in the Social Security Trustees Report. Revenue after 2019 is calculated to be 18.7% of GDP.

SOCIAL SECURITY

Total Social Security benefits paid in 2008 were $615 billion. Total income was $805 billion, and assets held in special issue U.S. Treasury securities grew to $2.4 trillion. Social Security currently operates on a yearly surplus and that yearly surplus is used to pay the current U.S. obligations in exchange for special issue Treasury Securities. Since the Social Security Administration has loaned the surplus funds to the Treasury Department, only IOU's are in the Social Security trust fund. Under intermediate assumptions (Unemployment rate of 8.2%, 8.8%, and 7.9% in calendar years 2009, 2010, and 2011 respectively and tapering down to 5.5% in 2016), Social Security will continue to operate with a yearly surplus until 2016 at which time it will begin operating on a yearly deficit that is projected to grow with each passing year (see Figure 1). Under high-cost assumptions (Unemployment rate of 8.5%, 9.3%, and 8.3% in calendar years 2009, 2010, and 2011 respectively and tapering down to 6.5% in 2018), Social Security will begin operating on a yearly deficit in 2013 (see Figure 2). Since the U.S. unemployment rate is currently at 10.2% (Nov. 2009), Social Security is expected to run a deficit before 2013 and possibly as early as 2010. When Social Security runs a yearly deficit, the Treasury Securities that the U.S. government owes itself will have to be sold to investors. The overall U.S. debt will not increase since the debt is being shifted from the Treasury Department owing the Social Security Administration to the Treasury Department owing investors. However, the bond market may react to this debt shift. Under the intermediate assumptions, the Social Security Trust fund will remain solvent until 2036 at which time the annual Social Security deficit will be $690 Billion per year and growing (See Figure 1).

Figure 1: Social Security Cash Flow (Intermediate Projections)
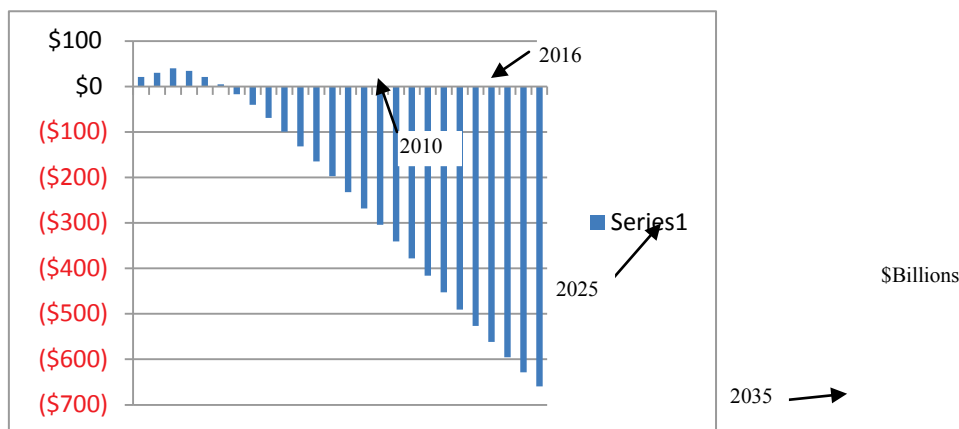
This figure shows the Social Security cash flow projections under intermediate assumptions for years 2010 – 2035.

Figure 2: Social Security Cash Flow (High Projections)
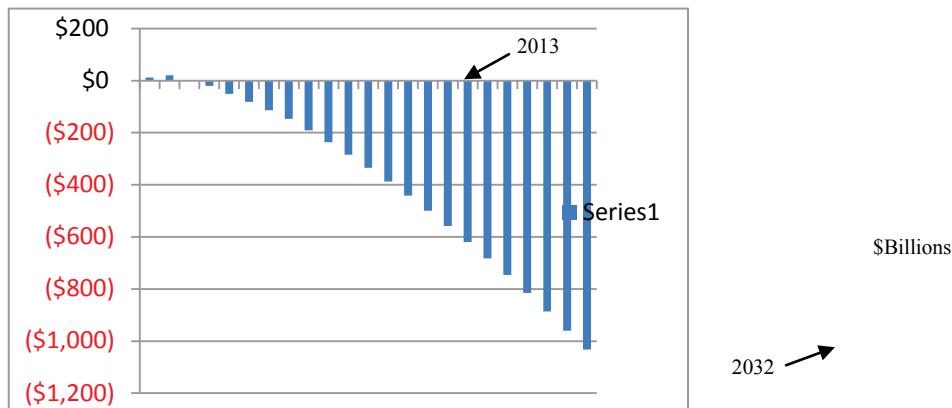
This figure shows the Social Security cash flow projections under high assumptions for years 2010 – 2035.

Social Security expenses for years 2018 and 2035 for intermediate, low and high cost assumptions were taken from the 2009 Social Security Trustees Report. Revenue in 2018 was taken from the 2010 U.S. Budget. Revenue for 2035 was calculated as described in the GDP/Revenue section of this paper.

Table 1: Social Security Cost as a percentage of U.S. Revenue 2008, 2018, 2035

	2008	2018	2035
Social Security Cost			
Intermediate ($B)	625	1147	2922
Low ($B)		1043	2371
High ($B)		1323	3785
U.S. Revenue ($B)	2524	4218	9095
% U.S. Rev. (Int.)	24.8%	27.2%	32.1%
% U.S. Rev. (Low)		24.7%	26.1%
% U.S. Rev. (High)		31.4%	41.6%

This table shows results for Social Security cost as a percentage of revenue for 2008, 2018 and 2035 under intermediate, low and high cost assumptions.

In the short term, Social Security is projected to begin running a yearly growing deficit (Fig. 1) that will cause a debt shift from the Treasury Department to investors that is likely to affect the bond market. In the long term, under intermediate assumptions, Social Security is projected to continue to account for a larger portion of the yearly U.S. revenue thereby increasing the total U.S. debt. Social Security reform is required, and the sooner it is enacted the more flexible and gradual it can be. Potential solutions discussed in the Social Security Trustees Report include increasing the payroll tax from its current level of 12.4 percent (for employees and employers combined) to 14.41 percent. Alternatively, current and future costs/benefits could be reduced by 13.3 percent. Alternatively, there could be a combination of the two. A first order analysis of these options will be investigated looking at the effect on Social Security itself and not the impact to the growth of the U.S. economy or impact on beneficiaries. Below (Figure 3) is the Social Security cash flow projection assuming a 13.3% reduction in costs/benefits as reported in the 2009 Social Security Trustees Report under nominal assumptions.
With a 13.3% reduction in cost/benefits, Social Security will begin operating in a yearly growing deficit in 2023. The Social Security Trust Fund will have more years to grow and therefore will take longer to deplete.

Figure 3: Social Security Cash Flow (Intermediate Projections) with 13.3% Reduction in Cost/Benefits
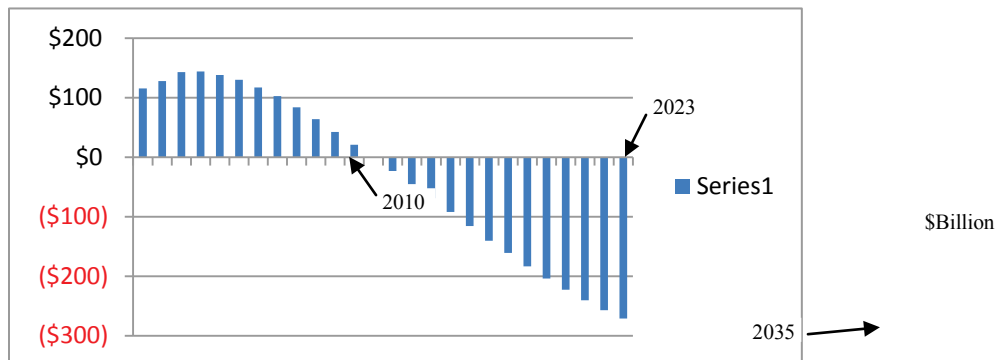
This figure shows the Social Security cash flow projections under intermediate assumptions with a 13.3% reduction in cost/benefits for years 2010 – 2035.

Below is the Social Security cash flow projection assuming a 16.2% increase in revenue, as reported in the 2009 Social Security Trustees Report under nominal assumptions. 16.2% is the net increase in revenue from increasing the S.S. tax rate from 12.4% to 14.1% (14.1/12.4 = 1.162). With a 16.2% increase in revenue, Social Security will begin operating in a yearly growing deficit in 2023. The Social Security Trust Fund will have more years to grow and therefore will take longer to deplete.

Figure 4: Social Security Cash Flow (Intermediate Projections) with 16.2% Increase in Revenue
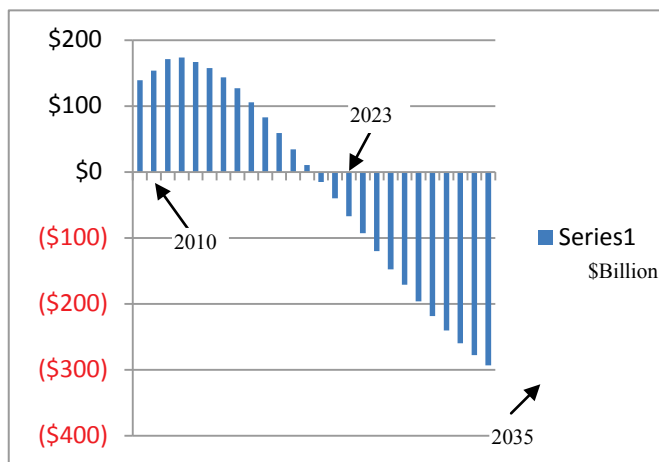
This figure shows the Social Security cash flow projections under intermediate assumptions with a 16.2% increase in revenue for years 2010 – 2035.

Below is the Social Security cash flow projection assuming a combination of 6.65% reduction in costs/benefits and an 8.1% increase in revenue. Also for this case, Social Security will begin operating in a yearly growing deficit in 2023. The Social Security Trust Fund will have more years to grow and therefore will take longer to deplete.

Figure 5: Social Security Cash Flow (Intermediate Projections)   with 6.65% Reduction in Cost/Benefits and 8.1% Increase in Revenue
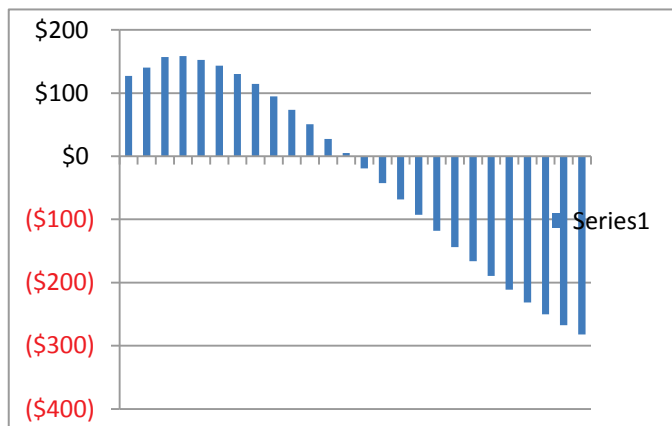
This figure shows the Social Security cash flow projections under intermediate assumptions with a combined 6.65% reduction in cost/benefits and 8.1% increase in revenue for years 2010 – 2035.

A final projection of the Social Security cash flow assumes a full combination of 13.3% reduction in costs/benefits and 16.2% increase in revenue. Clearly, a full 13.3% reduction in benefits and 16.2% increase in Social Security payroll taxes would have a larger impact on beneficiaries and economic growth. As shown in Figure 5, for a combined effort less than a 13.3% reduction in benefits and less than 16.2% increase in payroll taxes could keep Social Security operating in the black.

Figure 6: Social Security Cash Flow (Intermediate Projections)
 with Full 13.3% Reduction in Cost/Benefits and 16.2% Increase in Revenue
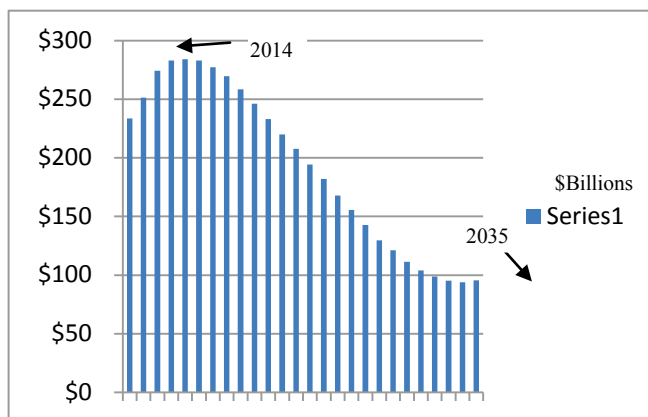
This figure shows the Social Security cash flow projections under intermediate assumptions with a combined 13.3% reduction in cost/benefits and 16.2% increase in revenue for years 2010 – 2035.

MEDICARE

In 2008, total Medicare expenditures were $468 billion and future expenditures are expected to increase at a faster pace than the overall U.S. economy. Medicare Hospital Insurance (HI), Part A, is currently operating in a deficit and that deficit will grow with each passing year with the Medicare trust fund being exhausted in 2017 (w/ intermediate assumptions). The HI deficit was taken directly from the Medicare 2009 Annual Report for years 2009-2018. The deficit from 2019-2035 was projected to continue to increase at the average rate calculated from 2009-2018 (see Figure 7).

Figure 7: Medicare HI Cash Flow (Intermediate Projections)
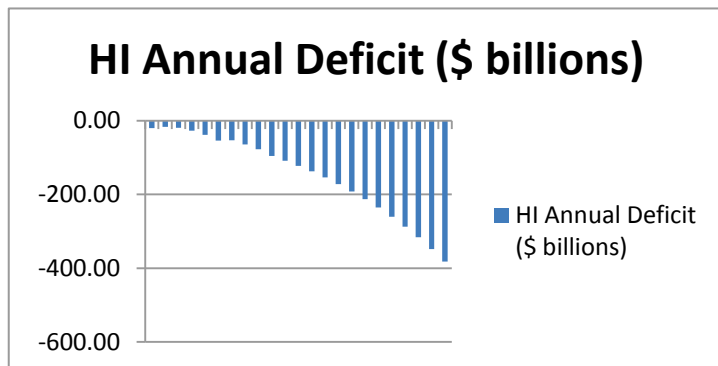
This figure shows the annual Medicare Health Insurance (HI) deficit in billions of dollars.

The Supplementary Medical Insurance (SMI), Part B, trust fund is adequately financed over the next 10-years because general revenues are reset every year to match cost. Under current law, the average annual growth rate of 5.5% is projected for the next 5-years. This is unrealistically constrained and requires physician fee reductions (21.5% for 2010) to be continually overridden by Congress (2003-2009). If Congress continues to override these physician fee reductions, the part B average annual growth rate will be 8.5% to 9.0%. The average annual Part D growth rate is 11.1% through 2018. The US Economy, as described in the Medicare Trustees Report, is projected to grow 4.5% during the same period.

MEDICAID

Medicaid spending in 2007 was 333.2 billion; $190.6 billion represents Federal spending and $142.6 billion represents State spending. Medicaid is expected to grow about 7.9% per year on average and reach $673.7 billion by 2017. Federal spending on Medicaid medical assistance payments is projected to rise to $192.6 billion in FY 2008 and to $383.4 billion by FY2017. For the projections of mandatory expenses section at the end of this paper, Medicaid expenses are projected to increase as reported in the 2008 Medicaid Annual Report with an average annual increase of 7.9%.

OTHER MANDATORY PROGRAMS

Projected cost for "Other Mandatory Programs" is taken directly from the 2010 US Budget with a 4.04% increase after 2019, which is the average projected increase over 2008 through 2019.

INTEREST ON U.S. DEBT

In 2008, the U.S. debt was $9.986 trillion and interest paid on that debt was $253 billion accounting for 10% of the 2008 revenue. The interest rate paid on the total U.S. debt in 2008, as reported in the Updated 2010 U.S. Budget Summary Tables, was 2.53%. The current U.S. debt is $12.04 trillion (Nov. 2009). The U.S. debt over the last 40-years has increased 7-8% per year, which is consistent with the projection in the 2010 U.S. Budget (average annual increase for years 2008-2019). The debt in the 2010 U.S. Budget is projected to be $23.29 trillion in 2019. The average interest rate to be paid on the U.S. debt calculated for years 2009-2019 in the U.S. Budget is 2.5%.

For the analysis below the data was taken directly from the Updated U.S. Budget through 2018. The U.S. debt was projected to increase 7% per year for years 2019-2035. The interest rate paid on the total U.S. debt in 2035 was assumed 2.5%. GDP was taken from the U.S. Budget and calculated to increase 4.6%

per year from 2019-3035. Revenue was taken from the U.S. Budget (2008 – 2019) and calculated as 18.7% of the calculated GDP for years 2019-2035.

Table 2: Nominal Predictions of Interest Paid on U.S. Debt for Years 2008, 2019 and 2035

	2008	2018	2035
Total U.S. Debt ($B)	$ 9,986	$ 21,884	$68,756
Interest Paid ($B)	$ 253	$708	$1,719
Interest Paid on U.S. Debt	0.0253	0.0324	0.0250
GDP ($B)	$14,222	$21,884	$46,940
Revenue ($B)	$ 2,524	$ 4,218	$8,778
Interest % of Revenue	0.100	0.168	0.196

This table list the percentage of interest paid on U.S. debt relative to the U.S. revenue for years 2008, 2019, and 2035.

In 2018, using projections in the 2010 U.S. Budget, the interest paid on the U.S. debt will account for 16.8 % of the revenue for that year. Based on the assumptions mentioned above, in 2035 the interest paid on the U.S. debt will account for 19.6 % of the revenue for that year. An interesting side note, for every 1% increase in the interest rate on the U.S. debt in 2018 and 2035 an additional 4.9% and 7.8 %, respectively, of the revenue for that year is required.

A Monte Carlo simulation, utilizing Oracle Crystal Ball[©] , was performed to look at the effect GDP growth, yearly U.S. debt increases, and varying interest rates have on the available revenue and future U.S. debt. Oracle Crystal Ball[©] is the leading spreadsheet based application suite for predictive modeling, forecasting, simulation, and optimization. For simulation A, B, and C the following assumptions were made; (1) The U.S. debt was modeled to continue increasing at an average rate of 7% per year. The debt increase was modeled with a normal distribution with 7.06% as the mean. Since this is an average increase over a number of years, the standard deviation was set at .005%. (2) The average annual GDP growth rate modeled with a normal distribution with the mean set at 4.6%. Since this is an average increase over a number of years, the standard deviation was set at .002%.

For simulation A (conservation assumption), the interest rate paid on the Total U.S. debt for a given year was modeled with a normal distribution with the mean set at 2.5%. The standard deviation was set at .005 with the interest rate truncated at 1.2%. 1.2% is the interest rate paid on the U.S. debt listed in the 2010 U.S. Budget for 2011 and represents the minimum.
For simulation B (moderate assumption), the interest rate paid on the Total U.S. debt for a given year was modeled with a normal distribution with the mean set at 2.5%. The standard deviation was set at .02 with the interest rate truncated at 1.2%.

For simulation C (High assumption), the interest rate paid on the Total US debt for a given year was modeled with a triangular distribution with the likeliest set at 2.5%, the minimum set at 1.2%, and the maximum set at 9.4%.

Results from simulation A (conservative assumption), show a 50% probability that in 2018, the interest on U.S. debt will account for between 12% - 16% of the revenue for that year with the full range of probabilities between 8% - 21%. In 2035, there is a 50% probability that the interest on the U.S. debt will account for 24% - 35% of the revenue for that year with the full range of probabilities between 8% - 32%.

Figure 13: Simulation A Results (2018)
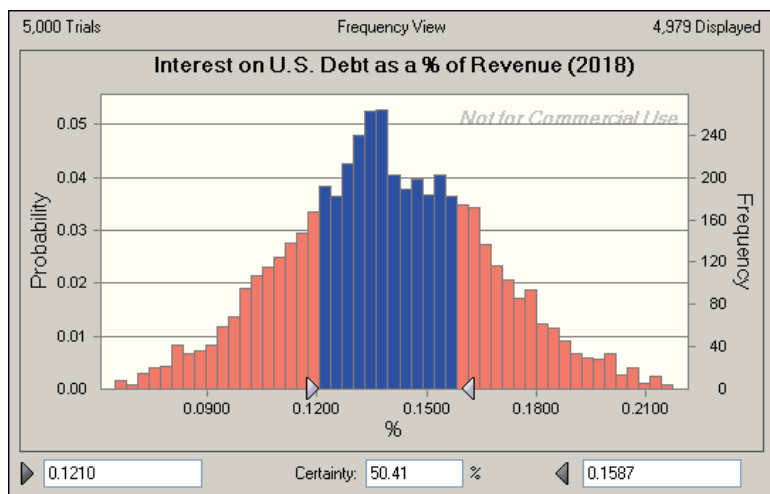
This figure shows the probability distribution of the percentage of revenue required to pay the interest on the U.S. debt for 2018 under a conservative set of interest rate assumptions.

Figure 14: Simulation A Results (2035)
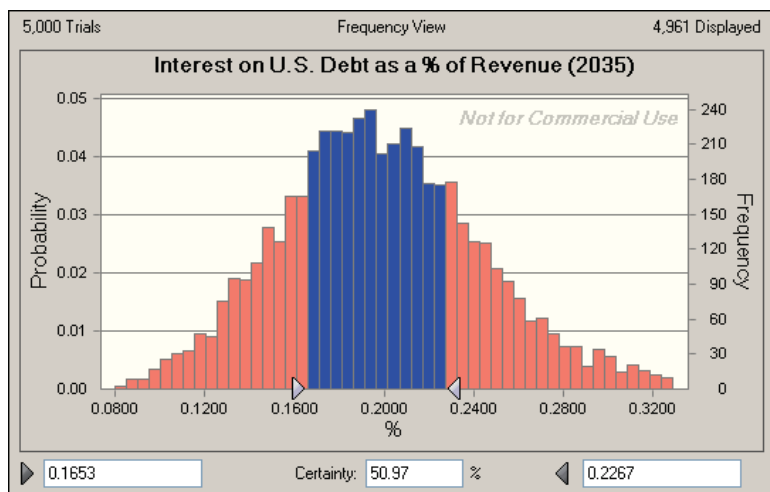
This figure shows the probability distribution of the percentage of revenue required to pay the interest on the U.S. debt for 2035 under a conservative set of interest rate assumptions.

Results from simulation B (moderate assumption), show a 51% probability that in 2018, the interest on U.S. debt will account for between 9% - 20% of the revenue for that year with the full range of probabilities between 8% - 41%. In 2035, there is a 51% probability that the interest on the U.S. debt will account for 13% - 28% of the revenue for that year with the full range of probabilities between 8% - 60%.

Figure 15: Simulation B Results (2018)
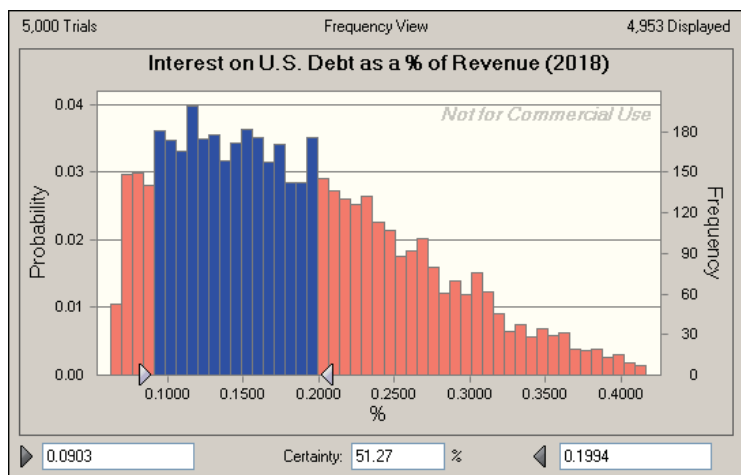
This figure shows the probability distribution of the percentage of revenue required to pay the interest on the U.S. debt for 2018 under a moderate set of interest rate assumptions.

Figure 16: Simulation B Results (2035)
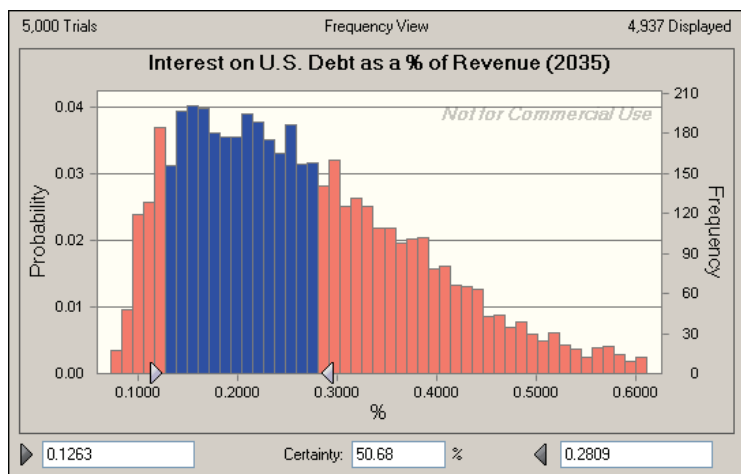
This figure shows the probability distribution of the percentage of revenue required to pay the interest on the U.S. debt for 2035 under a moderate set of interest rate assumptions.

Results from simulation C (high assumption), show a 52% probability that in 2018 the interest on U.S. debt will account for between 12% - 26% of the revenue for that year with the full range of probabilities between 8% - 51%. In 2035, there is a 52% probability that the interest on the U.S. debt will account for 16% - 37% of the revenue for that year with the full range of probabilities between 9% - 76%.

Figure 17: Simulation C Results (2018)
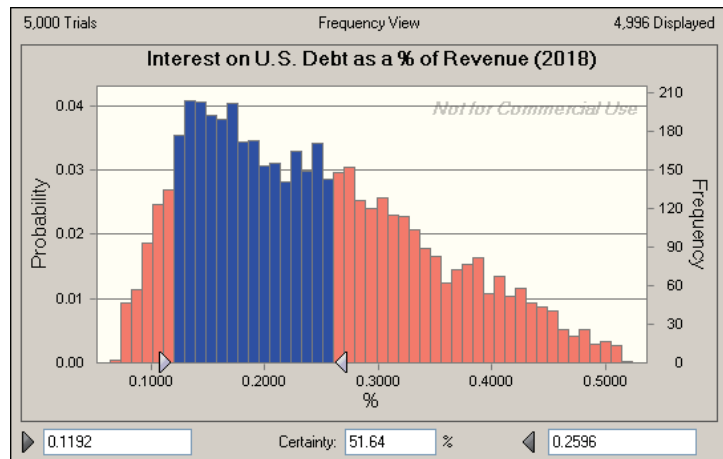
This figure shows the probability distribution of the percentage of revenue required to pay the interest on the U.S. debt for 2018 under a high set of interest rate assumptions.

Figure 18: Simulation C Results (2035)
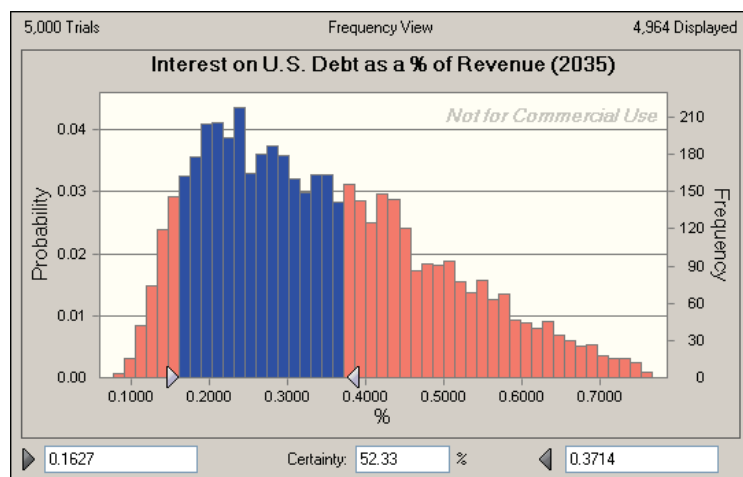
This figure shows the probability distribution of the percentage of revenue required to pay the interest on the U.S. debt for 2035 under a high set of interest rate assumptions.

Based on the nominal projection from Table 1 and the analytical simulation performed above, it is clear that rising interest rates are a threat to available resources in the coming years. It is clear that the U.S. cannot continue to increase the U.S. Debt at an average of 7-8% per year while GDP, and thus revenue, increase at a lower level. The Federal Reserve must make strong efforts to keep interest rates near their current low values while at the same time controlling inflation. At the same time, after the U.S. government has first stabilized the U.S. economy, a focus effort must be made to reduce the yearly deficit and thus debt increase. To keep this problem from getting worse, the average annual debt increase should be lower than the average annual revenue increase.

PROJECTIONS OF MANDATORY EXPENSES PLUS INTEREST ON U.S. DEBT

The projections presented in Table 3 and Figure 19 is taken directly from the 2010 U.S. Budget or Annual Trustee Reports for Social Security, Medicare and Medicaid referenced at the end of this paper. GDP from 2019 – 2035 is calculated to increase at 4.6% per year. Other Mandatory Expenses are projected to

increase at 4.04% per year, consistent with the increases from 2008 – 2018. Interest in 2035 is calculated to be 2.5% of the Total U.S. debt that is predicted to increase 7% per year from 2019-2035.

Table 3: Mandatory Outlays and Interest on U.S. Debt for Years 2008, 2018 and 2035

U.S. Dollars in Billions	2008	2018	2035
GDP	$ 14,222	$ 21,884	$ 46,940
Revenue	$ 2,524	$ 4,218	$ 8,778
Social Security Outlay	$ 625	$ 1,148	$ 2,923
Medicare Outlay	$ 426	$ 728	$ 1,828
Medicaid Outlay	$ 193	$ 412	$ 1,500
Other Mandatory Expenses	$ 411	$ 562	$ 1,183
Interest on U.S. Debt	$ 253	$ 708	$ 1,719

This table shows GDP, revenue, mandatory expenses, and interest on U.S. debt for 2008, 2018, and 2035

As shown in Figure 19, under intermediate assumptions, Mandatory Programs and interest payment on the U.S. debt are projected to account for 85% of the revenue in 2018 and 104% of the revenue in 2035. This analysis does not account for any military, State department, FBI, IRS, EPA, unemployment compensation, veteran's benefits, food assistance programs or any other discretionary spending. From this first order analysis, with most of the data taken directly from Government reports, it is clear that a major shift in U.S. policy is required with a focus on fiscal responsibility.

Figure 19: Mandatory Outlays and Interest on U.S. Debt as a Percentage of GDP
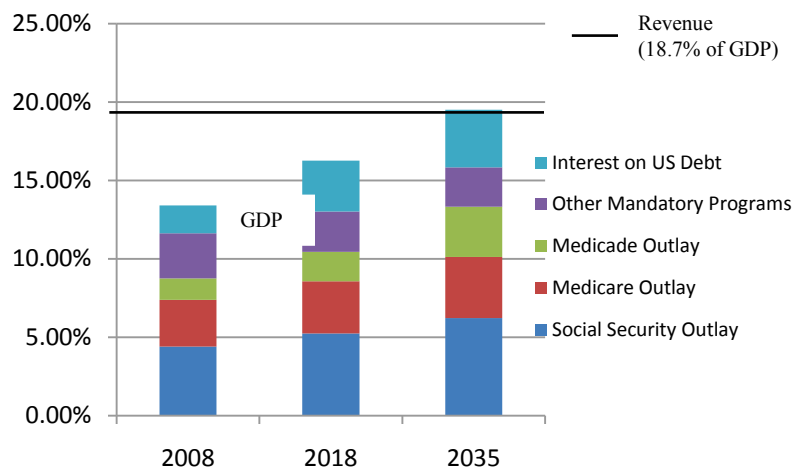
This table shows the percentage of U.S. revenue being spent on mandatory programs and the interest on total U.S. debt for years 2008, 2018 and 2035.

CONCLUSIONS

There are serious concerns for Social Security, Medicare and Medicaid. Projected growth for all three programs outpaces projected revenue growth. With unemployment currently higher than the estimated high projections, less near-term revenue is expected for all three programs further taxing these strained programs. Major reform is required for all three programs and the sooner solutions are enacted, the more flexible and gradual they can be. With the U.S. debt approaching the annual GDP, yearly debt payments are projected to further strain the economy. Furthermore, with even a small increase in interest, the interest payments go up a lot due to the large size of the current and increasing debt. After stabilizing the U.S. economy, a focused effort must be made to control the growing U.S. debt while the problem is still

manageable. It will likely require increased taxes and reduction in benefits requiring Congress and the President to overcome a political quagmire.

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Calculated from data provided at the following website;
http://www.treasurydirect.gov/govt/reports/pd/histdebt/histdebt_histo5.htm

BIOGRAPHY

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HUMAN-ORIENTED DEPLOYMENT AND INNOVATION OF PORTAL SERVICES

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ABSTRACT

Web-based portals are becoming the central platform in knowledge-intensive organizations. The portals serve as a gateway to organizational resources and services. Organizations are increasingly digitalizing internal documents, information resources, and business processes. By transferring business processes to web-based domains, organizations can benefit from a number of advantages. Business processes can be substantially automated, linked to other processes and resources, and be constantly available from a single access point despite their potentially distributed nature. When digitalizing internal business processes, however, organizations often pursue the straightforward way; that is, they simply copy the existing business processes into their web-based portal. Although this may appear to be the most reasonable approach, it is not. Without accounting for natural human-web interaction characteristics of users, this approach often leads to low service usability. We introduce pertinent behavioral findings and derived implications based on a case study of a large-scale organizational portal with extensive number of services. The findings highlight the essential human-web interaction features and extrapolate to actionable knowledge for proper management, re-engineering, and innovation of portal services.

CASE STUDY

A large-scale distributed intranet portal of knowledge-intensive organization was analyzed in this study. The portal incorporated over eight hundred fifty services and over three million resources. The services implemented a spectrum of organizational business process related to management, administration, resource location, collaboration, and many others. Services and resources were significantly distributed. The primary users were skilled knowledge workers at all levels of organizational hierarchy.

FINDINGS

Portal services and resources were considerably underutilized. Low usability was attributed to the misalignment between natural behavior and interaction of knowledge workers in web environment and implementation of services. Several pertinent characteristics of knowledge worker web behavior were observed. Exploratory analysis revealed that users segmented their more complex web tasks into several simpler subtasks, had relatively short attention span, and exhibited both passive and active interaction dynamics.

IMPLICATIONS

We advocate evidence-based and human-centered innovation, management, and engineering of services. Deployment of viable analytics is the initial step in the evidence-based approach. The analytics expose usability issues and accurately locate problems. Interactivity of services should be aligned with characteristics of human web behavior. Complex services require simplification and/or segmentation into several simpler subtasks. Active and passive interaction dynamics must be executable within seconds and minutes, respectively. Services should be personalized, that is, their interactive features should be tailored to individual users or groups having similar behavioral characteristics.

PREDICTIVE EFFECTS OF SUPERVISOR TRUSTWORTHINESS ATTRIBUTES ON TRUST-IN-SUPERVISOR

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ABSTRACT

This study examined the direct and interactive effects of ability, benevolence, and integrity on trust-in-supervisor. White-collar employees from diverse occupations and organizations (N = 107) were surveyed. Hierarchical multiple regression analysis results showed that perceptions of supervisor ability, benevolence, and integrity were positively associated with trust-in-supervisor. In addition, these three trustworthiness variables interacted to predict trust-in-supervisor. Further analysis using the procedures outlined by Dawson and Richter (2006) for probing three-way interactions revealed that ability and integrity interacted to predict trust-in-supervisor only when benevolence was high but not when it was low. Under conditions of high benevolence, ability predicted trust-in-supervisor when integrity was low but not when it was high, and integrity predicted trust-in-supervisor when ability was low but not when it was high. Implications of the findings and suggestions for future research are discussed.

KEYWORDS: Trust-in-supervisor, ability, benevolence, integrity

INTRODUCTION

Humans are social beings who are frequently involved in social exchange relationships. In order for such relationships to work well, people need to trust one another. This is no different in the workplace. Interpersonal trust is a vital component of effective working relationships and has been found to be related to affective organizational commitment (e.g., Poon, Rahid, & Othman, 2006), willingness to help coworkers (e.g., Poon, 2006), and various facets of job performance including task performance, contextual performance, and workplace deviance (e.g., Colquitt, Scott, & LePine, 2007; Dirks & Ferrin, 2002). Thus, in the absence of external control mechanisms, there are various practical benefits to fostering trust in the workplace, especially employees' trust toward their immediate supervisor. Given this, there is a need to understand why some supervisors are trusted and others less so.

To address the above issue, I drew on the conceptual framework of Mayer, Davis, and Schoorman (1995) to test a model of trust-in-supervisor that examined trustee attributes (i.e., ability, benevolence, and integrity) as predictors of trust-in-supervisor. To date, although there is research evidence that ability, benevolence, and integrity have statistically significant, unique effects on trust (see Colquitt et al., 2007 for a meta-analytic review), it is still uncertain how these three variables interact to predict trust. Given that Mayer et al. (1995) did suggest that ability, benevolence, and integrity might work interactively to predict trust and the recent call by scholars for research that examines (a) whether or not all three variables are necessary for forming trust (e.g., Burke, Sims, Lazzara, & Salas, 2007) and (b) how various trustworthiness variables work in conjunction with each other (Dirks & Skarlicki, 2009), the objective of this study was to (a) replicate past studies in examining the additive effects of ability, benevolence, and integrity on trust-in-supervisor and (b) explore whether or not the effects of ability, benevolence, and integrity might also be interactive. It is hoped that findings from such research will add to the empirical base of research findings on interpersonal trust. Also, given that most studies on interpersonal trust within organizations have been conducted in Western settings, a secondary contribution of this study is the extension of trust research to another setting.

CONCEPTUAL BACKGROUND AND HYPOTHESES

To date, although there is no universally accepted definition of trust, many scholars agree that positive expectations and a willingness to be vulnerable are critical components of trust (Rousseau, Sitkin, Burt, & Camerer, 1998). For example, Mayer et al. (1995, p. 712) defined this construct as the willingness of a trustor to be vulnerable to the actions of a trustee based on the expectations that the trustee will perform a particular action important to the trustor, irrespective of the ability to monitor or control the trustee. Rousseau et al. (1998, p. 395), in turn, defined trust as a psychological state comprising the intention to be vulnerable based upon positive expectations about the intentions or behavior of another. In this study, because the interpersonal trust relationship involves an employee and his or her immediate supervisor, we view trust-in-supervisor as employees' willingness to be vulnerable based on expectations that the intentions, words, or actions of their supervisor can be relied upon. This definition is in line with the generally held view that expectations and vulnerability are essential components of trust.

A person must be perceived as trustworthy to be trusted. Trustworthiness relates to the perceived attributes of a trustee that serve as the primary basis on which a trustor is willing to accept vulnerability (Dirks & Skarlicki, 2009. p. 137). According to Mayer et al. (1995), three trustworthiness attributes of trustees determine whether or not they would be trusted: ability, benevolence, and integrity. Ability is the extent to which a trustee is perceived to possess a set of skills and competencies that enables the trustee to have influence within some specific performance domain (Mayer et al., 1995) and captures the cognitive aspect of trustworthiness. Benevolence is the extent to which a trustee is perceived to want to do good to the trustor in their relationship aside from an egocentric profit motive (Mayer et al., 1995) and captures the affective aspect of trustworthiness. Finally, integrity is the extent to which a trustee is perceived to adhere to a set of acceptable principles (Mayer et al., 1995) and like the ability attribute, captures the cognitive aspect of trustworthiness. It is typically conceived as employees' perceptions of their managers' pattern of word-deed alignment (Simons, 2002; Whitener, Brodt, Korsgaard, & Werner, 1998) and forms the foundation of a trusting relationship between leaders and followers (Locke, 2000).

In order for employees to trust their supervisor, they must perceive that their supervisor (a) has the ability to make a positive difference for them (Butler, 1991; Conger, 1990), (b) has their interests at heart and cares about their well being (Burke et al., 2007), and (c) can be counted on to behave in a principled, honest, fair, and consistent manner (Kirkpatrick & Locke, 1991). In brief, employees are more likely to trust their supervisor if they perceive their supervisor to have ability, benevolence, and integrity.

There is also research support that ability, benevolence, and integrity are predictive of trust-in-supervisor. For example, past studies have found these variables to be positively associated with trust for (a) a company's top management team and plant managers (e.g., Mayer & Gavin, 2005), (b) a business unit's general manager (e.g., Davis, Schoorman, Mayer, & Tan, 2000), and (c) one's supervisor (e.g., Sherwood & DePaolo, 2005; Tan & Tan, 2000). More recently, Colquitt et al. (2007) in a meta-analysis of 132 independent samples concluded that ability, benevolence, and integrity had significant, unique relationships with trust. Therefore, by way of replication, I forward the following hypothesis.

Hypothesis 1. Trust-in-supervisor relates positively to employees' perception of their supervisor's (a) ability, (b) benevolence, and (c) integrity.

According to Mayer et al. (1995), a trustee would be perceived as trustworthy and, therefore, highly trusted when all three trustworthiness attributes of the trustee are high. Similarly, when a trustee is perceived to be low on all three trustworthiness attributes, trust for the trustee should be low. But must all three attributes be present to engender trust or would one or two of these attributes be sufficient? That is, would these attributes interact to predict trust such that they may compensate for one another? For example, would an employee trust a supervisor who lacks ability and integrity but demonstrates a great

deal of benevolence toward the employee? If not, would this employee trust a supervisor who lacks only ability but is benevolent and has high integrity or one who has high ability and integrity but displays little benevolence toward the employee? In other words, would ability, benevolence, and integrity interact to predict trust-in-supervisor?

Given the lack of strong theory and limited empirical evidence to answer questions about a possible three-way interaction and the nature of such an interaction, I pose the following research question.

Research Question 1. Will a three-way interaction of ability, benevolence, and integrity be related to trust-in-supervisor?

METHOD

Sample and Procedure

This study is part of a larger study of employee perceptions and attitudes. Participants comprised full-time working adults enrolled as part-time MBA students in three large universities in Malaysia. The survey questionnaire was distributed with the help of various course instructors. Participation was voluntary and confidentiality was assured. A total of 109 participants returned their completed questionnaires, but only data from 107 respondents (68 men, 39 women) were analyzed after dropping two multivariate outliers. The participants came from a wide range of functional backgrounds and occupations. Their age ranged from 23 to 55 years, with a mean of 32.42 years ($SD = 7.19$). The mean organizational tenure was 6.52 years ($SD = 6.87$), the mean years of total work experience was 9.36 years ($SD = 7.23$), about 51% were married, and 94% held an undergraduate or a more advanced degree. Finally, about 65% were Malays, 21% were Chinese, 10% were Indians, and 4% identified themselves as belonging to some other ethnic group.

Measures

Employees' perceptions of the ability, benevolence, and integrity of their immediate supervisor were measured using Mayer and Davis's (1999) trustworthiness scale (reworded slightly to reflect a focus on one's immediate boss rather than on top management in general). Ability was measured with six items ($\alpha = .92$), benevolence with five items ($\alpha = .85$), and integrity with six items ($\alpha = .87$). Sample items assessing ability, benevolence, and integrity, respectively, are "My boss is very capable of performing his/her job," "My boss really looks out for what is important to me," and "I never have to wonder whether my boss will stick to his/her word." Responses were made using Likert scales anchored from 1 (*strongly disagree*) to 5 (*strongly agree*). Ratings on items for each scale were averaged to form an overall score for the scale. Higher scores indicate higher levels of the measured variable. Finally, trust-in-supervisor was measured by asking employees to indicate in percentage terms how much they trust their present boss in general. This trust scale ranging from 0 to 100% had the advantage of overcoming the scale coarseness problem (i.e., operationalization of a criterion variable that does not include sufficient scale points), which reduces the power of moderated multiple regression tests to detect interaction effects (Aguinis, 1995).

Data Analysis

Preliminary analyses conducted to assess the fit between variable distributions and the assumptions of multivariate analysis identified two multivariate outlier cases (using the Mahalanobis distance at $p < .001$ criterion, cf. Tabachnick & Fidell, 2007), which were deleted. An examination of residual plots and standard skewness and kurtosis values indicated no violation of the assumption of normality, linearity, or heteroscedasticity.

The study hypotheses were tested using hierarchical multiple regression; the main effects variables, two-way interaction variables, and three-way interaction variables were entered as predictors in three steps. The main effects variables were mean centered before forming the interaction terms (cf. Jaccard &Turrisi, 2003). After the variables were mean centered, the variance inflation factors associated with each regression coefficient ranged from 1.78 to 5.47. The presence of a three-way interaction was determined by examining the statistical significance of the regression coefficient associated with this interaction term. This interaction was then probed further (i.e., by plotting simple slopes and testing slope differences) by following the procedures outlined by Dawson and Richter (2006).

RESULTS AND DISCUSSION

Results of Analyses

Means, standard deviations, and intercorrelations for the study variables are reported in Table 1, and the hierarchical multiple regression analysis results are reported in Table 2. As the results in Table 2 show, the relationships between ability, benevolence, and integrity with trust-in-supervisor were all statistically significant and in the predicted positive direction; therefore, Hypothesis 1 stating that these three variables would relate positively to trust-in-supervisor was supported.

Table 1: Descriptive Statistics and Correlations for Study Variables

Variable	Mean	SD	1	2	3
1. Ability	3.37	0.80	(.92)		
2. Benevolence	3.20	0.71	.56*	(.85)	
3. Integrity	3.17	0.73	.65*	.74*	(.87)
4. Trust-in-supervisor	62.14	24.68	.63*	.72*	.74*

Cronbach's alphas are shown in parentheses on the diagonal. *$p < .001$ (two-tailed).

Table 2: Results of Hierarchical Regression Analysis for Predicting Trust-in-supervisor

Variable	Model 1		Model 2		Model 3	
	b	SE	b	SE	b	SE
Step 1: Main Effects						
Ability	6.64**	2.42	6.27*	2.44	7.71**	2.45
Benevolence	11.78***	3.12	11.71***	3.14	13.39***	3.13
Integrity	11.85***	3.29	11.89***	3.29	14.04***	3.32
Step 2: Interaction Effect						
Ability × Benevolence			4.48	4.45	0.28	4.66
Ability × Integrity			-6.43	4.02	-6.92†	3.93
Benevolence × Integrity			-0.36	3.26	0.69	3.21
Step 3: Interaction Effect						
Ability × Benevolence × Integrity					-4.44*	1.80
R^2	.64		.65		.67	
Adjusted R^2	.63		.63		.65	
ΔR^2			.01		.02	

Unstandardized coefficients are reported. †$p < .10$ (two-tailed). *$p < .05$ (two-tailed). **$p < .01$ (two-tailed). ***$p < .001$ (two-tailed).

The answer for Research Question 1 can be found by looking at the three-way interaction result in Table 2 (under Model 3). As shown in Table 2, after controlling for all lower-order terms, the three-way interaction between ability, benevolence, and integrity was statistically significant ($b = -4.44$, $p < .02$, 95% CI = -8.00 to -0.87) and explained 2% additional variance in trust-in-supervisor. Thus, these three attributes do combine interactively to predict trust-in-supervisor. A plot of this interaction and slope difference test results (using the Microsoft Excel worksheet provided by Jeremy Dawson on his web site, www.jeremydawson.co.uk/slopes.htm) are given in Figure 1 and Table 3, respectively. As shown in Figure 1 and Table 3, the slope for the relationship between ability and trust-in-supervisor when both

benevolence and integrity were high (Slope 1) differed significantly from that for the relationship between ability and trust-in-supervisor when benevolence was high and integrity was low (Slope 2). The relationship between ability and trust-in-supervisor was weaker when both benevolence and integrity were high than when benevolence was high and integrity was low. Specifically, trust-in-supervisor was high regardless of the level of ability so long as both benevolence and integrity were high. This was not the case when only benevolence was high as under this condition trust-in-supervisor was positively related to ability. No other slope differences were statistically significant.

Figure 1: Plot of Regression Slopes for Three-way Interaction

This figure shows simple slopes of ability on trust-in-supervisor at high and low values of benevolence and integrity. The slopes were plotted using values one standard deviation above and below the relevant variable means.
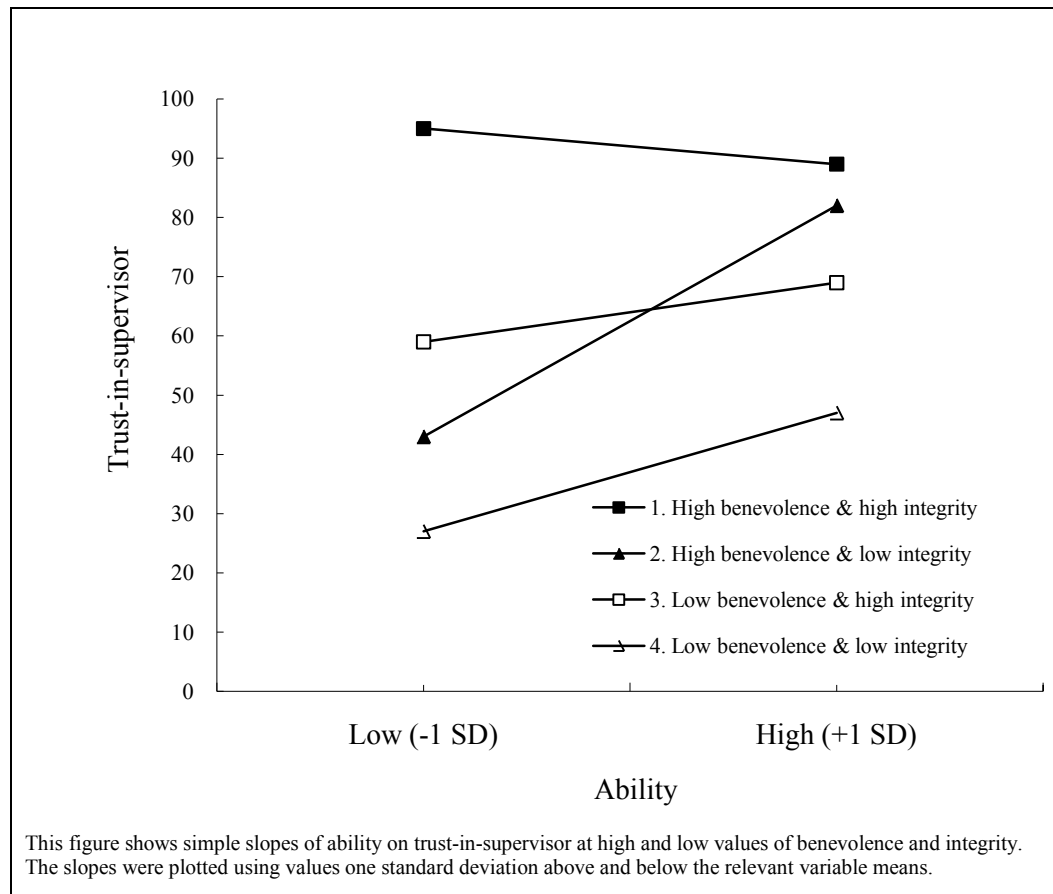
Table 3: Results of Significance Test for Slope Differences

Pair of Slopes	*t*-value for Slope Difference	*p*-value for Slope Difference
1 and 2	-2.58	.01
1 and 3	-0.75	.46
1 and 4	-1.71	.09
2 and 3	0.94	.35
2 and 4	1.09	.28
3 and 4	-0.59	.56

1 = high benevolence and high integrity, 2 = high benevolence and low integrity, 3 = low benevolence and high integrity, 4 = low benevolence and low integrity.

Discussion of Findings

The findings of this study replicated past findings on the additive effects of ability, benevolence, and integrity on trust. More importantly, this study extended prior research by exploring higher order effects and found a three-way interaction among the trustworthiness variables in predicting trust-in-supervisor. Under conditions of high benevolence, ability predicted trust-in-supervisor when integrity was low but not when it was high; similarly integrity predicted trust-in-supervisor when ability was low but not when it was high. An examination of the slopes in Figure 1 indicates that (a) for trust-in-supervisor to be high, employees must perceive benevolence to be high, and (b) when benevolence is perceived to be high, ability and integrity interacted in a compensatory manner in predicting trust-in-supervisor such that ability becomes most important when integrity is low and vice versa. Taken together, these findings suggest that benevolence is a necessary but not sufficient condition for fostering trust; before employees will trust their supervisor, benevolence must be supplemented with at least one other trustworthiness attribute. That is, when employees perceive their supervisor to be benevolent toward them, they will trust their supervisor as long as the supervisor is also seen to have either high ability or high integrity. In brief, ability and integrity compensated for each other in the presence of high benevolence to predict trust-in-supervisor.

Under conditions of low benevolence, ability and integrity did not interact to predict trust-in-supervisor. Specifically, when benevolence was perceived to be low, the relationship between ability and trust-in-supervisor did not differ by levels of integrity. High integrity supervisors seemed to be trusted more than low integrity ones regardless of their level of ability. A closer examination of Figure 1 indicates that with the exception of a situation in which both ability and benevolence were present, trust levels were always low when integrity was low. As expected, trust-in-supervisor was lowest when all three trustworthiness attributes were low.

The findings of this study have both theoretical and practical implications. A theoretical implication is that future research examining trustworthiness attributes need to look beyond statistical models that allow only for the test of main effects and two-way interaction effects to include three-way interaction or run the risk of having a misspecified model. A practical managerial application is that supervisors should be made aware of the importance of treating their subordinates with benevolence if they hope to be trusted by their subordinates. For example, supervisors can help foster trust by showing consideration for subordinates' needs and interests, safeguarding subordinates' rights, and refraining from exploiting their subordinates (Tschannen-Moran & Hoy, 2000). However, because benevolence is a necessary but insufficient condition for fostering trust, employers must ensure that they have supervisors who have high ability and integrity or, at the very least, one of these attributes. Fortunately, all three trustworthiness attributes can be improved through proper training interventions.

In sum, this study highlighted the importance of examining higher order effects in research examining trustworthiness attributes as these effects also have predictive power. The findings of this study suggest that ability and integrity can function as substitutes for each other so long as benevolence is perceived to be high.

Limitations and Future Research

A number of potential limitations of the present study need to be noted. First, the findings of this study may not generalize to employees in other cultural settings and need to be replicated with samples from other countries. Second, all data were collected from self-report surveys, and this may raise concerns about common method variance. There is, however, meta-analytic evidence that common method variance effects are less prevalent than previously thought (e.g., Chan, 2001; Crampton & Wagner, 1994). In addition, common method variance inflation that results in a greater proportion of criterion variance to

be accounted for by the main effects would reduce the likelihood of detecting interaction effects. The hypothesized interaction in this study was significant in spite of the potential effects of common method variance. Third, because the data were cross-sectional, definite conclusions about cause and effect relationships cannot be made. For example, one can argue that employees who trust their supervisor are more likely to perceive their supervisor as having high ability, benevolence, and integrity. Therefore, future investigations using experimental designs are needed to confirm the findings of this study. Fourth, this study focused on predicting trust-in-supervisor, and future research should extend the prediction to other trustee groups such as coworkers. Finally, this study examined only a part of the integrated trust model of Mayer et al. (1995). Future research is needed to test the complete model. For example, future research can examine whether or not trust would mediate the interactive effects of the three trustworthiness attributes on trust consequences such as risk taking and extra-role behaviors.

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THE IMPORTANCE OF THE EFFICIENCY INDICATORS IN THE FORMATION OF GOVERNMENT EXPENSES

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ABSTRACT

The article is focused on the efficiency of government expenses and possibilities of evaluating it. Nowadays an appropriate use of state finances is an actual problem of financial management of the state. Therefore a special emphasis is put on the necessity to evaluate the results of actions of the state sector. These results have become an important element of the state finance system oriented towards results as they form a stable base for planning and evaluating of budget resources. Being unaware of results, it is impossible to estimate if the aims and tasks set by the state financial policy are real and appropriate to the current situation and financial resources. Therefore a systematic approach to the evaluation of actions of the state administration is necessary. It can be done with a help of the system of efficiency indicators.

KEYWORDS: fiscal policy, government budget, expenses, efficiency indicators.

INTRODUCTION

The development of any country in economic and social aspects is influenced by the policy of the government, integral part of which is the budget or fiscal policy. It is defined as a system for regulation of economics with the help of changes in taxes and determination of state expenses.

Taking into consideration possible solutions of fiscal policy in the aspect of incomes and expenses of the state budget, promotion of optimal implementation of government functions through the effective use of financial resources is considered to be one of the main tasks of the state budget. Such possibilities exist during the whole process of the state budget, that is, in making, reviewing, discussing and implementing of the main state's financial plan. In general it is defined as a cycle of the state financial management. (Mikesell, 2007)

In discussions about the improvement possibilities of the state financial management, greater attention is paid to state expenses, focusing on the fact, that formation of budget incomes is limited by the factors determining economic activities. Therefore the most efficient budget reforms are possible in the area of state expenses as the so called uncontrollable and unproductive expenses are sometimes created. The reduction of the expenses should become the main task of the government. (Potter, Diamond) Nowadays it is also strengthened by enlarging forms of state democratization that are transforming in society's confidence in the government.

If the economical system is stable the above mentioned discussions usually become quieter and are not so topical. They acquire radical importance in the situations of economical crisis when the government has to start solving the problem of efficiency of state expenses because incomes are reduced, budget deficit is increasing, which results in disproportion in the sphere of money-loans. The state financial crisis results in greater attention that is paid to the management of state expenses because it is identified that successful economic structural changes cannot be made without reforms in the sphere of state financial management. Thus, a special significance is attached not only to evaluations of the structure

of state expenses but also to estimation of those government systems that have influenced government functions and thereby increase of the state budget.

Limited state financial resources emphasize the problem between expenses of state functions and their efficiency. It determines necessity to revise existing concepts and methods for evaluation of these aspects in order to ensure their practical estimation.

The aim of the research is to offer the evaluation of the system of efficiency indicators for the improvement of efficiency of the state financial management. The following tasks were set to achieve the aim: 1. By evaluating theoretical-practical aspects of the system of efficiency indicators, to identify its main components; 2. To analyze the system of efficiency indicators.

The main method was the method of qualitative research that is the content analysis of foreign scientific literature, as well as the method of the research of special cases (versatile research of different aspects of efficiency indicators).

It should be underlined that quantitative and qualitative methods for determining the results of the actions of the state sector were also used. The research mainly focuses on the evaluation of the system of efficiency indicators in the quantitative aspect.

THEORETICALLY-PRACTICAL ASPECTS OF THE SYSTEM OF EFFICIENCY INDICATORS

The management of state expenses should encourage the implementation of specific policy. An opinion exists that there should be made such management systems of expenses that can compensate political failures (Premchand, 2006) In general the management of state expenses is regarded as a row of numerical values, which begins in the stage of budget making and continues during its implementation providing inhabitants with services. Therefore it is said that the cycle of the management of state expenses is finished if certain goals are accomplished. Thus, great attention is paid to the process of using state financial resources. Efficiency indicators are confirmed to be the principal results of the actions of the government. They depend directly on the organizing aspects of the management of expenses.

Two essential directions of actions are emphasized in the management of government expenses:

- Analysis of actions related to expenses, evaluation of their results;
- Society's awareness of actions made by the government

The most topical questions in the managing of government expenses are following: what is efficiency, how it should be evaluated, how the results of evaluation should be used?

Efficiency is traditionally defined as the commensurability of used, invested resources with acquired results. (A Dictionary of Economics, 2002) In the context of state finances the main research object is the efficiency of assignments, which differs from technical efficiency as it is not based on technical parameters but on real amounts of expenses relating them to social usefulness. The efficiency is considered to be ensured if the consumer of government services is satisfied. It can be concluded that the practical use of the concept of efficiency in the management of government expenses is quite complicated. It is determined by versatile factors of actions of the state sector.

Without denying the significance of quantitative evaluation due to its numerical precision, it is difficult to use it in the analysis of actions of the state sector. Therefore it is more useful to use the indicators of

efficiency in the evaluation of actions of state institutions. Though they are not as precise as numerical parameters, their usage is comparatively less time consuming, cheaper and often more useful. (Premchand,2006)

The main aim of the efficiency indicators is to ensure greater productivity, which, in the aspect of state governing, transforms into better implementation of its tasks. It is explained with an assumption that the society is interested to know how efficiently budget resources are used.

Efficiency indicators should correspond to the aims and tasks set out by state institutions. They should be precisely defined and possible to evaluate to a certain extant. In such context they ensure a connection between the aims of actions of institutions, granted resources and benefits gained from the institution's actions.

In general they should include the following aspects. The results of activities (productivity) – the amount of benefit on 1 worker (the amount of examined cases etc.); coefficients can be useful to compare different spheres of actions.

- Prime cost – the average prime cost of the created benefit so that required and used financial resources could be demonstrated
- Time of accomplishment – a period of time needed for accomplishment of the action
- Offer of services –types, periodicity and number of institution's actions
- Demand for services – the level of satisfaction of a specific demand
- Result – expected result, its influence on the complex accomplishment of government's aims and tasks (Premchand,2006)

When creating the system of efficiency indicators a special attention should be paid to the needs of the users of the state sector services as well as the mutual connection of indicators with the process of budget making and implementation. It is emphasized that indicators should reflect the interests of users, that is, the aims of state institutions should be subordinated to these interests. If it is not so, that means workers only formally comply with these indicators.

When elaborating indicators there is a compulsory requirement that one should identify informative data necessary for evaluating indicators, certain periodicity of obtaining them, the form of submitting as well as possible measures in case of any problems.

Justifying the usefulness of the system of efficiency indicators in the state administration sector, it is emphasized that all above mentioned actions cannot be dissociated from ensuring of efficient state budget process because it is a versatile process, which shows the needs of budget institutions and the tasks of government's central institutions in the sphere of state's macroeconomic policy. Therefore in the context of actions of budget institutions the data of efficiency indicators should be used in the planning of further actions, determination of goals and tasks, efficient distribution of work, time and material resources. The indicators should be used to ensure the awareness of the management of the current problems. It is a way to improve constantly activities of the state sector. In the aspect of central government institutions efficiency indicators and their influence on the distribution of resources for further periods and the choice of government policy have an essential role.

It must be underlined that granting of resources necessary for maintaining a certain level of efficiency indicators can be possible in a stable situation. When the situation changes in the state economics, changes are possible in politics and distribution of resources as well. Therefore it is important to make prognosis how efficiency indicators will be influenced by the possible reduction of assignment when the state financial situation becomes worse. In such case it is suggested to use the highest and the

lowest significance of indicators; each of them provides for a certain amount of resources. It is considered that one of shortages of the system of efficiency indicators is connected with the possibilities of ensuring the efficiency of actions of the sector in the conditions of global instability when frequent and unpredictable changes may take place. It influences the process of resource distribution, therefore the determined normative indicators should be flexible and they should correspond to certain needs and possibilities.

It may be concluded that the main aim of using efficiency indicators is to ensure permanent information on the efficiency of actions of the state sector.

ANALYSIS OF THE SYSTEM OF EFFICIENCY INDICATORS

In 90ties of the 20th century during the budget reform the planning of budget special purpose programme was introduced, which was also meant to introduce the system of efficiency indicators in order to evaluate the use of invested financial resources according to the aims of the state policy. There was an intention to increase awareness of the necessity of planning such policy that is aimed towards results.

The actions of the new system should be connected not only to the indicators of invested financial resources but the main attention should be paid to their results or acquired benefits provided by these investments.

Evaluating the conditions of the above mentioned system, the author indicates its main components and possibilities of their practical application, importance and problems.

The system determines that, firstly, there should be certain political aims, which are planned to be reached with a help of introduction of specific political measures, taking into regard the fact that their accomplishment will be influenced by certain macro results. Therefore, when creating the budget one should be oriented towards a certain political result (*outcome budgeting*). In annual explanations of the budget law these political results should be demonstrated as the main goals of ministries in the certain budget programs.

Second, the results of actions are mentioned as the most important in the system of efficiency indicators. In the planning of the budget they are stated in quantitative and qualitative affirmations and they are planned to be achieved in the result of certain activities, thus adding orientation towards the results of specific actions (*outputs*) to the creation of the budget oriented towards political results. They are defined in two ways:

- Final products or services of ministries and institutions that are created with the help of investments;
- Final products of functions determined in normative documents of ministries and other state administration institutions

Thus, the significance of these indicators, firstly, is connected with the ensuring of state functions, secondly, with acquired benefits ensured by the investment of budget resources, which are showed in the budget as grants from general incomes. These indicators are closely related to the activities of state institutions, therefore it is underlined that they form a stable basis for the budget planning. The author's opinion is that these indicators are the most important in efficient planning and using of budget expenses. In budget explanations they are showed as the expected result of ministry's activities in the budget program.

It is determined that above mentioned indicators should be justified, they are used for elaboration of efficiency indicators on the level of institution's budget program in relation to granted resources. Thus, it is provided that investments are generally estimated on the level of budget program or subprogram. It means that practically these indicators are made only in ministries. According to the author, it should be considered as a negative fact because:

- There are no determined investments for each result of activities that could ensure a more detailed evaluation of the use of budget resources;
- State institution workers (clerks) do not have motivation to use resources more effectively and purposeful as they do not feel responsible for that;
- There are greater possibilities for manoeuvres with evaluation of investments on the ministry level that, in turn, does not ensure purposefulness in the use of resources.

Figure 1: The system of efficiency indicators
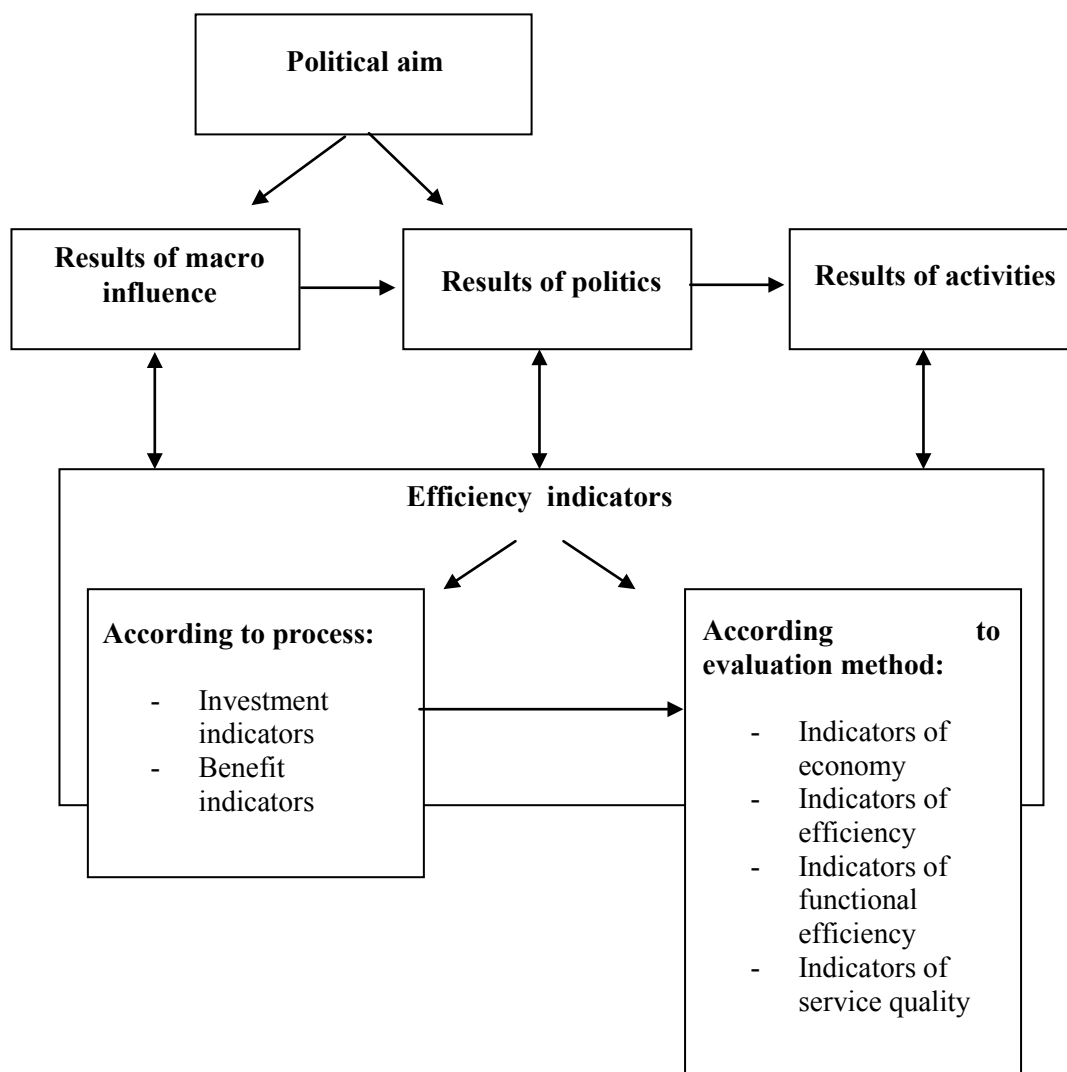
This figure shows the main components of the system of efficiency indicators

The author emphasizes that there are still many problems in the introduction of the system of efficiency indicators. State administration institutions do not wish to introduce a real system of efficiency indicators. The main arguments are:

- It is a serious work for state institutions as real activity indicators should be defined:
- Honest evaluation of their implementation;
- If there is a failure to accomplish the tasks to optimize functions of state administration institutions, the reduction of the state budget funding may be possible

Thus, it can be concluded that during the budget reform has not managed to solve the most important problems of budget formation because budget programmes are mainly formed accordingly to administrative divisions and investments of institutions. Although it improved the budget structure and clearness, it did not provide fully budget transparency. It did not give precise information how state financial resources are used.

CONCLUSION

Efficiency indicators are confirmed to be the principal results of the actions of the government. They depend directly on the organizing aspects of the management of expenses. Two essential directions of actions are emphasized in the management of government expenses:

- Analysis of actions related to expenses, evaluation of their results
- Society's awareness of actions made by the government

The main aim of the system of efficiency indicators is to ensure greater productivity, which in the aspect of state administration transforms into better accomplishment of its tasks. It is explained by the fact that the society wants to be aware of the efficient use of budget resources.

Efficiency indicators should correspond to the aims and tasks set out by state institutions. They should be precisely defined and possible to estimate to a certain extant. In such context they ensure a connection between the aims of actions of institutions, granted resources and benefits gained from the institution's actions.

In 90ties of the 20th century during the budget reform the planning of budget special purpose programme was introduced, which was also meant to introduce the system of efficiency indicators in order to evaluate the use of invested financial resources accordingly to the aims of the state policy.

In the state`s administrations does not exist a united understanding about the efficiency indicators of the budget. It means that state administration institutions do not wish to introduce a real system of efficiency indicators. It influences negatively the improvement process of the state finance management.

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TERMS OF LENDING FOR SMALL BUSINESS LINES OF CREDIT: THE UNIQUE ROLE OF LOAN GUARANTEES

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ABSTRACT

This study examines the role of loan guarantees in lines of credit granted to small businesses. Since there is evidence of simultaneity among lending terms, two-stage instrumental variable procedures are used to obtain consistent parameter estimates. The findings suggest the presence of a loan guarantee is associated with lower interest rates and smaller lines of credit and that loan guarantees and collateral are substitutes. Firms with longer banking relationships and/or fewer banking relationships are less likely to have loan guarantees.

MEASURING THE CREDITWORTHINESS OF SMALL FARM BORROWERS

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ABSTRACT

This study examines the determinants of farm loan delinquencies, and in particular, the influence of multiple loans and multiple lenders on delinquency. The number of lenders used by a borrower, the number of loans outstanding, and the interaction of the two factors are all positively related to loan delinquency rates. In fact, these factors are at least as significant as standard financial ratios in explaining loan delinquency. The most consistent finding is that borrowers who have been denied credit in the past five years are more likely to be delinquent. Furthermore, borrowers using multiple lenders appear to be able to bargain for lower interest rates.

THE DETERMINERS OF THE VIRTUAL FINANCIAL COMMUNICATION OF SMALL AND MEDIUM-SIZED FIRMS QUOTED ON UNREGULATED BELGIAN MARKETS

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Mélanie Croquet, University of Mons
Laurent Arnone, University of Mons
Angy Geerts, University of Mons

ABSTRACT

The ambition of this research is to identify the determiners of the financial communication of Small and Medium sized firms quoted in Belgium through their Web site. The case of the not regulated markets is envisaged. First, a scoring was established to determine with which intensity these firms use internet as vector of financial communication. To do it, a key for understanding was built on the basis of a review of literature highlighting the prescriptions in disclosure of information through Web. This score was then regressed via the OLS method according to variables presented in the literature as determiners of the firms' financial communication and which the hypotheses of this research concern. The main results of this study put in evidence three fundamental determiners of this score : The membership or not in the IT sector, the performance of the company and the type of market on which the company is quoted (Free market or Alternext).

INTRODUCTION

These last years, the internet has become a privileged channel for current and potential investors to collect financial information. For year 2006, Léger (2008, p. 91) notes that 83% of individual investors were internet users, against 57% in 2002. The proportion of potential investors and shareholders surfing the web in search of financial information thus has increased exponentially. Internet, a real tool for managing the investor relationship, therefore allows the financial community and the public investor to evaluate companies by providing financial information to them (Barredy and Darras, 2008, p. 3). Almilia and Budisusetyo (2008) even assert that traditional company reports on paper are outmoded.

The objective of this research is first of all to determine with what intensity companies use internet as a vector of financial communication. Once this is established by means of a scoring, we shall identify the determiners of this level of communication through the web. The originality of this study resides in its research object. Our analysis will concern small- and medium-sized firms quoted on unregulated markets in Belgium. Those markets are relatively recent (2004 for the Free market and 2006 for Alternext) and, to our knowledge, have not yet been the topic of such a research project. Finally, we shall highlight the main characteristics of unregulated markets in Belgium.

THE UNREGULATED MARKETS: ALTERNEXT AND THE FREE MARKET

In Belgium, the company avid to list on the stock exchange can resort to one of three different markets. Eurolist arose from the reform of Euronext Paris in February 2005. The First Market, the Secondary Market and the New Market are henceforth collected within a single regulated market. Inspired by the English market Alternative Investment Market ("AIM"), Alternext Paris was launched in May 2005. Alternext Brussels followed in June 2006; The Free Market was elaborated in November 2004 by Euronext Brussels on the model of the Free Market established in the Paris Stock Exchange in 1996.

The Free Market and Alternext have been legally considered as MTFs (multilateral trading facilities) since November 1st, 2007. They are unregulated markets in the sense of the European directives and the Belgian financial legislation. Companies listed on these markets are thus neither forced to publish their accounts in the IAS / IFRS standards nor to conform to the Belgian Code of governance.

The Free Market of Euronext Brussels includes twenty-eight companies. It was created to answer the accessibility difficulties of companies not having a minimal market capitalization of 50 to 75 million euros. "No precondition, no anteriority of the accounts and no minimal percentage of distribution are required for registration on the Free Market" (Goldberg-Darmon, 2006). In matters of communication, the company listed on this market is subject to more flexible rules (Euronext on 2008). Alternext Brussels counts nine firms. On this unregulated but organized market, certain conditions have to be met for companies to be listed: the company has to have existed for two years and appeal to a listing sponsor who will help to prepare the IPO and make sure that obligations to provide information are respected. Furthermore, the amount of the public offer has to be at least 2.5 million euros. Once quoted on Alternext, the company will have to publish its periodic information (annual financial report and biannual financial status) and will remain subject to the monitoring of the CBFA (Financial Banking and Insurance Committee). The approval by the CBFA of the prospectus is required for all listed companies.

These two unregulated markets are thus quite indicated for small- and medium-sized firms avid to raise capital without necessarily plying to excessively binding listing rules

THE PRINCIPLES FOR FINANCIAL COMMUNICATION ON THE WEB

A review of the literature was made to highlight the prescriptions in terms of information disclosure through the web. This review of the literature will allow us to bring to the foreground an analysis grid of web sites in terms of financial communication of small- and medium-sized firms quoted on unregulated markets in Belgium. The authors advance the role of the annual report (Pervan, 2006; Euronext, 2006; Dutta and Bose, 2007; Léger, 2008; Barredy and Darras, 2008) and of the interest that it represents for the investor. The possibility to download the annual accounts must exist. Dutta and Bose (2007) go more in detail during their study and observe the presence of audit reports, financial ratios, and intermediate results over several years. In its recommendations, Euronext (2006) also underlines the importance of a table summarising the main key figures. Pervan (2006), Dutta and Bose (2007), Léger (2008) as well as Barredy and Darras (2008) also recommend to communicate the history of share prices as well as share dividends. According to the recommendations of Euronext (2006), the on-line publishing of the introduction prospectus is deeply wished. Léger (2008) has a similar way of thinking. Press releases (Pervan, 2006; Euronext, 2006 Dutta and Bose, 2007; Léger, 2008), the shareholding structure (Euronext, 2006; Dutta and Bose, 2007; Léger, 2008; Barredy and Darras, 2008), and the organisation chart (Pervan, 2006; Euronext, 2006; Dutta and Bose, 2007) are all susceptible to greatly interest investors. Dutta and Bose (2007) think that managers' income must be known. This would make less sense for the small- and medium-sized firms studied that do not have to follow the Belgian Code of governance. All these authors agree that a particular relationship must be knitted with the shareholder. This can be done through a periodic newsletter (Euronext, 2006; Dutta and Bose, 2007), a specific web page (Pervan, 2006; Barredy and Darras, 2008), an address, a telephone and\or an email of a specific contact person for investors (Pervan, 2006; Euronext, 2006; Dutta and Bose, 2007; Barredy and Darras, 2008; Léger, 2008), a specific forum (Barredy and Darras, 2008), a letter to the shareholders (Leger, 2008; Barredy and Darras, 2008), answers to FAQs (Dutta and Bose, 2007; Léger, 2008), the schedule of financial communication events (Euronext, 2006; Dutta and Bose, 2007; Barredy and Darras, 2008; Léger, 2008), the shareholder's guide and rights and a club for shareholders (Léger, 2008). The on-line publishing of the general assembly and analysts' meetings can be a real added value in the financial communication of the company (Léger, 2008). Companies cannot limit themselves to a distribution of the accounting information - data on the

activity itself is important too. For example, market shares and evolution of the competitive environment are recommended as well (Kleiber, 2003 quoted by Barredy and Darras, 2008). This review of the literature allowed us to create an analysis grid of web sites that will be used to analyze the web sites of companies concerned by this study. The objective is to score the quantity of communication of every company in our population.

Table 1: An analysis grid of web sites

1) Financial reports	
Current year	Annual reports
	Annual account
	Audit report
	Intermediate results
	Management reports
Previous years	Annual reports
	Annual account
	Audit report
	Intermediate results
	Management reports
Prospectus of IPO	
Financial ratios financiers and/or main key figures	
Board of directors reports	
General assembly reports	
Explanation about data	
Financial analysts reports	
2) Investors information	
Specific webpage for investors	
Link to Euronext's website	
Current share's price	
History of share's price	
Current dividend	
Previous dividends	
Shareholder structure	
Number of shares	
Organization chart	
Shape and composition of the organs of governance	
Letter to shareholder	
Specific contact for investors	
Shareholder forum	
FAQ	
Shareholders' schedule	
Shareholders' guide	
Shareholders' rights	
Press release	
Press review	
3) Website 's ergonomy	
On front page:	« Investors »
	« Press »
Several languages version of website	
Date of last changes on the website	
Help tools	
Search engine	
Roadshow	
Joining a periodic letter	
Get the press release by mail	
4) Firm's profile	
History	
Activities	
Strategy	
President's words	
Contact	
Market share	
Position regards to competitors	

THE DETERMINERS OF THE FINANCIAL COMMUNICATION ON WEB

Although until now research was not conducted on companies quoted on unregulated markets in Belgium, several studies have handled the question of the determiners of financial communication over the web (Craven and Martson, 1999; Asbaugh and al., 1999; Debreceny and al., 2002; Ettredge and al, 2002; Rodriguez and Menezes, 2003; Xiao and al., 2004, Mendes-da-Silva and Christensen, 2004; Laswad and al., 2005; Bollen and al., 2006; Paturel and al., 2006; Andrikopoulos and al., 2007). These authors tried to highlight the explanatory variables of financial disclosure on the internet. Here we will list these variables that are at the basis of our research hypotheses.

The Size of the Firm

Big companies have to bear a greater asymmetry of information between the managers and the shareholders. Because of this, the agency costs are greater to bear too (Debreceny and al. 2002). Besides, big companies being more visible publicly, they tend to look after their reputation and their image to avoid governmental interventions. It thus emerges that bigger sized companies provide more information than small firms (Debreceny and al. 2002; Ettredge and al 2002; Rodriguez and Menezes 2003; Xiao and al. 2004, Mendes-da-Silva and Christensen 2004; Bollen and al. 2006; Andrikopoulos and al. 2007). The size is measured according to the market value (Debreceny and al. 2002; Xiao and al. 2004, Mendes-da-Silva and Christensen. 2004; Bollen and al. 2006), the annual sales (Andrikopoulos and al. 2007), the turnover, the number of workers, the total assets or the market value of the company (Rodriguez and Menezes on 2003). From here, we formulated the following hypothesis:

Hypothesis 1: the size of the company has a positive effect on its internet financial communication score.

In our research the size is measured using the natural logarithm of the total assets. The market value, available on the Euronext site, could also have been a good indicator but its correlation with the growth potential would have distorted the results of our econometric model. The growth potential (Hypothesis 6) is measured by taking the difference between the market value and the book value of the firm. The annual sales and the turnover are not available for all the companies given that some of them publish their accounts in abbreviated form and not in complete form.

The Level of Debt

According to Debreceny and al. (2002), to assure its creditors of its capacity to pay off, the more indebted company would tend to disclose more information. From there, the ratio of long-term debts over the total assets would be positively connected to the strategy of information disclosure. Andrikopoulos and al. (2007) add that an increase in debts leads to an increase in agency conflicts between shareholders and creditors (Jensen and Meckling, 1976) and that an improvement in communication on the internet can reduce these agency costs of debts. In light of this research, Andrikopoulos and al. (2007) hypothesized the existence of a positive relation between the level of debts and the degree of information disclosure on the web. Paturel and al. (2006) distinguish between private debts (measured according to the ratio of banking debts to the total assets) and public debts (measured according to the ratio of bonded debts to the total assets). Their hypothesis is that private debt has a negative impact on the score of disclosure through the web, whereas public debt has a positive impact. Besides, Laswad and al. (2005) notice a positive relation between the debts of the local authorities they studied and their level of disclosure on the web. From there, we made this hypothesis:

Hypothesis 2: the debt of the company has a positive effect on its internet financial communication score.

In our research the debt will be measured using the ratio of long-term debts to the total assets, in accordance with most of the previous studies.

The Performance

According to Xiao and al. (2004), the managers of profitable companies should rather let their performance be known to assure their position, attract capital and reduce the risk of their company being under estimated. They measure this profitability by means of Return on Assets (ROA). The hypothesis of a positive relation between the performance and the level of distribution of information on the web, advanced by Ettredge and al (2002) and by Andrikopoulos and al. (2007), is not confirmed. Paturel and al. (2006) also think that the more successful the company is, the more the level of information disclosure will be raised. This hypothesis will be validated for their sample of French companies. On the other hand, a negative relation will be obtained for the British companies in their study. It would seem that the level of communication is raised more for companies presenting weaker performances. They explain this result by "the effect of the publication of favourable information on the risk of competition "(Paturel et al. 2006, p29). Mendes-da-Silva and Christensen (2004) find a negative relation between the performance (measured by the annual profit per share) and the level of information disclosure on the web. A negative relation is also obtained by Debreceny and al. (2005) between the performance (measured by ROE) and the frequency of information disclosure on the web. The majority of the consulted empirical studies having put in evidence the negative influence of performance on the financial communication score, we emit this hypothesis:

Hypothesis 3: the performance of the company has a negative effect on its internet financial communication score.

In our research, performance will be approached by two dimensions: an exploitation (operation) dimension measured in terms of ROA before amortization (EBITDA / total asset) and a rather financial dimension measured in terms of ROE before tax (net profit before tax / equity capital).

The Dispersion of the Capital

Debreceny and al. (2005) as well as Paturel and al. (2006) assert that the more diluted the shareholding is, the more numerous the agency problems will be. In that case, significant and frequent communication will be recommended. On the other hand, when the shareholding is mainly in the hands of a family or some big shareholders, they have access to information internally and are thus less inclined to spread information outside. They thus establish a positive relation between information disclosure and the dispersal of shareholding. Xiao and al. (2004) demonstrate a different impact on the extent of the financial communication on the web when shares are held by governmental agencies and public enterprises (negative effect), by institutional investors (positive effect) or by foreign investors (absence of effect). Ashbaugh and al. (1999) as well as Bollen and al. (2006) notice a positive relation between the proportion of shares available for individual investors and the level of information disclosure on the web. So, we emit this hypothesis:

Hypothesis 4: the dispersal of the capital has a positive effect on the internet financial communication score.

In our research the dispersal of the capital will be measured by the free float. It indicates the percentage of participation held by the public. It is obtained by subtracting the shares held by the leaders and the institutional investors from the entirety of shares on the market

The sector

Companies having a certain know-how and\or advanced technology have assets that are difficult to assess such as research and development, human and intellectual capital, etc. and will thus tend to spread more information. Indeed, their accounting data underestimate their value and underestimate their future earnings. Furthermore, these companies are subjected to fast and frequent changes connected to the technological world (Debreceny and al. 2002). Xiao and al. (2004) notice that companies in the IT sector tend to spread more information on the web. Indeed, they master this technology and want to demonstrate their expert position on the subject. On the other hand, Bollen and al. (2006) discover a negative relation between the level of technology and the level of information disclosure on the web. The hypothesis arguing that the company being a part of a high technology sector and where the investments in research are considerable spreads more information was not verified by Rodrigues and Menezes (2003). From there, we emit the following hypothesis:

Hypothesis 5: membership in the IT sector has a positive effect on the internet financial communication score.

Within the framework of this study, we chose to integrate a binary variable making it possible to determine a company's membership in the IT sector. To do so, the companies among which the code NACE BEL 2008 is 61 (telecommunications), 62 (programming, computer advising and other computing activities), 63 (information departments) or 70.210 (advising in public relations and in communication) are considered as belonging to the IT sector and get the value one. Other companies obtain the value zero.

The growth potential

Debreceny and al. (2002) underline the impact of the growth potential and the intangible assets within the company. Indeed, these two elements influence the market-to-book value ratio but are highlighted with difficulty in the financial and accounting information. To estimate their importance, it is enough to observe the difference between the book value and the market value. In such a context, companies would tend to communicate more to limit the asymmetry of information. However, their results show that companies with a high level of growth have a negative and significant relation with the distribution of information on the web. This can be explained by the fact that the property costs of a company with strong growth grow exponentially with the distribution of information. For that reason, the owners of the company would be less inclined to communicate. Debreceny and coauthors find no significant relation for companies with a low level of growth. Bollen and al. (2006) notice no relation between the distribution of information and the level of growth of the company. Bearing this in mind, we put forth this hypothesis:

Hypothesis 6: the growth potential of a company has a negative effect on its internet financial communication score.

In our research the growth potential will be measured by the difference between the market value (available on the Euronext website) and the book value.

METHODOLOGY

Our study concerns 37 companies quoted on unregulated markets in Brussels.
With the help of an analysis grid (see Table 1) built on the basis of the literature review conducted previously, we examined the websites of companies and we gave them one point for each item on the site. A score was therefore obtained for every company. Thanks to this score we were able to estimate the degree of website information disclosure of the 37 companies in this study. Then, this score was declined via the ordinary least squares (OLS) method according to the explanatory variables which the hypotheses of this research concern.

RESULTS

Thanks to our analysis grid (see Table 1), we examined the websites of all the companies in our population. A point was given for every item of the analysis grid on the website. The scores so obtained appear in table 2.

Table 2: Score of financial communication

Firms	Market	Score
OTC	Free Market	2
Oxbridge	Free Market	3
Val st L	Free Market	3
5ème saison	Free Market	4
Fred&Ginger	Free Market	5
Eryplast	Free Market	6
Sodiplan	Free Market	6
TEAM	Free Market	6
PNS	Free Market	8
Archimède	Free Market	9
Fixinox	Free Market	9
Flexos	Free Market	9
Tetrys	Free Market	9
MCLS	Free Market	10
Pharco	Free Market	10
Haacht	Alternext	11
Antigoon	Free Market	12
RVA	Free Market	12
EMD Music	Free Market	13
SV Pat	Free Market	13
Iceconcept	Free Market	14
Newtree	Free Market	15
Realco	Free Market	15
Reibel	Free Market	15
De rouck	Alternext	15
Vision IT gp	Alternext	16
Proximedia	Free Market	17
Arpadis	Free Market	18
Newton 21	Free Market	18
BSB	Alternext	18
Ecodis	Alternext	18
Propharex	Free Market	20
Evadix	Alternext	20
Rentabiliweb	Alternext	22
Emakina	Alternext	23
U learning	Free Market	24
Porthus	Alternext	24

Among 51 items present in our analysis grid, some are literally absent from websites (the previous intermediate results, the letter to the shareholders, the shareholder's guide, the date of the last modification of the site as well as the market shares of the company). Less than 10% of small- and medium-sized firms quoted on unregulated markets present these elements on their website: the previous and current dividends, a forum for shareholders, a help tool, the location of the company, the previous audit reports, FAQs, the rights of the shareholders, the current annual report, the report of the general assembly, the reports of financial analysts and the message from the president. Only five companies talk about the intermediate results, the previous annual reports and the current share price. The current audit reports, a search engine as well as the possibility of receiving press releases by mailing are offered by 16.2% of small- and medium-sized firms. About 20% of small- and medium-sized firms show their annual accounts, the report of the Board of directors and their strategy. Nine companies reveal the shape and the composition of their organs of governance and offer the possibility of a subscribing to a newsletter. Less than 30% of the observed websites contain the structure of the shareholding as well as

the organization chart of the company. The history of the company as well as the past annual reports are presented by twelve companies. About 38% of the companies publish the schedule of the shareholders meetings, a particular contact for the investors and the current annual report. Fifteen small- and medium-sized firms present financial ratios or key figures, whereas seventeen propose a link to the Euronext website. More than half of the companies post their prospectus of initial public offering as well as a press review. About 65% of websites show press releases and propose a version of the website in several other languages. More than 70% of websites offer the access to "press" and "investors" tabs from the front page. The vast majority of sites present the activities of the company (86.5 %) and show how to contact the firm (94.6%).

The explanatory variables come from the Belfirst database (version 2008) published every year by the Van Dijk Office in partnership with the National Bank of Belgium. For each of these variables, we considered the last year of availability of the accounts.

Table 3: Variables definition

Variables	Measure
Sector	IT firms = 1 and other firms = 0
Debts	Total Debts/ total assets.
Performance	ROA = EBITDA / total assets
	ROE = net profit before tax / equity capital
Dispersion of capital	Free float
Growth	Market value – book value
Size	Log total assets

Table 4: Descriptive Statistics of variables

Variables	Mean	Std. Dev.	Min	Max
Score	12.75676	6.206651	2	24
Debts	0.5341804	0.2474827	0.0295779	0.9313824
Roa	8.183714	11.95672	-25.59	34.25
Roe	4.711715	45.84808	-134.18	133.83
Freefloat	0.2283806	0.1118438	0.001	0.49
Growth	-8163213	$1.76 * 10^7$	$-7.64* 10^7$	6450999
Size	15.70034	1.115419	12.88157	17.90549

Table 5: Correlation between variables

	Score	Sector	Market value	Debts	Roa	Roe	Freefloat	Growth	Size
Score	1.0000								
Sector	.04210	1.0000							
Market value	0.2618	0.2548	1.0000						
Debts	-0.3689	-0.0719	-0.1579	1.0000					
Roa	-0.2517	0.1463	-0.0051	0.4670	1.0000				
Roe	-0.2717	0.1338	0.0374	0.1577	**0.6300**	1.0000			
Freefloat	-0.0361	0.0665	-0.3335	0.1380	0.0052	-0.1184	1.0000		
Growth	-0.2245	-0.2637	**-0.9697**	0.0355	-0.0498	-0.0624	0.2984	1.0000	
Size	0.3083	-0.1130	0.5364	-0.2461	-0.1813	-0.1412	-0.3266	-0.3926	1.0000

As foreseen, the growth potential is strongly correlated to the capitalization because of its very definition. As a consequence, we have chosen not to retain the market capitalization as a measure of the size, in order to be able to simultaneously test the influence of the size and the growth on the financial

communication score of companies. Furthermore, considering the important correlation between the ROA and the ROE, we have decided to use two different models to test the influence of performance on the communication score.

Seeing the scores obtained, we notice that companies with the best scores are mainly registered on Alternext. This can be explained by the fact that the listing on Alternext implies the obligation of periodic information disclosure. Although no requirement stipulates that this information also has to be posted on the internet, we can suppose that companies having already prepared and supplied this information elsewhere go ahead and put it on the web. We thus decided to add the variable "market" in our model. Companies quoted on Alternext will get the value zero, whereas those registered on the Free Market will obtain the value one.

The general model takes on the following shape:
Score $= \acute{\alpha} + \text{\ss}1$ (market) $+ \text{\ss}2$ (sector) $+ \text{\ss}3$ (size) $+ \text{\ss}4$ (performance) $+ \text{\ss}5$ (dispersion of capital) $+ \text{\ss}6$ (potential growth) $+ \text{\ss}7$ (debts)
This model was tested using the 2007 version of the software STATA.

Table 6: Results of the regressions by OLS

	Model 1 general	Modele 1 refined	Modele 2 general	Modele 2 refined
Market	-4.397672	-5.633189	-4.215354	-5.739111
	0.1584	0.013**	0.1782	0.010*
Sector	5.343104	4.519201	5.389797	4.494681
	0.0323**	0.037**	0.0514***	0.0576**
Size	1.054878		0.930151	
	0.3461		0.4477	
Roa	-0.1025471	-0.137414		
	0.266	0.076***		
Roe			-0.035615	-0.03966
			0.0163**	0.0030**
Freefloat	-1.467246		-3.025930	
	0.879		0.7860	
Growth	$3.45*10^{-8}$		$3.09*10^{-8}$	
	0.615		0.5471	
Debts	-2.507757		-3.930871	
	0.601		0.3585	
cons	0.8382754	16.90373	3.065783	16.05172
	0.966	0.000*	0.8877	0.000*
Number of obs	34	35	34	35
F stat	2.98	7.26	3.39	7.74
Prob > F	0.0197**	0.0008*	0.0103**	0.0005*
R-squared	0.4448	0.4126	0.4776	0.4281
Adj R-squared	0.2953	0.3558	0.3369	0.3728
Root MSE	5.3951	5.0979	5.2331	5.0302

Significant at 1% *, 5% ** and 10 % ***.

Two models were tested: one taking into account the ROA as the measure of the performance; the other one, the ROE. A White test demonstrated the presence of heteroscedasticity of the residues within model two. Consequently, to obtain valid estimations of the variances and the covariances of our estimators, we used the variances and the standard distances corrected by the heteroscedasticity. Besides, a Breush-Godfrey test made it possible to show the presence of autocorrelation of residues. In model one, only the coefficient of the "sector" variable appears to be statistically significant. The positive sign of this coefficient confirms hypothesis 5. Membership in the IT sector positively affects the internet financial communication score. This result confirms the conclusions of Debreceny and al. (2002) and of Xiao and al. (2004). Companies belonging to the IT sector apparently use the internet as a vector of financial communication more than companies in other sectors do. We can pinpoint here their desire to demonstrate their expertise on the subject and to show investors the value of their know-how.

To refine this model, we proceeded to a Wald test on the coefficients of variables "freefloat", "growth", "debts" and "size". The results of this test prompted us not to reject the null hypothesis of these coefficients and to extract these four variables from model one. The removal of these variables allowed a net improvement in the quality of adjustment of this model 1. We notice that the variables "market" and "performance" have a negative and statistically significant influence on the financial communication score. So the fact of being quoted on the Free Market negatively influences the financial communication score on the web. This can be explained by the absence of requirements in terms of financial communication in this market. Another argument that could be advanced concerns the type of investor interested in these two markets. Indeed, we can imagine that the communication effort is greater when the company faces more specialized investors. A more in-depth study concerning the structure of shareholding and the type of investor interested in these two markets could confirm or disprove the argument that has been advanced.

Hypothesis three, which postulates a negative influence of performance on the financial communication score on the web, is confirmed. We can in turn support the results presented by Mendes-Da-Silva and Christensen (2004), Paturel and al. (2006), Debreceny and al. (2005). Model two was then refined via the preliminary realization of a Wald test applied to least statistically significant variables ("freefloat ", "growth", "debts" and "size").

The results of model two are similar to those obtained previously and confirm the validation of hypotheses three and five of this research as well as the importance of the listing market as regards the determination of the financial communication score on the web. Other hypotheses were not confirmed: the coefficients of the variables of size, debts, dispersion of the capital, and the growth potential were not significant.

CONCLUSION

The role of the website of companies in search of investors is "to inform and to seduce, to explain and to convince, to attract and to develop loyalty" (Léger 2008, p. 92). The stake is to anticipate the questioning of the potential investors, to answer it by means of clear and complete information as well as to facilitate the interaction with these real partners of the company. The use of the internet has exceeded the simple promotion of company products because the promotion of the relations with the present and future investors has also become an objective pursued during the creation of a company website (Geerlings, 2002; Bollen and Hassink, 2002). According to Léger (2008, p. 90), the internet changed the modalities of sharing information with shareholders because the information is quickly updated and spread. Furthermore, this information is accessible by all at a low cost, archived and available at any time (Geerlings, 2002; Léger 2008).

The originality of this study resides in its population. Here we have focused on companies quoted on unregulated markets in Belgium which were never before the object of such research to our knowledge. To do it, we observed, at first, the intensity with which companies quoted on unregulated markets in Belgium use internet as a financial communication channel by means of scoring. This step was founded on an analysis grid of websites built on the basis of the main elements advanced in the literature. We then tried to identify the determiners of the financial communication score obtained. It emerges from this study that membership in the IT sector has a positive impact on the financial communication score on the web, according to hypothesis five, which indicates that companies in the IT sector will communicate more financial elements through their websites than other firms. Performance has a negative effect on the financial communication score through the web, according to hypothesis three, which states that the less successful company will tend to communicate more. The market on which the company is listed also has a negative impact. This means that the company quoted on the Free Market will inform less than the firm registered on the Alternext market. The latter are subjected to the obligation of periodic information

disclosure, contrary to companies quoted on the Free Market, but nothing indicates however that they also have to provide this information on the internet. The results of our econometric analysis nonetheless show their tendency to do so. We can imagine therefore that having these various documents ready, they also choose to disclose them on the web.

In future, this study could be completed by a more detailed analysis of the shareholder structures and the type of target investor for each of the unregulated markets.

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FORECASTING FOREX VOLATILITY IN THE TIMES OF TURBULENCE

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ABSTRACT

Foreign exchange volatility has constantly been examining by researchers and financial experts for quite long time now. Changing dynamics of foreign direct investments have certainly influenced the foreign exchange rates between the countries. The volatility pattern in the foreign exchange markets around the world has always been very alarming. Though this volatility has given some tempting opportunities to earn high returns, it has also charged the investors with an equal amount of risk giving an interrogative probability to make such high returns.   Since most of the existing research works were related to normal time period, it becomes very important to extend the work to the period which is related to crisis or turbulence. It will be pertinent to observe the volatility patterns in the times of turbulence. The paper has considered thirteen exchange rates covering a period from July 1, 2005 to June 30, 2009 representing daily exchange rates. For comparison purpose, first three years have been considered as normal period and the last year which starts from July 1, 2008 and ends on 30th June 2009 represents to crisis year. The volatility patterns in these exchange rates are forecasted using GARCH model.
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THE MISSING LINK TO GOOD CORPORATE GOVERNANCE IN MALAYSIA

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INTRODUCTION

The topic of corporate governance has entered the agendas of many boards of directors in recent years. It is no longer a topic for idealists or academics. More corporate leaders are convinced by the necessity of good corporate governance. The Asian financial crisis, that started in 1997, partly originating from the prolonged recession in Japan in the early 1990s (Sachs, 1998),adversely affected the performance of many East Asian economies. Malaysia was not spared from the contagious effects that followed throughout 1998. It is generally believed that a lack of sound corporate governance was, to a certain extent, a major reason for this economic crisis in the East Asian region (D'Cruz, 1999; Khas, 2002; Kim, 1998).

According to Graham, Litan and Sukhtankar (2002), the cost of poor corporate governance is borne heavily by minority shareholders, a significant issue in emerging markets like Malaysia where many public companies are family owned. Remuneration, the selection of board members, weak investor relations, a low level of transparency in disclosing information by companies listed on the Bursa Malaysia (BMB), formerly known as Kuala Lumpur Stock Exchange (KLSE), and the ineffectiveness of regulatory agencies in enforcing legislation by punishing offenders and protecting minority shareholders, are all reasons attributed to the collapse of several Malaysian companies (Mohamad, 2002). These are the common problems which are in the debates on corporate governance. These unsolved issues clearly show that the exercise of a rule-based conformance approach did not work and has resulted in corporate governance failure.

Fasterling (2006) commented on the importance of honest and accurate reporting as a fundamental value for the effectiveness of disclosure rules. He further argues that if honest reporting is not reliable, and must instead depend solely on enforcement and verification measures, disclosure rules rapidly become inefficient, because inaccurate disclosures are difficult to detect and where disclosures are accurate, they still may have hidden implications that are difficult to uncover (Kraakman, 2004).

INTRODUCTION TO THE CONTEXT OF THE STUDY

The Malaysian Securities Commission (SC) revealed that it had uncovered "a variety of breaches and mismanagement" by directors and senior officers of a number of companies (Oh, 2003). The offences include insider trading and market manipulation, as well as corporate governance transgressions such as purchasing assets at inflated prices, selling assets at deflated values, submission of false or misleading information, schemes to defraud, and misuse of proceeds from capital-raising exercises. The release of the Malaysian Code of Corporate Governance (Ministry of Finance, 2000), the introduction of paragraph 15.26 and 12.57 of the then Kuala Lumpur Stock Exchange (KLSE) Revamped Listing Requirements (RLR) (Ministry of Finance, 2001) and the revised Malaysian Code on Corporate Governance (Finance Committee on Corporate Governance, 2007) have provided a framework and structure for good governance reporting architecture. Nevertheless organizations are ultimately controlled and run by human beings and in order to promote transparent corporate governance reporting, voluntary acts from within, based on sincerity, rather than conforming to an external requirement are crucial (Salleh & Ahmad, 2008).

Corporate governance and business ethics were the main concern with regards to integrity value in Malaysian private sector. Various scandals and malpractices, involving both foreign and local companies, have time and again demonstrated the need to uphold good governance (Razak, 2005). Corporate crimes such as corporate frauds have tarnished the credibility and integrity of the private sector among investors and the public (Razak, 2005). The above problems underscore the key point of the importance of adopting good management practices in every sphere of the corporate sector, in order to promote integrity and sustain economic prosperity (Razak, 2005).

In Malaysia, annual reports are seen to be less effective in conveying useful information to the users due to the disclosure of information that is no longer relevant or that current users demand more from the contents of annual reports. Che Haat et al (2005) found that users demanded more from the contents of the annual reports and feels that annual reports failed to convey useful information. Users were also considering alternative sources of information about the companies as more reliable, trusted and easily accessible relative to the firm's annual reports. In addition, the contents of the information disclosed appear not to cater to the needs of investors. There might also be certain fundamental information that is lacking in the Malaysian disclosure framework as a study conducted by Standard and Poors (2004) also revealed that most of the companies in Malaysia still fell short of global disclosure practice (Standard & Poors, 2004; Toh, 2004).

This has been the dilemma for security regulators in assessing company corporate governance practices which currently are not being disclosed in company annual reports. The issue of corporate governance reporting and corporate governance practice is not yet resolved.

THE AIMS OF THIS PAPER

The aims of this paper are to review various means of assessing corporate governance practices and to report the results of a study which determined the views of experts and practitioners about the reporting of corporate governance in Malaysia. The paper tries to uncover the missing link to good corporate governance in Malaysian Government Link Companies. This study was part of a larger study of governance in Malaysia.

The research questions addressed were:

1. *What were the major issues in corporate governance in Malaysia?*
2. *How accurate was corporate governance reporting? What was poorly reported?*
3. *How reliable was corporate governance reporting as an indicator of the quality and integrity of company management?*
4. *How could some of these issues be addressed?*

METHODOLOGY

This study adopted a qualitative approach to uncover issues in corporate governance reporting and how to address these issues. Structured interviews were conducted with company directors and company top management selected from the top 100 companies in Malaysia (i.e. the practitioners)(Bursa Malaysia, 2008), and Malaysian corporate governance associations, policy makers and academics (i.e. the corporate governance experts).

The interview sample which represents both practitioners and corporate governance experts provides an in-depth gauge of the issues. As the interviewees have in depth knowledge of the subject, they can provide rich information to the study (Babbie, 2002). A total of 12 interviews were conducted with a

sample of 4 practitioners and 8 corporate governance experts. While this is a relatively small sample, the twelve respondents showed considerable agreement in their views which suggests that the results are probably representative of the sector. Personal interview was the preferred method of gathering the required information because this approach gives more attention to understanding corporate governance issues in a holistic and meaningful way. From the interview exercise, issues related to corporate governance reporting were discovered.

Table 1: Number of Personal Interviews with the Practitioners and Corporate Governance Experts

Respondents group	Number of interviewees	Percentage (%)
Practitioners	4	33.33
Corporate Governance Experts	8	66.67
Total	**12**	**100**

Table 1 shows the number of personal interviews conducted with two sub-groups, the practitioners and the corporate governance experts.

Sources of data were taped transcripts of the interviews and the detailed notes taken by the researcher during the interviews. These data were analysed for identification of themes and similar responses. The tables report the number of times that responses were volunteered by the respondents unless indicated otherwise.

FINDINGS

Issues with Corporate Governance in Malaysia

In the case of Malaysian Government Link Companies, there is an unsolved issue as regards to corporate governance reporting. Similar to Che Haat (2005) this study confirmed that current users demand more from the contents of annual reports and, in addition, the contents of the information disclosed might not cater to the information needs of the investors. This has resulted in users considering other sources of information about the companies to be more reliable, trusted and easily accessible relative to the firm's annual reports. Interviewees' views are typified by the following:

> *We wouldn't want to report too many things in the annual report. As long as we comply with the Bursa Malaysia (Kuala Lumpur Stock Exchange) listing requirement that should be good enough (Practitioner)*

> *Information reported is not transparent enough and there is a need for the information to be verified or certify for the trueness by an independent party. The current mandatory approach are not promoting integrity in corporate governance reporting, it should be change to aspiration approach (Corporate Governance Experts)*

All of the practitioners believed that there are unsolved issues pertaining to corporate governance in Malaysia. As for the corporate governance expert group, two respondents believe that, there are no issues pertaining to corporate governance in Malaysia since the companies comply with the mandatory listing requirement. The balance of the expert group believes otherwise. The majority of the practitioners feel that companies only comply and report on mandatory requirements and need to improve on voluntary disclosure. This has resulted in having reports that are low in transparency. Half of the expert group agreed and have the same opinion as the practitioner group.

> *Company are good in reporting the mandatory requirement which is being spell out in the listing requirement, but lacking in disclosure of best practice in corporate governance which is the voluntary disclosure (Practitioner).*

Table 2: Issues With Regards To Corporate Governance in Malaysia

Are there any issues with corporate governance in Malaysia?	Practitioners	Corporate Governance Experts
No issues	-	2
Comply and report on mandatory requirement but lack on voluntary disclosure / Transparency of the report	3	4
Quality of directorship/ Human capital	1	5
Risk Management	1	-
Monitoring and Enforcement	-	2
Malaysian code on corporate governance should tailored to Malaysian listed company	-	1
Inefficient of information flow	1	1

Table 2 shows the respondents perceptions of other issues raised with regards to corporate governance.

Another major issue which the expert group considered as crucial is the quality of directorships, including board knowledge, experience, capability, integrity values, attitudes and leadership values. Only one practitioner highlights this issue during the interview.

> *Quality of the board is crucial because it influence the corporate culture. Good corporate governance starts from the top which then flows down. They are the setting tones (Corporate governance expert).*

Risk management and flow of information within the organization are other issues that the practitioners feel needs to be improved as it is considered as a critical issue.

Other issues which the expert group highlighted during the interview were the monitoring and enforcement of the Malaysian code on corporate governance. The expert group were concerned with monitoring and enforcement in Malaysia which they feel needs to improve. They also believe that the Malaysian code on corporate governance should tailored to the nature and structure of the Malaysian listed companies the majority of which are family based and state owned companies.

Accuracy of Reporting

Table 3: Accuracy of Corporate Governance Reporting

How accurate are reports on corporate governance?	Practitioners	Corporate Governance Experts
Very accurate	1	1
Accurate	1	1
Need revision	2	6

Table 3 shows the respondents perceptions on corporate governance reporting in Malaysian Government Link Companies.

The majority of the corporate governance expert group believes that corporate governance reporting needs to be reviewed by Bursa Malaysia (Kuala Lumpur Stock Exchange) since companies tend to report only on mandatory requirements but tend not to provide voluntary disclosures. The report on corporate governance also is questionable since it is only guided by the code but not enforced by law. Half of the practitioners also agree with this statement. Honest and accurate reporting is the fundamental value for the effectiveness of disclosure rules (Fasterling, 2006).

> *Corporate governance report is not like the financial report where it is govern by law and validated by an auditor (Expert group).*

Disclosure

Table 4: Issues That Is Poorly Reported

What issues are poorly reported?	Practitioners	Corporate Governance Experts
Directors remuneration/ salary/ bonus/ any other benefit received	2	1
Directors performance/ Effectiveness/ Training	-	4
Integrity issues/ Accountability issues	1	1
Risk management/ internal control/ audit	1	1
Shareholder	-	1
Assessment/ Action taken after assessment	-	3

Table 4 shows the responses on issues which are poorly reported in the companies' annual report.

Half of the practitioners believed that information pertaining to director remuneration and any other benefits received are poorly reported. They feel that this is a sensitive issue on which companies do minimal reporting. This may be due to the nature and structure of Malaysian listed companies; family based and state owned companies. As for the expert group, they feel that information related to director performance, effectiveness and training is poorly reported. This is another controversial issue on which companies do minimal reporting. The issues being highlighted by both groups share one common theme: information related to the board of directors.

The expert group also suggest that information related to the assessment conducted in the companies and action taken after assessment is poorly reported.

> *Assessment conducted in the company is just on the surface, eg YES or NO; and*
> *there is no report or data pertaining to the action taken after the assessment. There*
> *is lack of quantitative data and if there is a report, it is very generic (Expert group).*

Other issues which are poorly reported are integrity and accountability issues; risk management and internal control and information on shareholders.

Table 5: Greater Disclosure as a Solution

Can it be solved through greater disclosure?	Practitioners	Corporate Governance Experts
Yes	4	8
No	-	-

Table 5 shows the respondents opinions about how greater disclosure could be address as a solution to issues in corporate governance reporting.

All respondents from both groups agreed that greater disclosure can perhaps solve many of the above issues in corporate governance. Fasterling (2006) argues that inaccurate disclosures are difficult to detect and where disclosures are accurate, they still may have hidden implications that are difficult to uncover (Kraakman, 2004). Respondents agreed:

> *Company should be more transparent in reporting, more accountable and they*
> *should do auditing and forensic accounting (Practitioner).*

> *Greater disclosure perhaps can help in this issue but enforcement and monitoring are really important. Revising the company's act might also help in addressing this issue (Expert group).*

Assessment of the Quality and Integrity of Management

Table 6: Corporate Governance Reporting as a Reliable Indicator of the Quality and Integrity of Company Management

Do you think that corporate governance reporting (disclosure) can be a reliable indicator of the quality / integrity of company management? What is your opinion regarding this matter?	Practitioners	Corporate Governance Experts
Yes	1	1
Perhaps	1	2
No	2	5

Table 6 shows the respondents' opinions about corporate governance reporting (disclosure) becoming a reliable indicator of the quality / integrity of company management.

Half of the practitioners do not believe that corporate governance reporting can be a reliable indicator of the quality and integrity of the company management. More than half of the expert group does not believe the statement unless the information is being verified by an independent party.

> *Corporate governance reporting (disclosure) cannot be a reliable indicator of the quality or integrity of company management. There is no relationship between CG Reporting and quality of management (Practitioner). Perhaps corporate governance reporting (disclosure) can be a reliable indicator of the quality or integrity of company management however corporate scandals still come into sight. There is a variance between corporate governance reporting and practice in the present form or situation. Until then corporate governance reporting is questionable (Corporate governance experts).*

Corporate Governance Issues not Currently Addressed by Regulations

Table 7: Issues which are not being addressed by Corporate Governance

Are there any other issues which are not being addressed by corporate governance?	Practitioners	Corporate Governance Experts
Human values/ Human Governance/ Human Capital	3	3
Integrity values	1	-
Leadership/ board roles/ board quality	4	4
Investment information	1	-
Corporate Governance Auditing	1	1
Public Role	1	-
Corporate Responsibility/ social/ environment	-	1

Table 7 shows the respondents' opinions regarding issues which have not been addressed by corporate governance.

Leadership, board roles and board quality are areas which receive inadequate emphasis in corporate governance regulations. All of the practitioner respondents and half the expert group agree with this proposition.

Another major issue which both groups feel that corporate governance does not address sufficiently is related to human values, human governance and human capital.

Human values which relate to staff spiritual development, good sport, leadership, board roles and board training are area that corporate governance needs to stress on (Practitioner).

Quality of the Board of Director is very crucial. Human resource department should promote quality and adherence to best practice. Clarity in staff performance measurement and training availability are crucial to promote human capital (Expert group).

Corporate governance auditing is another issue that both groups feel may help to address the current issues in corporate governance.

Other issues that corporate governance does not address sufficiently are integrity values among board members, investment information, public roles in promoting good corporate governance practice and corporate social responsibility.

Table 8: Suggestions on how to Instil Integrity Value in a Corporation

Are there any other suggestions on how to instil integrity value in a corporation?	Practitioners	Corporate Governance Experts
Training/ human capital/ ESQ	4	1
Adequate system/ Value/ Process	-	2
Regulators roles/ investors roles/ Shareholder activisms	-	2
Public announcement	-	1
Key Performance Indicator	-	1
Company culture	-	1

Table 8 show the respondent suggestions on how to instil integrity value in a corporation.

The entire practitioner group suggested that providing training and increased awareness among staff members regarding integrity values would be a good way to instil integrity within the company. Fasterling (2006) also agrees that increasing awareness of human values such as honesty and integrity would be the best approach to address this issue. On the other hand, the expert group believes that an adequate system, stress on values and process rather than on rules and regulation might help in promoting integrity in a company.

Provide training and promote awareness on integrity among staff member; example ESQ training (Practitioner). Integrity in business is a must for all corporations as it able to instil protective systems by which business corporations are directed and controlled. The control must be 'kaizen' with checks and balances between the supervisory and executive part of the corporations (Expert group).

The expert group also felt that regulators' roles, investors' roles, and shareholder activism are other factors that can promote integrity. One of the respondents from this group also suggests that a clear liaison with regulators may help effective enforcement being conducted. Other suggestions made by the expert group were to have effective public announcements pertaining to any corporate governance issues, publishing key performance indicators and having the right company culture.

CONCLUSION

The issue of corporate governance reporting and corporate governance practice is not yet resolved in Malaysian government link companies. This has been the dilemma for security regulators in identifying the approach to assessing company corporate governance practices which are not being reflected from the information disclosed in the company annual report. Che Haat (2005) highlighted that users demanded

more from the contents of the annual reports and felt that annual reports failed to convey useful information. There might also be certain fundamental information that is lacking in the Malaysian disclosure framework as a study conducted by Standard and Poors (2004) also revealed that most of the companies in Malaysia still fell short of global disclosure practice (Standard & Poors, 2004; Toh, 2004). The study limitation is that the findings do not represent all Malaysian public listed companies. Furthermore, the problems and issues discovered here are based on the respondents' point of view. Thus, a further empirical study is recommended to uncover theses in greater detail.

The study discovered that there are unsolved issues pertaining to corporate governance reporting in Malaysia. Corporate governance reporting does not necessarily represent the company corporate governance practice. The respondents did suggest undertaking verification of the corporate governance reporting to ensure the reliability of corporate governance reporting. The interview exercise conducted identified issues that impact on the current practice of governance in Malaysia. It also helped in identifying ways to address the issues. It is hoped that the dilemma experienced by the security regulators regarding this matter can be eased and the study findings can assist them in improving corporate governance practice in Malaysia.

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CUSTOMER PERCEPTIONS OF SERVICE IN TAIWAN ONLINE-BANKING INDUSTRY

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ABSTRACT

*As the information technology evolves, the world is now in paradigm shift from the industrial age to the information age. As a result, there is a growing demand in the service fields that require expert knowledge and information. The fabrics of industries in recent years, the trade of online banking has become more and more diversified. Specializing in unlimited, speedy and convenient services, online banking has transformed traditional banking in many countries. The managements' ability to anticipate and respond to such changes in the financial marketplace; thus, has a decisive influence on the success or failure of many retail banks. The present study, exploratory in nature, was intended to develop a comprehensive conceptual framework from which researchers could empirically examine and explain the relationship between customers' perceived usefulness of online banking and the relative advantages of online banking, its website quality**,** knowledge & support**,** information quality and customer trust in Taiwan. Multiple regressions were conducted to test the above-mentioned relationships. The statistical results showed that relative advantages, trust and perceived ease of use are most significantly and positively related to customers' perceived usefulness of online banking. The findings suggest that managers with information pertaining to the planning of online banking web sites and service selection. In designing online banking services, software developers should pay close attention to informative content that will be, above all, perceived by customers as useful and relevant.*

Keywords: Online banking, technology acceptance model (TAM), knowledge management, customer perceptions

SKILLS NEEDED IN TODAYS' WORKPLACE: FEEDBACK FROM UNDERGRADUATE BUSINESS ALUMNI AND EMPLOYERS

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ABSTRACT

The results presented in this paper are the responses from 163 undergraduate business alumni of a target school and 45 New Jersey employers to the questions: 1.)What writing tasks are required at work? 2.) Which quantitative skills are required at work? and 3.) Which computer software is required at work? These questions were adapted from Western Carolina College of Business Alumni survey .The results of the survey showed strong correlations with the writing tasks (r=0.989), quantitative tasks (r=0.967), and computer software (r=0.973) identified by both the alumni and the employers as being tasks required at work. E-mail, business letters, and memos were the most common written communication required at work. Budgeting, financial accounting, project management, and forecasting were most common quantitative skills required Word processing, spreadsheets, email, and world wide web were most common computer applications used. Based on these results the target school should consider modifying the curriculum so that graduates have these competencies in the writing tasks, quantitative skills, and computer software identified as being required at work by the majority of alumni and employers surveyed.

INTRODUCTION

In receiving alumni and employer feedback for curricula revision, some faculty in colleges use alumni and employer surveys. The purpose of this project was to determine the writing, quantitative, and computer skills needed for the undergraduate business program using employer and alumni feedback to guide revisions to the business curricula.

METHODS

A survey packet was mailed during April 2008 to 2383 alumni and 145 employers of the target college that included information that explained the study, provided information on informed consent for participation in the study and presented the questions for the study. The questions asked respondents what specific writing tasks they are expected to complete such as e-mail, business letters, memos, proposals, training guides, research reports, sales letters, promotional materials, product specifications, technical documentations, web pages, and product documentation. They were also asked what specific quantitative skills are required at work such as algebra, geometry, statistics/ probability, queuing/simulation, project management, forecasting, financial accounting, budgeting/cost analysis, rates of return, discounted cash flow analysis, total quality management, operations management, and queuing analysis. Respondents indicated whether they use any of the following programs word processing, e-mail, database, spreadsheet, presentation, multimedia, desktop publishing, world wide web, statistical analysis software, programming or computer based training. These questions were adapted from the Western Carolina University survey (Western Carolina University College of Business, 2006). Permission was obtained from Western Carolina University to use survey questions.

RESULTS

Table 1: Writing Tasks Required at Work Identified By Alumni and Employers

Writing Task	Percent Alumni	Percent Employer	Number Alumni	Number Employer
E-mail	91%	93%	149	42
Business letters	76%	69%	124	31
Memos	69%	67%	113	30
Proposals	44%	51%	71	23
Training Guides	42%	36%	68	16
Research Reports	34%	33%	56	15
Sales Letters	28%	31%	45	14
Promotional Materials	26%	29%	43	13
Product Specifications	25%	29%	40	13
Technical Documentation	22%	24%	36	11
Web Pages	19%	20%	31	9
Product Documentation	19%	20%	31	9
Other	10%	7%	17	3

Table 1 lists the writing tasks required at work that are identified by alumni and employers. Columns 1 and 2 list the percent of alumni and employers respectively who identified each writing task as being required at work. Columns 3 and 4 list the number of alumni and employers that identified a writing task as being required at work.

There were 163 alumni and 45 employers that responded to the survey by August 31, 2008. Table 1 lists the writing tasks required at work that were identified by alumni and employers. Responses to the question regarding the writing tasks that are routinely required at work are that greater than 50% of the alumni and employers reported routinely writing email, business letters, and memos. Also 51% of the employers who responded identified writing proposals as a required writing task.

In analyzing the responses, both the alumni and the employers reported writing emails, business letters, and memos as the writing tasks that they routinely use at work. Based on the data, business faculty may want to focus assignments in their courses that incorporate more written work from the students in the areas of business letters, memos, and writing emails.

The writing tasks that were required infrequently as indicated by fewer than 50% of the respondents were writing proposals, training guides, research reports, sales letters, promotional materials, product specifications, technical documentation, web pages, and product documentation. Alumni respondents identified writing job descriptions, legal documents, and service agreements as other writing tasks required at work. Employers identified writing investigative reports, recovery letters, and audit reports as other writing tasks required at work.

In analysis of the data, the rankings by alumni and by employers of writing skills that are not routinely required at work may be due to the higher representation of respondents employed in Finance/Insurance, Heath Care and Professional Services, and Government where more generalized writing skills such as memos, emails, and letters are used routinely. The other writing tasks that are ranked as not routinely used, are those that apply to specific job classifications such as sales letters that would be more directed to marketing and sales positions, training guides that would be required more in positions in the human resources field, while technical documentation, research reports, and product documentation are writing tasks associated with operations management and research positions.

Table 2 lists the percent alumni, percent employers, number of alumni, and number of employers that identified each quantitative task as being routinely required at work. The most important quantitative skills that were identified by at least 50% of the alumni and employers were budgeting/cost analysis, financial accounting, and project management. Forecasting was reported by 50% of the alumni to be a required quantitative task routinely required at work.

Table 2: Quantitative Tasks Required at Work Identified By Alumni and Employers

Quantitative Task	Percent Alumni	Percent Employer	Number Alumni	Number Employer
Budgeting/Cost Analysis	65%	71%	106	32
Financial Accounting	56%	51%	91	23
Project Management	53%	53%	86	24
Forecasting	50%	42%	82	19
Statistics/Probability	40%	33%	65	15
Operations Management	39%	33%	63	19
Rates of Return	34%	42%	56	12
Algebra	30%	27%	49	8
Discounted Cash Flow Analysis	15%	18%	25	5
TQM/SPC	8%	11%	13	4
Queuing/Simulation	6%	9%	10	3
Geometry	6%	7%	9	4
Other	4%	4%	7	2
None		9%		3

Table 2 lists the quantitative tasks required at work that are identified by alumni and employers. Columns 1 and 2 list the percentage of alumni and employers respectively who identified a quantitative task as being required at work. Columns 3 and 4 list the number of alumni and employers that identified a quantitative task as being required at work.

In analyzing the responses, budgeting, financial accounting, and project management were the most common quantitative skills required at work as reported by both the alumni and employers. Based on the high proportion of respondents from the financial and professional services industries, the ranking could have been influenced by skills that are job-specific to the industry. For the faculty who teach quantitative skills and operations management, the data may be beneficial to faculty in knowing the importance of the quantitative skills to the workplace. The data may influence content covered in the quantitative skills courses and what is assessed in those classes.

The quantitative skills reported by fewer than 50% as being required at work were statistics/probability, operations management, calculating rates of return, algebra, cash flow analysis, Total Quality Management (TQM)/Statistical Process Control (SPC), queuing/simulation, and geometry. Other quantitative skills that were reported by the employers that were required at work were tax, bond equations, and cost comparisons.

In analyzing the data, algebra, geometry, and statistics/probability are ranked as not routinely required at work. An explanation for this finding may be due to the courses being the foundation courses upon which higher level quantitative skills build. In addition, TQM/SPC, rates of return, cash flow analysis, queuing/simulation, and operations management may be ranked as not routinely used at work since these are skills associated with specific job classifications within industries that are not strongly represented as areas of employment by the sample populations. Job areas that require specific quantitative skills include: economics, computer support services and analytics, health services, public administration, survey researchers, financial services, and marketing and sales (Burnett, 2002). Although the employment areas represented by employers and alumni include finance and insurance, health care, professional services and government, the specific quantitative skills indicated as required at work by less than 50% of the respondents, may not be important quantitative skills within those areas of employment represented by the sample populations.

Table 3 lists the responses to the question regarding the computer software skills that are required at work. The results were that greater than 50% of the alumni and the employers reported that knowledge of email, spreadsheets, word processing, the world wide web/internet, and databases are required at work. Other software specified by alumni as being required for their work was accountant specific applications such as FoxPro, QuickBooks, and a system for golf accounting sales. Additionally alumni identified Siebel, digital editing programs, and specific programs used in our business, MS Project, Visio as other

software program knowledge required for work. Other software specified by employers was proprietary software, electronic medical records, and timesheets.

Table 3: Computer Software Required at Work Identified By Alumni and Employers

	Percent Alumni	Percent Employer	Number Alumni	Number Employer
E-mail	93%	96%	96	43
Spreadsheet	91%	78%	78	35
Word Processing	88%	96%	96	43
World wide web/Internet	74%	71%	71	32
Database	60%	51%	51	23
Presentation/Multimedia	50%	47%	47	21
Computer-Based Training	40%	38%	38	17
Desktop Publishing	17%	31%	31	14
Statistics	13%	11%	11	5
Programming	10%	22%	22	10
Other	10%	4%	4	2
None	24%	2%	2	1

Table 3 lists the computer software skills required at work that are identified by alumni and employers. Columns 1 and 2 list the percentage of alumni and employers respectively who identified a particular computer software skill as being required at work. Columns 3 and 4 list the number of alumni and employers that identified a particular computer software skill as being required at work.

In analysis of the data, the five computer software skills identified by the alumni and employers are already integrated within the core business courses at the targeted college. The data reinforces that these software skills should remain in the business curriculum. With a response indicating the use of spreadsheets at work as 91% for alumni and 78% for employers, these responses may be influenced by the positions held by the respondents in the accounting, finance/insurance, and professional services areas. These occupational areas often require knowledge of spreadsheet programs.

Less than 50% of the respondents reported that presentation/multi media, computer-based training, desktop publishing, statistics, and programming were software skills required at work.

The responses to the question regarding computer software knowledge required at work are closely ranked as the four least required at work as indicated by both the business alumni and the employers. The knowledge of computer-based training, desktop publishing, and programming may be job specific rather than regularly used software programs such as spreadsheets, presentation, database, word processing, world wide web/internet, and email. Statistics software would be used within the statistics courses or in the management information systems courses which are foundation courses within the business curricula at the targeted college.

Table 4: Correlations Between Alumni and employer data for writing task, quantitative tasks, and computer skills

Task/Skill	Pearson r	R^2
Writing Tasks	0.989	0.98
Quantitative Tasks	0.967	0.94
Computer Skills	0.973	0.95

Table 4 lists the Pearson's r value that was calculated by comparing the alumni and employer data for their answers to the questions about writing tasks, quantitative tasks, and computer skills. There is a strong correlation between the alumni and employer for each of the skills meaning that the alumni and employer agree on what skills are important for writing, quantitative, and computer skills

Table 4 lists the Pearson's r values that were calculated by comparing the alumni and employer data for their answers to the questions about writing tasks, quantitative tasks, and computer skills. There is a strong correlation between the alumni and employer for each of the skills meaning that the alumni and employer agree on what skills are important for writing, quantitative, and computer skills. The R^2 shows a less than 5% variation for writing and computer skills which is statistically significant at the 5% level.

Quantitative skills has a 6% variation in data. This is an important finding for revising curricula as the target college was able to identify common writing, quantitative, and computer skills as discussed in the previous section and that these findings are statistically significant.

RECOMMENDATIONS

Based on the findings of this study, the following areas can be assessed within the business policy and strategy courses: (a) communication abilities, (b) analytic skills, (c) use of information technology, and (d) reflective thinking skills. The assessments can be done through use of written and oral presentations by students to case studies or business simulations, use of technology through presentation software and Excel spreadsheets for data analysis, written and oral interpretation of case studies that are based on international business issues and a diverse workforce, and reflective papers written by students about their methods of interpretation and recommendations for case study or simulation decisions.

After implementation of the recommendations for revisions to curricula and course content, the changes should be monitored each semester by a faculty designee from the School of Business curriculum committee. In addition the student learning outcomes assessment measures that were recommended should be monitored each semester by a faculty designee from the School of Business assessment committee.

It is recommended that colleges and universities routinely include employer and alumni surveys as part of their curriculum assessments as their feedback can provide valuable information for revising the curriculum.

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EVALUATING THE DIFFERENT CONTRIBUTIONS ON INTELLECTUAL CAPITAL AND FIRMS' RETURN OF MARKET PERFORMANCE

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ABSTRACT

The study attempts to adjust Pulic's (2000) intellectual capital approach, "Value Added Intellectual Coefficient (VAIC^TM)", to measure firms' value creation and return of market performance. Based on the literature review, the research adds two more IC components, R&D expenditure and intellectual property, into the VAIC^TM approach. The data was collected from 2005~2007 annual reports that companies listed on the Taiwan Stock Exchange Corporation (TSEC) and Market Observation Post System (MOPS). The results support the hypotheses that firms' intellectual capital has a positive impact on market performance and its profitability in modified VAIC method. Besides, the author found that R&D expenditure and intellectual property (TCE) may capture additional information on value creation and provide sustainable advantages in order to create firms' market performance. Furthermore, firm with different contribution on intellectual capital will create the different return of market performance. Thus, in knowledge-based economy, what should be considered is not only the value of IC but IC allocation as a critical aspect that should not be ignored. Finally, both IT- and Non-IT corporations must value and manage their intellectual capital, particularly R&D and intellectual property (TCE), in order to create long-term competitiveness and create higher market return.

KEYWORDS: *VAIC^TM, intellectual capital, R&D expenditure, intellectual property*

INTRODUCTION

The idea of Intellectual Capital (IC) helps executives to elucidate intangible resources and knowledge assets of organization. In extant IC research, a greater emphasis is on antecedents of IC and the casual relationship between IC and market performance. Little is surveyed on why components of IC evolve relatively different and on the causal relationship between certain IC component and market performance at a certain period of time. Considering that the accumulation of Intellectual Capital is a dynamic and continuous process. The limited resources firms are able to engage in the creation of intellectual capital given a certain time frame, different weights are often distributed to different subcomponents of IC. The question of how firms recognize the potential offered by intellectual capital over the others and the relationship between the organizations' priorities and market performance are therefore pragmatic.

This paper takes on the intellectual capital perspective to survey the evolutionary dynamics of intellectual capital. A basic argument is that firms often cultivate intellectual capital in a similar and possibly sequential manner. It may be a consequence of organizational adaptation to industrial environment over time while heterogeneity in intellectual assets between firms may be a result of firms' enaction to the environment. In terms of the generally accepted consensus on the content of intellectual capital, three interdependent IC components are examined in this study: human capital, structural capital and social capital. Due to the sample in this preliminary study is mainly with high technology industry. We therefore also consider the relative change in technology capital (Chang, 2007). Using financial data of companies in Taiwan, a regression analysis is presented.

LITERATURE REVIEW

When competitive success of a strategy is dependent on the firm's invisible assets, the proper allocation of invisible assets is also largely determined by the content of a strategy (Itami, 1987). The issue of fit among organization, resources and environment is a dynamic process. The alignment between

organizational system, structures, processes and changes in the environment significantly impact organizations' market performance in resources acquisitions and performance. Whether such adaptation is environmentally derived or out of managerial choice (see Hrebiniak and Joyce, 1985 for more discussion on organizational adaptation), the history of intellectual capital depicts the progress of organizations' market performance.

Human Capital, Structural Capital and Social Capital

Synthesizing the literatures, *Human capital* simply comprises the competence, skills, experience, and intellectual agilities of the individual employees, and it is a source of innovation and strategic renewal depends on how an organization effectively use in a company (Bounfour, 2002; Brooking, 1996; Edvinsson and Malone, 1997; Ross et al., 1997; Stewart, 1997, Sullivan, 1998). The concept of human capital is dominant in any discussion of intellectual capital. *Structural capital* includes processes, systems, structures, and other intangibles that are owned by the firm but do not appear on its balance sheet (Bounfour, 2002; Brooking, 1996; Edvinsson and Malone, 1997; Stewart, 1997; Ross et al., 1997). Structural capital is the supportive infrastructure and information systems that enable to turn individual know-how into group property and allow the intellectual capital to be measured and developed in an organization. Structural capital also deals with the mechanisms and structures of the organization that can help and support employees (human capital) in their quest for optimum intellectual performance and therefore overall business performance. The remaining type of intellectual capital is *social (customer) capital* resides either at the individual or the organizational level and it is an intermediary form of intellectual capital consisting of knowledge in groups and networks of knowledge resources embedded within and derived from a network of relationships (Burt, 1992; Coleman, 1988; Edvinsson and Malone, 1997; Ross *et al*., 1997; Stewart, 1997). Some studies address the relationship between social capital and firms' financial performance, but only very few studies actually provide empirical results.

Research & Development (R&D) Expenditure and Intellectual Property

Investment in research and development (R&D) is one of the fundamental ways organizations create new knowledge and increase firm's performance. R&D investments increase the opportunities for organizational members to identify and apply technology and its associated options in their products and process in order to increase firms' profitability. The more an organization invests in R&D, the more it supports its individual members to enhance individual's knowledge and expertise and thus, builds human capital and increases firm's performance. R&D also establishes that most of the outcomes of research and development efforts become codified and institutionalized in patents, routines, processes, databases, and other organizational level repositories as organizational (or structural) capital (Hall, 1992). In order to make their knowledge difficult for competitors to imitate, organizations expend considerable efforts in combining stands of knowledge possessed by individuals and creating integrated knowledge that is embedded in their processes, routines, and products (Grant, 1996) we called intellectual property.

In recent years, R&D expenditure and intellectual property have received more attentions because ideas and innovations related to the products or processes have become the most important resource that replaces land, energy, and raw materials. Particularly in information technology and telecoms, the roles of R&D expenditure and intellectual property have changed rapidly. In R&D expenditure, Abernethy *et al*. (2003) that examined several studies concludes that there is a significant positive rate of return to R&D expenditure at corporate sector and that corporate returns may be twice the rate of return to tangible investment. Chen *et al*. (2005) also advise that R&D expenditure has a positive effect on profitability and that intellectual property has a positive effect on firm value and financial performance. Intellectual property represents a proprietary technological advantages that may enable a firm to either actively enter a new market or negatively protect its processes in current market situation before its competitors to imitate (Sullivan 1998), and increases the ability of the firm to obtain a return on its investment in R&D (Porter, 1980). Therefore, intellectual property is expected to positively related to R&D investment (Hayton, 2005) and directly influence firms' financial performance.

METHODOLOGY AND HYPOTHESIS DEVELOPMENT

In this study, financial data of companies in Taiwan Stock Exchange spanning from 2005 to 2007 is used for analysis. Table 1 outlines the sample selection procedures in the study. After deleting off-market firms, missing data on the selected variables, and net income is less than 0 in a current year, the final sample consists of a total of 1773 firm-year observations, including 854 IT companies and 918 non-IT companies. The missing data generally happens in the value of selected intellectual capital variables.

Table 1: Sample Selection and Sample Firms' Profile – Sample Selection Procedure

	Firm-years
Listed companies during 2005~2007	2140
Deleting missing number and off-market companies	
	365
Final sample	1773
IT companies	854
Non-IT Companies	918

Valued Added Intellectual Capital (VAIC)

While many survey methods (internal measures) are proposed in addition to those based on accounting information (external measures), it is difficult to compare company to company using such methods (Boremann, 1999; Pulic, 2000 and 2004). In this research we adopted an accounting tool for IC management, namely the Valued Added Intellectual Capital (VAIC^{TM}) (Pulic, 2000) for evaluation of intellectual capital. A primary focus of this method is on the efficiency of resources that creates values for the firm. A basic principle to VAIC^{TM} is to calculate the value added (VA) of a firm by subtracting input from output, whereby labor expenses are not included in the input. In financial terms, this is equal to:

VA = GM – *sgaExp.* + *LExp.* = Operating Income + *LExp.*

where VA is value added; GM is gross margin; *sgaExp.*: selling, general, and administrative expenses; *LExp.*: labor expenses that Pulic (2000b) calls human capital.

According to Pulic (2000b), the value of human capital (HC) and structural capital (SC) is described by the labor expenses and the difference between VA and HC. From this description, HC and SC are denoted as in the followings:

HC = LExp.

SC = VA- HC

where HC is human capital; SC is structural capital; Pulic states that human capital and structural capital are reciprocal. The less human capital participates, the more structural capital is involved. The next step is to evaluate social capital. According to Pulic's VAIC, social capital is calculated by capital employed which equals to the book value of the net assets of the firm.

SC= CE (capital employed) = Book Value of Net Assets

For technology capital, R&D and intellectual properties are taken into consideration. To proxy for technological capital (TC), the study includes R&D expenditure and the value of intellectual property following Chang's propositions (2007). To account for the effect, the study uses the same denominator of the dependent variable (Tobin's *q*) as the scaling variable for technological capital.

$$\text{Technology Capital Efficiency TCE} = \frac{\text{R\&D expenditure} + \text{value of intellectual property}}{\text{Book value of common stocks}}$$

The study sets out to calculate the efficiency of the four forms of IC and the Tobin's *q* is adopted as the proxy of firm's market performance (*MPerf*) with those resources. Up to this point the study now has four indicators (predicting variable) and one dependent variable :

Human Capital Efficiency HCE = VA / HC

Structural Capital Efficiency SCE = SC / VA

Social Capital Efficiency CEE = VA / CE

$$\text{Technology Capital Efficiency TCE} = \frac{\text{R\&D expenditure} + \text{value of intellectual property}}{\text{Book value of common stocks}}$$

$$MPerf = \frac{\text{Market value of equity} + \text{Book value of debt}}{\text{Book value of assets}}$$

Market value of equity variable is based on closing share prices on the last trading day of the year

Hypothesis Development

To test the relationship between the weight of IC components and firms' market performance in IT- and Non-IT market scope, we conduct a series of regression analyses that substituted the various performance measures as dummy and dependent variables.

Hypothesis 1 (H₁): There is a positive relationship between intellectual capital components including HCE, SCE, CEE and TCE, and market performance.

$$MPerf_t = \alpha_0 + \alpha_1 HCE_t + \alpha_2 SCE_t + \alpha_3 CEE_t + \alpha_4 TCE_t + \varepsilon_t$$
(1)

By setting the dummies for companies that are listed separately as IT companies and non-IT companies on Taiwan Stock Exchange (TWSE), as well as the different IC-components, H_1 allows us to test the difference between where the companies are listed. IT and non-IT are dummy variables for companies which are listed on Taiwan Stock Exchange. HCE, SCE, CEE and TCE are different IC-components as described above. Coefficient β_1 and β_2 would be equivalently significant if Hypothesis 2 is true.

Hypothesis 2 (H₂): There is no difference regarding that companies are IT or non-IT companies.
$$MPerf_t = \beta_1 IT_t + \beta_2 NonIT_t + \alpha_1 HCE_t + \alpha_2 SCE_t + \alpha_3 CEE_t + \alpha_4 TCE_t + \varepsilon_t$$
(2)

To investigate the relationship between market performance and IC-components in different weight, we use equation 3 and include different return of market performance in the following tests. A key postulate is that the relationship between market performance and IC-components would mislead if the effect of different IC allocation is ignored. In the test we use a null hypothesis to examine the relationship between return of market performance and IC components across different weight on IC-components.
$$\ln(MPerf_t) = \alpha_0 + \alpha_1 HCE_t + \alpha_2 SCE_t + \alpha_3 CEE_t + \alpha_4 TCE_t + \varepsilon_t$$

$$\ln(MPerf_t) \geq r_1, HCE, SCE, CEE, TCE \text{ with different weight}$$

Test : $r_1 < \ln(MPerf_t) < r_2, HCE, SCE, CEE, TCE$ with different weight

$$\ln(MPerf_t) \leq r_3, HCE, SCE, CEE, TCE \text{ with different weight}$$

$H_{3a} : w_{HCE} = w_{SCE} = w_{CEE} = w_{TCE}$

$H_{3b} :$ Not all w_i is equal

EMPIRICAL RESULTS

Table 2 and 3 present descriptive statistics and correlation analysis for the dependent and the independent variables. The mean Tobin Q is about 20.6420 and 16.4452 for IT and non-it companies. In the light of the high degree of correspondence with Tobin Q and HCE (0.3006), and with SCE (0.4477), and with

CEE (0.3064), and with CEE (0.3064) and with TCE (0.2920), the results for VAIC subcomponents demonstrate that increase in value creation efficiency influence IT firms' profitability and market performance. For non-IT companies, the market performance is correlated with IC components that 0.1282, 0.4068, 0.2229, and 0.3021 respectively. Furthermore, the Tobin Q-TCE relationships (0.2920 and 0.3021) are highly correlated that roughly support the hypotheses 1that firms with more R&D expenditures and intellectual property have significantly positive effect on firms' value and financial performance. Therefore, R&D expenditure and intellectual property should be included in calculating firm's intellectual capital and analyzing the value creation.

Table 2: Descriptive Statistics for Selected Variables

Variable		Average	Variance	Std dev.	Skewness
Tobin Q	IT	20.6420	114.8787	10.7182	2.8419
	Non-IT	16.4452	39.5528	6.2891	2.0465
HCE	IT	3.5381	28.8494	5.3712	9.6178
	Non-IT	4.7898	122.0005	11.0454	7.6010
SCE	IT	0.5611	0.0481	0.2194	-0.4925
	Non-IT	0.5304	0.0665	0.2578	-0.2068
CEE	IT	0.4089	0.1312	0.3622	4.7353
	Non-IT	0.3055	0.0745	0.2729	3.9539
TCE	IT	0.0466	0.0053	0.0725	4.8599
	Non-IT	0.0174	0.0011	0.0334	4.5094

Table 3: Correlation Analysis of Selected Variables

		Tobin Q	HCE	SCE	CEE	TCE
Tobin Q	IT	1				
	Non-IT	1				
HCE	IT	0.3006	1			
	Non-IT	0.1282	1			
SCE	IT	0.4477	0.4702	1		
	Non-IT	0.4068	0.4393	1		
CEE	IT	0.3064	0.0434	0.1423	1	
	Non-IT	0.2229	-0.0826	-0.0209	1	
TCE	IT	0.2920	-0.0780	-0.037	0.2021	1
	Non-IT	0.3021	-0.1063	-0.1155	0.2363	1

Table 4 shows the results from testing hypothesis 1 and 2. First, the modified VAIC approach is supported both by IT and non-IT companies that explanatory power is increased from 27% to 34% (F-value = 111.8566) and 21% to 31% (F-value = 103.9851) respectively. The relationship between intellectual capital and market performance (H_1) has received support (p-value = 0.0000, 0.0000, 0.0000, and 0.0000 respectively) in IT companies and SCE, CEE, and TCE are proved (p-value = 0.0000, 0.0000, and 0.0000 respectively) while HCE is not (p-value = 0.3854). It also makes difference regarding whether these companies are listed in IT or Non-IT companies (H_2).

Table 4: Analysis of the relations of *MPerf* and IC in different Company Type

Coefficient	VAIC Approach				Modified VAIC Approach			
	IT		Non-IT		IT		Non-IT	
	Adj. R^2	F-value	Adj. R^2	F-value	Adj. R^2	F-value	Adj. R^2	F-value
	0.2700	106.0234	0.2179	86.17847	0.3423	111.8566	0.3100	103.9851
	Beta	p-value	Beta	p-value	Beta	p-value	Beta	p-value
Intercept	7.0404	0.0000***	9.3880	0.0000***	5.4786	0.0000***	8.4605	0.0000***
HCE	0.2455	0.0002	-0.0238	0.2010	0.2837	0.0000***	-0.0152	0.3854
SCE	17.2964	0.0000***	10.4881	0.0000***	17.6898	0.0000***	11.1777	0.0000***
CEE	7.3993	0.0000***	5.2648	0.0000***	5.6986	0.0000***	3.5896	0.0000***
TCE					40.9514	0.0000***	59.3982	0.0000***
					F-test	p-value		
Hypothesis: IT Comp.= Non-IT Comp.					4.4430	0.0000****		

*Note: *, **, *** denotes significance at the 10%, 5%, and 1% level*

In the earlier hypothesis testing we found support in the relationship between market performance and intellectual capital (Table 4). A further investigation into the different allocation in intellectual capital considering IT- and non-IT companies' return of market performance, the results confirm that companies place different weights and distribute resources to intellectual capital across different return of market performance. In IT companies (Table 5), firms' return of market performance is highly associated with its IC value creation while there is no significant between the first 20% and 40%~60% level, and 20%~40% and 60%~80% level. Additionally, the results (Table 6) clarify that HCE, SCE and CEE are negatively related to the firms' return while TCE is significantly positive correlated to the return of market performance. It may describe even IT companies need more employees to develop its designs and products, it may also erode its profit if companies they don't have a well supportive infrastructure and information systems that enable to turn individual know-how into group property. In non-It companies, only the relationship between the first 20% level and the level of 60%~80% is not significant. The results illustrate that HCE, SCE, CEE and TCE are not significant in the rank of first 20%. SCE and CEE are significantly positive related to the firm's return of market performance and furthermore, firms' will obtain higher return if they invest in the development of TCE. Conclusively, the employers should understand what level of market return they desire then they can decide how to distribute their investment in its intellectual capital.

Table 5: Analysis of the Companies' Return of *MPerf* and IC Considering Critical Value

ln(*MPerf*)	IT Companies *F*-Value (*p*-value)				
	0~0.2	0.2~0.4	0.4~0.6	0.6~0.8	0.8~1.0
0 ~0.2	1.0000				
0.2~0.4	13.2879 (0.0000***)	1.0000			
0.4~0.6	0.9625 (0.4226)	0.0724 (0.0000***)	1.0000		
0.6~0.8	12.3085 (0.0000***)	0.9623 (0.3478)	12.7877 (0.0000***)	1.0000	
0.8~1.0	0.6582 (0.0169**)	0.0495 (0.0000***)	0.6839 (0.0269**)	0.0535 (0.0000***)	1.0000

ln(*MPerf*)	Non-IT Companies *F*-Value (*p*-value)				
	0~0.2	0.2~0.4	0.4~0.6	0.6~0.8	0.8~1.0
0 ~0.2	1.0000				
0.2~0.4	8.2474 (0.0000***)	1.0000			
0.4~0.6	1.8296 (0.0000***)	0.2218 (0.0000***)	1.0000		
0.6~0.8	0.8838 (0.2582)	0.1072 (0.0000***)	0.4831 (0.0001***)	1.0000	
0.8~1.0	4.8887 (0.0000***)	0.5928 (0.0033***)	2.6720 (0.0000***)	5.5312 (0.0000***)	1.0000

*Note: *, **, *** denotes significance at 10%, 5%, and 1% level*

Table 6: Analysis of the relations of *MPerf* and IC Considering Different ln(*MPerf*) in IT Companies

ln(MPerf)	0~0.2		0.2~0.4		0.4~0.6		0.6~0.8		0.8~1.0	
	Adj. R2	F-value								
	0.4707	25.5105 (0.0000***)								
	Beta	p-value								
0~0.2 HCE	(7.7311)	0.0000***								
SCE	4.3965	0.2931								
CEE	0.0000	N/A								
TCE	21.6545	0.1623								
			Adj. R2	F-value						
			0.4138	20.4731 (0.0000***						
			Beta	p-value						
0.2~0.4 HCE			(40.7938)	0.0004***						
SCE			(36.3379)	0.0034***						
CEE			(34.4426)	0.0040***						
TCE			0.0000	N/A						
					Adj. R2	F-value				
					0.3488	15.8169***				
					Beta	p-value				
0.4~0.6 HCE					(3.5907)	0.3885				
SCE					9.4430	0.1261				
CEE					0.0000	N/A				
TCE					75.6531	0.0000***				
							Adj. R2	F-value		
							0.2493	10.2670 (0.0000**		
							Beta	p-value		
0.6~0.8 HCE							(61.7723)	0.0017***		
SCE							(56.0410)	0.0099***		
CEE							(59.1923)	0.0039***		
TCE							0.0000	N/A		
									Adj. R2	F-value
									0.2890	12.0808
									Beta	p-value
0.8~1.0 HCE									(6.3901)	0.3006
SCE									30.0183	0.0010***
CEE									0.0000	N/A
TCE									45.6573	0.0110***

*Note: *, **, *** denotes significance at the 10%, 5%, and 1% level*

Table 7: Analysis of the relations of *MPerf* and IC Considering Different ln(*MPerf*) in Non-IT Companies

ln(*MPerf*)		0~0.2		0.2~0.4		0.4~0.6		0.6~0.8		0.8~1.0	
		Adj. R²	**F-value**								
		(0.0144)	0.6039 (0.6607)								
		Beta	**p-value**								
	HCE	0.0108	0.9192								
0~0.2	SCE	(2.6363)	0.2605								
	CEE	(0.1953)	0.8816								
	TCE	(15.0869)	0.3474								
				Adj. R²	**F-value**						
				0.2327	9.4939 (0.0000***)						
				Beta	**p-value**						
	HCE			(0.0293)	0.8104						
0.2~0.4	SCE			12.0158	0.0000***						
	CEE			2.8790	0.0579*						
	TCE			59.1333	0.0017***						
						Adj. R²	**F-value**				
						0.2972	12.8391 (0.0000***)				
						Beta	**p-value**				
	HCE					(0.0323)	0.4108				
0.4~0.6	SCE					6.9569	0.0001***				
	CEE					5.9838	0.0000***				
	TCE					29.0948	0.0703*				
								Adj. R²	**F-value**		
								0.2530	10.4814 (0.0000**)		
								Beta	**p-value**		
	HCE							0.0029	0.9338		
0.6~0.8	SCE							9.4736	0.0008***		
	CEE							(0.0512)	0.9876		
	TCE							69.4119	0.0000***		
										Adj. R²	**F-value**
										0.2042	7.9924 (0.0000***)
										Beta	**p-value**
	HCE									0.0519	0.6159
0.8~1.0	SCE									14.6685	0.0001***
	CEE									3.7412	0.1802
	TCE									80.4388	0.0031***

*Note: *, **, *** denotes significance at the 10%, 5%, and 1% level*

SUMMARY AND CONCLUSION

This study, based on intellectual capital and financial perspectives, examines how to apply the concept of intellectual capital to value creation. The research tries to connect intellectual capital deployment with changes in corporate market performance and specially tries to establish a line between the two. After reviewing the relevant literatures, the study concludes human capital (HCE), structural capital (SCE),

social capital (CEE), and R&D expenditures and intellectual property (TCE) are four subcomponents of intellectual capital.

According to predicted hypotheses, the correlation between Tobin Q and IC components are positively related, a similar finding to the most research studies discussing intellectual capital and firms' market performance. To make further comparison with VAIC^{TM}, an explanatory power of the modified VAIC model is increasing from 27% to 34% (*F*-value = 111.8566) and 21% to 31% (*F*-value = 103.9851) respectively in IT- and non-IT companies and the directional signs for HCE(+), SCE(+), CEE(+), RDE(+), and IPE(+) are significantly positive associated with firms' value and profitability while HCE is not significant in non-IT companies. Comparing to the most researchers' findings, the results support that an investment in the development of TCE has had an impact on their competitive advantages and the higher marker performance is consistent with higher investment in TCE that illustrated by both IT companies and non-IT companies. Furthermore, companies invest more in the intellectual capital; they will create higher return of market performance.

Thus, when conducting business valuation in the future, what should be considered is not only the value of IC but also IC allocation as a critical aspect that should not be ignored. Corporations must value and manage their IC, particularly R&D and intellectual property, in order to create long-term competitiveness and create higher value.

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BUSINESS DEMOGRAPHY DYNAMICS IN PORTUGAL: A SEMI-PARAMETRIC SURVIVAL ANALYSIS

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ABSTRACT

We address the post-entry performance of new Portuguese firms by investigating the structural characteristics of the hazard and survival functions, using semi-parametric survival analysis for the total economy and its broad sectors. In order to approach the prevalence of some stylized facts and determinants of new firm survival, a new entrepreneurship database was produced, using the administrative data of Quadros de Pessoal, following the Eurostat/OECD´s internationally comparable business demography methodology. In line with the literature, we find that firms that start small and experience faster post-entry growth, face a higher probability of survival. Firm's current size dimension matters particularly for the Services sector probability of survival. In industries characterized by high entry rates, post-entry survival is more difficult. This happens mostly in Agriculture and the Construction sectors in Portugal. We find a different result from the literature, for the effect of industry growth in survival rates. Firms operating in industries which are growing faster, seem to suffer from a higher probability of failure. The combined effect of turbulence and entry and growth variables help explaining this unexpected effect of industry growth on survival probabilities. By correcting heterogeneity, we obtain stronger magnitudes of the hazard ratios found previously.

INTRODUCTION

This work addresses the post-entry performance of new Portuguese firms by investigating the structural characteristics of the hazard and survival functions, using semi-parametric survival analysis.

It is based on the application of the entrepreneurship definitions and methodology of the Manual on Business Demography Statistics (OECD/Eurostat, 2007) to the *Quadros de Pessoal* dataset (Employment Administrative Records by the Portuguese Ministry of Labour and Social Security), which is the main data source in Portugal for the universe of employer enterprises. Accordingly, the analysis focuses on a specific subsample, consisting on the population of active enterprises only, with at least one paid employee. These are the so-called "employer active enterprises". Entrepreneurship performance indicators were then calculated, following the work of the Entrepreneurship Indicators Programme (OECD, 2008). This allowed the computation of a comprehensive array of entrepreneurship indicators on employer enterprise and survival dynamics in Portugal, over a period of 18 years, disaggregated in dimensions such as sectors, regions and size classes.

Most empirical studies on regional variations in entry and exit rates at the international level are either based on survey data like the Global Entrepreneurship Monitor (Acs et al., 2008), business data, business registration data (Klapper et al., 2008; Klapper et al., 2009) or a mix of the previous (Baterlsman et al., 2005a; Baterlsman et al., 2005b). Moreover, most only take into account the manufacturing sector. There is scarce evidence of studies on entrepreneurial activity that encompass simultaneously all sectors, regions and countries. Portugal is somehow an exception, where extensive research has been done in firm dynamics using mostly *Quadros de Pessoal* (Mata and Portugal, 1994; Mata et al., 1995; Mata, 1993; Mata and Machado, 1996; Baptista et al., 2008; Cabral, 2007; Cabral and Mata, 2003; Baptista and Carias, 2007; Baptista and Mendonça, 2007).

The main contribution of this work is the application of a recent internationally comparable methodology for entrepreneurship and the usage of this analytical arsenal, to provide a multidimensional overview of firm and survival dynamics in Portugal. Over a period of eighteen years, firm and survival desegregation is provided, in dimensions such as sectors, regions and size classes, while guaranteeing international comparability with other datasets, such those recently developed by the Eurostat/OECD´s for the Entrepreneurship Indicators Program (EIP). To our knowledge, there is not yet a study on firm dynamics or survival that encompasses such a long run perspective, with such a level of detailed desegregation across so many dimensions.

Following a brief description of the dataset and core definitions, the next section presents a semi-parametric analysis of survival in Portugal, where estimations for the total economy and broad sectors is provided, as well as estimation results when heterogeneity is taken into account. Finally, the last section concludes.

DATASET AND CORE DEFINITIONS

The *Quadros de Pessoal* (Employment Administrative Records) is an annual survey conducted in Portugal by the Portuguese Ministry of Labour and Social Security (*Gabinete de Estratégia e Planeamento do Ministério do Trabalho e da Segurança Social)*, which provides a rich and comprehensive matched employer-employee dataset. It is of the utmost importance for most research purposes concerning Portuguese labour market analysis, characterisation of labour market qualification structure, as well as for the study of both employer and employee characteristics and linkages, in several areas of scientific research, namely in the entrepreneurship research field. The empirical literature on entrepreneurship refers explicitly, the importance of such a linked employee-employer database.

Indeed, linked firm-level data is fundamental to answer questions about the relationships between entrepreneurial determinants and entrepreneurial performance, at several levels, since it allows to follow individual firms for a particular period of time observing their overall characteristics and related changes: identification, location, main activity, legal identity and year of legal birth, stock capital, turnover and number of establishments and employees. The availability of longitudinal datasets is also extremely relevant for a time-series analysis of entrepreneurship, in terms of the performance and survival of specific cohorts of newly created firms over time.

The entrepreneurship database obtained from the *Quadros de Pessoal*, following the Eurostat/OECD (2007) methodology, consists of an annual average of 215,903 active employer enterprises over the period 1985-2007, with an annual average of 36,803 births and 23,743 deaths.

The survival analysis provided in the following sections, will take place over this new entrepreneurship dataset, where only *real* births and deaths are accounted for. The core measure of births reflects the concept of employer enterprise birth. A birth amounts to the "creation of a combination of production factors with the restriction that no other enterprises are involved in the event" (Eurostat/OECD, 2007). A birth occurs when and enterprise actually starts activity. Births do not include entries into the population which result from break-ups, spit-offs, mergers, restructuring of enterprises or reactivations of units which are dormant within a period of two years. This population thus consists of enterprises that have at least one paid employee in its birth year and also of enterprises that, despite existing before the year in consideration, were below the one employee threshold. An employer enterprise entry is thus counted in the dataset as a birth of an employer enterprise after it recruits its first employee, while complying with the above mentioned requisites. The employer enterprise birth rate is based on a ratio where the numerator follows the above definition for employer enterprise births, while the denominator is the population of active enterprises with one or more employees during the reference period.

An employee enterprise death occurs when an employer enterprise stops having employees. Deaths do not include exits from the population due to mergers, take-overs, break-ups or restructuring of a set of enterprises. Moreover, deaths do not include exits from a sub-population if it results from a change of activity. We have tried to identify those situations in order to remove them from the population, according to Eurostat/OECD´s methodology. Therefore, a death can occur because the enterprise ceases to trade or because it shrinks below the one employee threshold. The manual recommends waiting for two years after the reference period to allow for reactivations, before deaths are calculated.

The churn rate is one type of indicator used for the measurement of turbulence. It is viewed as an economy's ability to expand and adjust its structure of production to the market's changing needs and is given by the sum of birth and death rates (Eurostat/OECD, 2007).

A SEMI-PARAMETRIC SURVIVAL ANALYSIS

Both seminal and most recent literature agrees that size affects the survival rates of new firms (Mata et al., 1995; López-Garcia and Puente, 2006). This generated one of the most striking stylized facts in the literature of industry dynamics (Audretsch and Mahmood, 1994). Concerning the concept of initial firm size (corresponding to the size at the time of a firm´s birth), several studies have reported that the probability of firm exit from the market was decreasing with initial size. Large firms experience higher survival rates than smaller units. According to the literature, there are several reasons behind this. The most prevalent relate to the efficient scale needed to operate efficiently in a market, to the capital intensity production technology, to the firms' capacity to access financial markets and to the "inferior" management ability of small entrepreneurs.

Regarding the first reason, Audretsch and Mahmood (1994) have considered that larger firms are more likely to be closer to the necessary minimum efficient scale to operate efficiently in a market. Frequently, entering small avoids big losses, as firms expecting a good performance usually start up larger. Even if larger firms find themselves to be less efficient than they had expected, they may become smaller before they do exit the market (Mata and Portugal, 2004). Additionally, larger firms diversify more than smaller ones, which also contributes to reduced market risks.

Moreover, the stock of capital accumulated by firms should also be considered. Small firms are less capital intensive, so variable costs represent a larger share of capital costs. Despite the different cost structure of small firms allowing extra flexibility to market fluctuations, it does not prevent them to be the first to exit the market in more severe periods of economic downturn.

Thirdly, internal financial constraints and internal capital markets imperfections are also commonly pointed out as reasons for the smaller size of entrants. Firms enter small not because they choose to, but because new firms underinvest as they are financially constrained, which leads to a negative impact on firms' survival probabilities (López-Garcia and Puente, 2006). In the presence of market instability, all this also accrues to these new smaller firms not being able to sustain their market positions for long periods of time (Mata and Portugal, 2004).

The last reason pointed out previously relates to the entrepreneur management ability. It is often considered that due to intrinsic reasons and incentives, smaller firms employ less able managers, who can more easily abandon the market. In fact, being an entrepreneur has higher opportunity costs when the economy's wages grow, and lower quality managers are more likely to miscalculate their true value label (Mata and Portugal, 2004). Geroski, Mata and Portugal (2003) quoting Lucas (1978), refer that worse management capabilities often translates into bigger costs, for any given firm size, those leading to firms choices towards operating at a smaller scale.

Mata, Portugal and Guimarães (1995) and Geroski, Mata and Portugal (2003) underline the previous observations relating to the importance of initial firm size in explaining the survivor probability of firms. However, they argue that current size is a better predictor of failure than initial size. After controlling for initial size, measuring current size amounts to measuring firm performance. According to them, the fact that a firm has grown is the past, signals that it has been performing well and therefore its probability of exit is low. Moreover, Mata, Portugal and Guimarães´s (1995) findings indicate that after controlling for size differences, past growth matters indeed for survival, suggesting a partial adjustment process of firm size in the post-entry period. Although accepting their arguments López-Garcia and Puente (2006) highlight the fact that current size could be endogenous to the firm dynamics, since firms that are about to abandon the market, grow smaller before exiting and vice-versa.

We shall take a more in-depth view of these and other determinants, chosen for empirical testing of survival, in the following sections. Next, we present an overview of the theoretical foundations of the Cox Proportional Hazard Model.

Modeling with the Cox Proportional Hazard Model

The statistical representation of the relation between the survival time of a firm and specific variables is known as the hazard rate model of the duration of the life of a firm. According to the model a given firm j faces a hazard rate (h_j) that is a function of a baseline hazard rate (h_0), which all firms face, transformed by a set of explanatory variables (X) through a vector of parameters (β). The hazard rate model can be written in the form $h_j(t) = f(h_0(t), \phi(X, \beta))$. Under this model, two firms with the same birth date will face a different hazard function if, and only if, their other characteristics are different. By definition, the model seems a natural solution to understand the temporal pattern of survival and to identify the covariates that could be related significantly to survival. Additionally, it is also a good solution for working with longitudinal datasets, characterized by right censored data and other types of selection issues.

An empirical application of the model implies the specification of a functional form for the hazard function. One of the most common options is the proportional hazard model: $h_j(t) = h_0(t)\phi(X, \beta)$. The name derives from the fact that the hazard that a firm faces is proportional to the baseline hazard. In other words, the shape of the hazard function is the same for all individuals, and variations in the explanatory variables will translate into parallel displacements of this function, thereby affecting only the scale of the hazard function and not its shape. Given the fact that the hazard is a conditional probability and, therefore, must be positive, a convenient functional form for $\phi(X, Y)$ is exponential. Hence the hazard a subject j faces is written in the following form: $h_j(t) = h_0(t)e^{(X, \beta)}$. Note that this particular functional form offers the advantage of a very convenient interpretation of the estimated coefficients, since $\beta = \dfrac{\partial \ln \phi(X, \beta)}{\partial X}$. This means that the coefficient of one explanatory variable is the constant proportional effect of a unit increase of this variable on the conditional probability of exiting.

The assumption made for the functional form of $\phi(X, Y)$ is widely accepted, the same does not happening for the functional form of the baseline hazard, since different parametric specifications of the hazard function display different duration dependence behaviors. Positive (negative) duration dependence implies that the likelihood of failure at time t, conditional on the duration up to t, is increasing (decreasing) in t. *A priori* it is not obvious which distribution is most appropriate even when economic theory provides some clues concerning the way the baseline hazard varies over time. In case of doubt, one line of action to consider is to make no assumption about the functional form of the baseline hazard. Such

a method was first suggested by Cox (1972) and the resulting models are called semi-parametric. Cox (1972) also suggested that the proportional hazard model could be easily extended to account for time varying covariates. This is what we will approach next.

The model incorporates the main features of discrete duration models, as described by Lancaster (1990), where the logarithm of the probability that a firm exits at time t given that it survived in $t-1$ is explained by a series of explanatory covariates X_{t-1} plus a set of parameters identifying the baseline hazard function, according to the following specification:

$$\log h(t \mid x_t, x_0) = \lambda_t + \beta x_t + \gamma x_0, \ for \ t = 1,...,k \tag{1}$$

The use of the partial likelihood function does not require that $h_o(t)$ must be specified, which allows the estimation of β and γ and avoids the risk of misspecifying the baseline hazard function. The model described previously, considers two types of heterogeneities that may cause exit, and that need to be considered: current heterogeneities between firms, that is heterogeneities based on differences that exist in period t, and heterogeneities that occur from differences that existed in the moment when firms were created (t=0). Heterogeneities due to differences in founding conditions include those conditions that are cohort specific, i.e., which take a common value for all firms in the same cohort, such as macroeconomic or industry-wide factors and those which are firm-specific (Baptista and Mendonça, 2007).

In our case (e.g. as in López-Garcia and Puente, 2006) the survival is a continuous phenomenon, but the available information is reported annually in the month of October, transforming time in a discrete variable. To circumvent this, we have grouped the data, by creating 11 interval specific dummy variables (one for each spell year at risk) and will be using a discrete hazard model. The most common discrete time representation of an underlying continuous time Cox proportional hazard model is the complementary log-log (cloglog model), which is what will be used in the following estimations. The major advantage of using the hazard model is that each firm contributes several times to the likelihood function, each time it is at risk.

Explanatory Variables

We have considered in the chosen estimation framework, seven explanatory variables (Table 1), beyond sector and year dummies, which will be briefly described next.

The first explanatory variable is the firm start-up size. It is measured by the logarithm of the number of employees at the firm's year of birth. A negative influence on the hazard rate is expected, i.e., larger start-ups should face a reduced risk of survival. The second variable relates to the number of employees reported at the year of measurement. Besides these two firm characteristics, the specific conditions of the industry are likely to affect firm survival (López-Garcia and Puente, 2006). Among the measures of firm dynamics is important to control for industry entry and growth rate and its degree of competition. Thus, the third variable has to do with the firm´s entry rate. New firms are more likely to live longer if they enter expanding industries or industries with low entry activity (Mata, Portugal and Guimarães, 1995).

Another important industry characteristic is the degree of competition, which is measured through the Herfindhal-Hirschman Index (HHI). Highly concentrated industries may allow suboptimal scale of new firms and therefore give some room for survival after entry. On the other hand, according to the industrial organization literature, highly concentrated industries might as well represent a higher potential for incumbent's collusion and therefore a more aggressive behavior towards new entries. (Mata and Portugal, 1994, López-Garcia and Puente, 2006).

By definition, at start-up there is no post-entry growth. The effect of growth can only be perceived as firms age and current size shifts from initial size. At any time after start-up, current size can be viewed as initial size plus the change in size which occurred. As size is measured in logs, this change is the cumulative growth rate since start-up. Therefore after controlling for the effect of start-up size, the coefficients associated with the current size gives up an estimate of the effect of the post-entry growth (Mata, Portugal and Guimarães, 1995).

Turbulence is a natural consequence of the chase for new business opportunities as resources are rapidly reallocated from unsuccessful to successful enterprises and to growing areas of business, therefore being considered a natural source of dynamism. These firm dynamics, that is, the pace at which firms are starting up and closing down is a commonly used measure of the level of entrepreneurial activity in an economy. The sum of birth and death rates (Eurostat/OECD, 2007) is the chosen indicator for the measurement of turbulence.

There may well be differences in survival rates between industries over and above those captured by the industry-specific variables mentioned above. For this reason industry dummy variables are also included in the analysis. Finally, since the overall state of the economy has long been indicated as an important force driving firms out of business, we include year dummies, to proxy the moment of the cycle and, therefore, control for the macroeconomic environment. (López-Garcia and Puente, 2006; Mata, Portugal and Guimarães, 1995).

Table 1 – Explanatory Variables Considered in the Model

Variable	Definition	Measurement
Start-up Size	Number of employees at the birth year of the firm.	Logarithm of the number of employees.
Current Size	Number of employees at the current year.	Logarithm of the number of employees.
Industry Entry Rate	Industry entry rate calculated for sectors defined at a 2-digit CAE level.	Logarithm of the industry entry rate, defined as the number of entrants divided by the total number of firms in industry.
Concentration (HHI)	Herfindhal-Hirschman Index (HHI) calculated for industries at a 2-digit CAE level.	Logarithm of the HHI.
Growth	Logarithmic difference of industry employment in two consecutive periods.	Logarithm of the number of employees at year t minus the logarithm of the number of employees at year $t-1$.
Entry Rate X Growth	Interaction variable, defined as the product of entry and growth.	Product of logarithms.
Turbulence	Sum of entry and exit rates calculated for sectors defined at a 2-digit CAE level.	Sum of logarithms of the industry entry rate with the industry exit rate.
Sector Dummies	Dummies for 4 broad sectors: Agriculture, Construction, Manufacturing and Services.	---
Year Dummies	Dummies for each current year.	---

Source: Own calculations based on Quadros de Pessoal, GEP, MTSS.
*Note: * The literature has shown that there is a non linear effect of the start-up size on survival, which is normally accounted for via a log transformation. The specification is reasonable given that the value of the likelihood increases.*

Estimation Results for the Total Economy

Table 2 shows the cloglog regression results for the total economy, using different specifications of the model. In the second column (Model 1), the model estimates the proportional hazard function for firm and industry start-up conditions. The idea is to avoid the introduction of possible endogenous effects with the presence of variables such as the current size or the industry´s annual growth. These variables are

included in the models presented in columns 3 and 4, respectively. All the models control for broad industry dummies and for macroeconomic effects through year dummies. The estimation values of the industry control variables are presented in Table 2. The year dummies values have been introduced but the values are not shown as usually no clear pattern can be discernible from the estimated coefficients (Mata, Portugal and Guimarães, 1995).

The values presented below are the hazard ratios, that is, the ratio of hazard rate when the variable increases by the one unit. A hazard ratio over one implies that an increase in the given explanatory variable increases the probability of exit and, correspondingly, a hazard ratio below one means that an increase in the variable decreases the hazard.

As argued in the literature and mentioned previously, the start-up size of a firm improves the changes of survival. Smaller firms are the most likely to exit, probably because they are the least efficient. The coefficient of the start-up size in the first estimated model is illustrative. However, when we observe the second model, the effect of a firms' current size seems to be predominant. When introducing the sum of the start-up and the current size (by denoting S_0 and S_t the initial and current size, respectively, and by α and β the correspondent coefficients, the effect of size is expressed by $\alpha S_0 + \beta S_t$), it becomes evident that the current size improves the chances of survival and that the initial size does not. This result is consistent with the results of Mata, Portugal and Guimarães (1995). According to the authors, firms that have started smaller and have experienced faster post-entry growth, face a higher probability of survival. Indeed, our overall effect is line with the previous authors' results.

The results for the three first models also indicate that in industries characterized by high entry rates, at the moment of birth, post-entry survival is more difficult. Firms that experience more competition from entrants, have a higher probability of failure. A higher entry rate combined with fast growth rates for any given industry generates, in general, a shorter duration of firms (Mata, Portugal and Guimarães, 1995 and Gort and Klepper, 1982). This somehow expected piece of evidence can be also drawn from our results. It might seem easier to enter the market in earlier stages of the product life-cycle, when markets are expanding, but it becomes particularly difficult to survive.

So far, all our results have stressed the literature's conclusions. However, the same does not happen for the effect of industry growth (Models 3 and 4). What we would expect is that firms operating in industries that are growing faster, would suffer from a smaller probability of failure (since they can penetrate the market without harming the competitors), but our results show exactly the opposite. To help explaining this result, it should be pointed out that industries in the early stages of their life-cycles usually register both high rates of entry and exit (Agarwal and Gort, 1996 and Baptista and Karaoz, 2007). In general, industries with higher than average entry rates also exhibit higher than average exit rates (Cabral, 2007), due to birth and death rates being highly correlated across industries, corroborating the idea that "entry barriers are exit barriers" (Mata et al., 1995). The combined effect of entry and growth could explain this unexpected effect of industry growth on survival probabilities. Industries experiencing higher growth rates are also more turbulent, registering high rates of entry and also of exit (the "revolving door" at work), thus decreasing the likelihood of survival.

Table 2 - Estimation Results for Total Economy

Variable	Model (1)	Model (2)	Model (3)	Model (4)
Log of Start-up Size	0.692 *** (0.002)	1.349 *** (0.007)	1.342 *** (0.007)	1.339 *** (0.007)
Log of Current Size	-----	0.460 *** (0.002)	0.458 *** (0.002)	0.588*** (0.002)
Industry (2 digit) Start–up entry rate	1.353 *** (0.013)	1.323 *** (0.012)	1.335 *** (0.019)	1.42*** (0.018)
Start-up Industry HHI (2 digit)	0.986 *** (0.001)	0.987 *** (0.001)	0.985 *** (0.001)	0.881*** (0.001)
Industry Growth (log)	-----	-----	1.127 *** (0.018)	1.326*** (0.018)
Growth x Entry rate	-----	-----	1.063 *** (0.017)	1.966** (0.017)
Turbulence	-----	-----	-----	4.195 *** (0.193)
Sector Dummies Agriculture	(a)	(a)	(a)	(a)
Construction	1.130 *** (0.012)	1.223 *** (0.013)	1.365 *** (0.020)3	1.405 *** (0.021)
Manufacturing	1.123 *** (0.013)	1.220 *** (0.014)	1.391 *** (0.021)	1.567 *** (0.024)
Services	0.951 *** (0.010)	0.983* (0.010)	1.037 *** (0.014)4	1.115*** (0.016)5
Year Dummies	Yes	Yes	Yes	Yes
Number of firms	447772	447772	447772	447772
LR X2	42744.42 ***	68538.34 ***	45018.35 ***	46506.55 ***
Log likelihood	-655716.05	-642819.08	-424079.05	-423334.96

Source: Own calculations based on *Quadros de Pessoal*, GEP, MTSS.
Note: (a) refers to the reference sector.
The year dummies "yes" means that they have been included in the estimation.
Standard deviation is shown in brackets and *. **, *** means, respectively, 10, 5 and 1% level of significance.

Table 3 presents the pair wise correlation for the explanatory variables. The correlation between turbulence (sum of the entry and exit rates) and growth rate is indeed positive (58%) and statistically significant at 5% confidence level, corroborating our previous argument.

Table 3 – Correlation Matrix

	Log of	Log of	Industry	Start-up	Log of	Growth	Turbulence
Log of Start-up Size	1						
Log of Current Size	0.8253*	1					
Industry (2digit) start–up entry rate	0.0570*	0.1036*	1				
Start-up Industry HHI (2 digit)	0.1122*	0.1417*	0.6323*	1			
Industry Growth (log)	-0.0523*	-0.0409*	0.3552*	0.2619*	1		
Growth x Entry rate	---	---	0.0044*	---	-0.0383*	1	
Turbulence	-0.0268*	-0.0571*	0.5349*	0.3057*	0.5797*	---	1

Source: Own calculations based on Quadros de Pessoal, GEP, MTSS.
*Note: * refers to the correlations coefficients with 5% statistical significance.*

Estimation Results for Broad Sectors

We will now extend the previous analysis to the economy's broad sectors. Thus, for Agriculture, Construction, Manufacturing and Services the probability of firms exit is now computed separately. The results for the most complete model specified (Model 4) are presented below in Table 4. Since the number of firms in each broad sector is quite diverse, ranging from 23,686 firms in Agriculture to 295,887 firms in Services, the conclusions are not straightforward, when we take into consideration the absolute values of the coefficients. Therefore, this analysis must rely more on the overall results than on the absolute values of the hazard coefficients.

As for the total economy's, the firm's current size dimension is extremely important to determine the probability of survival. This is particular evident in the Services sector. Another important finding is that the larger the industry start-up entry rate, the higher the probability of failure for all sectors, but especially for the Agriculture and the Construction sectors. On the other hand, there are considerable disparities in the HHI concentration measure. If for manufacturing higher concentration rates indicate a higher probability of failure, the same is not observed in the Services or Construction, which seem to be driving the overall concentration effect in the economy. Services, but particularly Manufacturing's turbulence appear to be influencing irrevocably the total turbulence in the economy. Industry growth, by sector, continues to show unexpected effects *vis-à-vis* the international literature, even if the interaction between high industry growth rates and entry rates at the start-up moment, seem to explain the negative impact on firms survival.

Table 4 - Estimation Results for Broad Sectors

Variable	Model (4) Total Economy	Agriculture	Construction	Manufacturing	Services
Log of Start-up Size	1.339 *** (0.007)	1.165 *** (0.032)	1.271 *** (0.015)	1.381 *** (0.018)	1.347 *** (0.010)
Log of Current Size	0.588 *** (0.002)	0.514 *** (0.015)	0.516 *** (0.006)	0.5021 *** (0.006)	0.426 *** (0.003)
Industry (2digit) Start–up entry rate	1.42 *** (0.018)	1.651 *** (0.134)	1.646 *** (0.104)	1.268 *** (0.053)	1.341*** (0.026)
Start-up Industry HHI (2 digit)	0.881 *** (0.001)	1.016 (0.011)	0.966 *** (0.005)	1.013 *** (0.005)	0.988 *** (0.002)
Industry Growth (log)	1.326 *** (0.018)	1.154 *** (0.039)	1.077 *** (0.018)	1.041 ** (0.018)	1.087 *** (0.011)
Growth x Entry rate	1.966 *** (0.017)	1.015 *** (0.089)	1.045 *** (0.015)	1.057 *** (0.054)	1.074 *** (0.010)
Turbulence	4.195 *** (0.193)	1.005* (0.168)	(b)	87.963 *** (10.360)	8.180 *** (0.542)
Sector Dummies Agriculture	(a)	-----	-----	-----	-----
Construction	1.405 *** (0.021)	-----	-----	-----	-----
Manufacturing	1.567 *** (0.024)	-----	-----	-----	-----
Services	1.115 *** (0.016)	-----	-----	-----	-----
Year Dummies	Yes	Yes	Yes	Yes	Yes
Number of firms	447772	23686	72146	56047	295887
LR X2 (24)	46506.55 ***	1431.96 ***	6552.03 ***	7133.35 ***	30791.63 ***
Log likelihood	-423334.96	-14977.837	-61870.962	-54896.679	-268871.89

Source: Own calculations based on *Quadros de Pessoal*, GEP, MTSS.
Note: (a) refers to the reference sector and (b) to a drop do to collinearity

Control of Heterogeneity

As most of the research in the field, our analysis also relies on observed firm characteristics, which does not account for possible firm-specific unobserved characteristics, such as the quality of the project or the human capital of managers. According to Dolton and van der Klaauw (1995), the effects of unobserved individual heterogeneity are not so important when the baseline hazard is non-parametric, as in our case. However, controlling for unobserved heterogeneity results in more consistent and unbiased estimates of the covariates' coefficients.

An alternative specification of the cloglog model is shown in Table 8, so as to evaluate the importance of controlling the heterogeneity among firms. We used the most straightforward and common method (such as the one used in López-Garcia and Puente, 2006) to incorporate individual unobserved heterogeneity. This method consists of the inclusion into the specification of the proportional hazard model described above, of a random variable, following a Gamma distribution with unit mean (so that the baseline hazard can be interpreted again as the hazard of the mean individual if explanatory variables are re-scaled conveniently) and some positive variance δ^2. The hazard function is now represented as $h_j(t) = h_0(t)e^{(X,\beta)}v_j$, where vj is the value of the random variable for the individual j.

Thus, Table 8 shows the hazard ratios of the most complete model (Model 4), while controlling for heterogeneity. We can infer that this specification is preferable to the previous ones. The p-value associated to the likelihood test of Gamma variation is zero, indicating statistically significant heterogeneity. This fact does not change the sign of the impact of the explanatory variables. It only changes the magnitude of the hazard ratios. It is now possible to observe higher magnitude ratios.

FINAL REMARKS

In line with the literature, we find that firms that start small and experience faster post-entry growth, face a higher probability of survival. Firm's current size dimension is also extremely important to determine the probability of survival, particularly in the Services sector. But in industries characterized by high entry rates at the moment of a firm's birth, post-entry survival is more difficult. This happens mostly in Agriculture and the Construction sectors in Portugal. A higher entry rate combined with fast growth rates for any given industry also generates a shorter duration of firms. It might seem easier to enter the market in earlier stages of the product life-cycle, when markets are expanding, but it becomes particularly difficult to survive. Firms that experience more competition from entrants, also face higher probabilities of failure. For manufacturing, higher concentration rates indicate a higher probability of failure. The same is not observed in the Services or Construction, which seem to be driving the overall concentration effect in the economy.

However, we find a different result from the literature, for the effect of industry growth in survival rates. Firms operating in industries which are growing faster, seem to suffer from a higher probability of failure. The combined effect of entry and growth can also help explaining this unexpected effect of industry growth on survival probabilities. This has to do with turbulence and the high rates of entry and exit verified in Portugal thorough this period. Industry growth, by sector, reinforces this view, and the interaction between high industry growth rates and entry rates at the start-up moment, seems to unfold the reasons for the negative impact on firms´ survival. Heterogeneity is also found in the main model. By correcting with a different specification model, we obtain stronger magnitudes of the hazard ratios found previously.

Table 8 - Estimation results with Heterogeneity Correction

Variable	Model 4 Heterogeneity correction
Log of Start-up Size	1.349 *** (0.008)
Log of Current Size	0.429 *** (0.003)
Industry (2digit) Start–up entry rate	1.401 *** (0.026)
Start-up Industry HHI (2 digit)	0.985 *** (0.002)
Industry Growth (log)	1.023 *** (0.008)
Growth x Entry rate	1.043 *** (0.007)
Turbulence	6.130*** (0.276)
Sector Dummies	
Agriculture	(a)
Construction	1.551 *** (0.028)
Manufacturing	1.740 *** (0.033)
Services	1.168 *** (0.020)
Year Dummies	Yes
Number of firms	447772
Log likelihood	-382627.76
LR test of Gamma variance. $\overline{\chi}^2$ (1)	**38478.9 *****

Source: Own calculations based on *Quadros de Pessoal*, GEP, MTSS.

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PATTERNS OF LOCALIZATION STRATEGIES OF KOREAN FOREIGN DIRECT INVESTMENT AND THEIR IMPACTS ON FIRMS' PERFORMANCE

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This research analyzes the patterns and performance of outward foreign direct investment (FDI) by Korean firms. It analyzes the localization strategies of Korean multinational corporations (MNCs) by comparing different host country groups. The discussion on the performance of subsidiaries focuses on manufacturing industries. The paper has two main objectives. The first is to analyze and understand the recent characteristics and patterns of localization of Korean FDI. The second is to examine the relationship between Korean FDI and its performance in major host countries using localization patterns as moderating variables. Specifically, it attempts to empirically analyze the operational performance of manufacturing subsidiaries. The results will provide insights on the characteristics of Korean outward FDI, as well as shed some light on the FDI strategies of MNCs. Both China and US are the two major host countries. There may be different motivations and characteristics, depending on the type of host country: China and US. The study will first compare localization patterns and then investigate which type of localization would lead to higher performance in each country. The findings would contribute to the development of FDI theories.

INTANGIBLE ASSET EVALUATION MODELS BETWEEN REALITY AND MYTH

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ABSTRACT

Nowadays, we may observe that the key word which best describe the economic reality is the continuous change. So many countries passes from traditional economy based on tangible resources at knowledge based economy, an economy based on intangible resources, on innovation, globalization, lifelong learning, competitiveness, economic dynamism. The questions we tried to ask are: Is intangible assets evaluation a myth? Can any of the existent intangible assets evaluation model generate comparison between knowledge-based organizations? Which evaluation model is the best for distinguishing the future benefit created in knowledge based organizations? How necessary is a global evaluation model to reveal the fair value of an organization? What can we do that traditional financial statements do not become mostly useless for their end users?

JEl: M21; M41

KEYWORDS: Intangible assets, future benefit, evaluation, financial statements

INTRODUCTION

The starting point of many researches on intangible assets or intellectual capital definition is the need of better explains the total value or the market value of a company (Table no. 1). The situation met in many listed companies, whose book value was only a small fraction of their market value. The difference between market value and book value of an organization is due to the increasing importance of intellectual capital or intangible assets, as elements generating future benefits (Sveiby 1997, Edvinsson and Malone 1997).

Table no. 1: Total assets of organization

Total organization assets	Cash Money	**Current assets**	**Tangible assets**
	Account receivables		
	Stocks		
	Estate, equipment	**Non-current assets**	**Intangible assets**
	Internal structure (patents, concepts, models, management systems and organizational culture)		
	External structure (commercial brands, image and customer relations, suppliers)		
	Personnel skills (employees' knowledge and skills)		

Source: Sveiby, K.-E. 1997. The New Organizational Wealth: Managing and Measuring Knowledge- Based Assets. San Fransisco: Berrett-Koehler Publishers Inc, p. 11

IS INTANGIBLE ASSETS EVALUATION A MYTH OR IS REALITY?

The main reason why intangible asset assessment model is necessary is that measuring these goods is very difficult and requires high costs, and the results are not specific. The main problem regarding measuring systems is impossibility of measuring social phenomena with scientific accuracy.

Indicators that are used to assess intangible assets are only useful of they can provide essential relevant information. Unfortunately, much of previous research rely upon identifying easily measurable elements and collecting and accounting for data. Many times the assessment was irrelevant and useless for those who required information. We must identify only relevant elements to business and strategy to avoid this trap. We often believe intangible assets are difficult, if not impossible to measure. We will prove that this is wrong. It is, probably, easier than people think, and many methods of measurement are available.

Some specialists believe the solution to this problem is a unique performance indicator, a matrix that provides social future benefit and encompasses results, which are not included in traditional accounting. The economic value of the enterprise represents the total value of it, social value and traditional value. Organization value refers to performance as far as management and the activity of an enterprise are concerned. To shareholders, financial value is most important. Nevertheless, leaders must not simply consider their wealth opportunities, but the other parties involved (stakeholders).

In the studies conducted by OECD, measurable investment (research and development, program-products, advertising, training) is included under non-material investment, while other investments that can be difficult to assess, and so are omitted parts of self-financing.

Bernard Marr stated in his paper „Intangible Asset Measurement" the fact that one cannot run a successful business without the information required to make strategic decisions. It would be as if one were driving blindfolded: they could not see the way or the speed of the car. The problem occurs when we are dealing with intangible assets. Organizations have no essential performance indicators for these assets, such as information regarding brand image and reputation, intellectual property or customer relations. All these can be of essence to future and current efficiency of the company.

There are many methods provided for intangible asset evaluation. The most widely known are included in the following classes:

1.The classification of Luthy (1998) and Williams (2000) (Table no. 2):

a. Direct methods of estimating intellectual capital (Direct Intellectual Capital Methods – DIC)
b. Estimation methods based on stock market capitalization (Market Capitalization Methods - MCM)
c. Estimation methods based on asset efficiency (Return on Assets Methods - ROA)
d. Estimation methods based on scorecard (Scorecard Methods - SC)

Roos G, Pike S, Fernström L mention a fifth method of measurement - Proper Measurement Systems – MS. They take everything that is valuable in the company and decompose it into assessed attributes. We can use real data to generate proper calculation of value because the attributes are integrated in evaluation systems.

Table 2: Intangible Assets Evaluation Methods

	Intangible asset evaluation methods		
Level of organization (general)		Market-to-book value	Estimation methods based on market capitalization
		Tobin's q	
		Invisible balance	
		IAMV	
		FiMAIM	
		VAIC	Estimation methods based on efficiency and asset recovery
		EVA	
		Intangible asset value	
		Intellectual capital revenues	
Components (individually analyzed)	IC Index		Estimation methods based on scorecard
	Business IQ		
	National intellectual capital		
	IC Assessment		
	Magic		
	Scorecard		
	Meritum guidebooks		
	Holistic Accounts		
	Skandia Navigator		
	Intangible asset monitor		
	Danish guidelines		
	Added value index		
	Value chain score board		
	IC- dVAL		
	Knowledge auditing		
		Citation- Weighted Patents	Direct methods of estimating intellectual capital
		HRCA 2	
		The Value Explorer	
		HTCA 1	
		TVC	
		Intangible asset assessment	
		AFTF	
		Broker Technology	
		HR statement	
		Overall assessment method	
	Non-financial	**Financial**	

Source: Sveiby, Methods for Measuring Intangible Assets - http://www.sveiby.com/Portals/0/articles/IntangibleMethods.htm

2. According to the purpose of evaluation (control, evaluation/measurement, decision-making and justification,), the following categories occur:

a**.** Monitor Performance (for control). The best models are assignments similar to Baldrige and KPIs.

b. Acquire / Sell Business (for evaluation). The best models are those encountered in industry (e.g.: $ per click, $ per client, $ per brand evaluation).

c**.** Report to Stakeholders (for explanations, PR). The most common methods in this category are IC, Eva, Triple-bottom line.

d. Guide Investment (for decision-making). None of the evaluation models can have a greater importance than traditional approaches relying on Discounted Cash Flow.

e. Uncover Hidden Value (for learning). The models that are often used are Balanced Scorecard methods and direct methods for estimation of intellectual capital.

3. Professor Christophe Bouteiller classifies the methods for assessing intangible assets as: global methods and individual methods (see Table 3).

Table 3: Professor Christophe Bouteiller Intangible Assets Evaluation Methods

Evaluation methods for intangible assets	**GLOBAL METHODS**
	• Market value
	• Tobin's Q
	• Calculated intangible value
	• Total generated value
	• Normalized earnings
	INDIVIDUAL METHODS
	• Cost-based methods
	• Market-based methods
	• Income-based methods
	• Currency-based methods (Option-pricing methods)

Source - Christophe Bouteiller - The Evaluation of Intangibles: Advocating for an Option Based Approach, www.departments.bucknell.edu/management/apfa/Hamburg%20Papers/ Bouteiller.pdf

In order to generate an evaluation for intangible assets in real time that could be transparent, global, coherent and useful, a working group has been established in 2005 (The Value Measurement Reporting Collaborative – VMRC).

The members of VMRC are the following:
- American Institute of Certified Public Accountants (AICPA)
- Canadian Institute of Chartered Accountants (CICA)
- CPA Australia
- Institut der Wirtschaftprüfer e.V. (IDW)
- South African Institute of Chartered Accountants (SAICA)

VMRC identifies about 80 assessment models for intangibles. These are some of the most important methods:
   a) methods based on stock market capitalization (9 methods)
- Examples: Future Value Management – Burgmann, Accenture; Knowledge Capital – Lev; Market Value of Intangibles – Sveiby etc

   b) methods specific to intangible asset evaluation (16 methods)
- Examples: Calculated Intangible Value – Andriessen; Inclusive Value Metodology – Pherson; Intangible Assets Monitor – Sveiby etc.

   c) methods specific for evaluating customer relations, personnel, structural capital and other types of capitals (26 methods)
- Examples: Business IQ – Sandvik, Celemi Monitor – Celemi, Customer Value Management – SMS etc.

   d) organization assessment indicators (22 methods)
- Examples: Balanced Scoreboard – Kaplan, Norton; Dolphin Navigator – IC Community; 21st Century Annual Report – ICAEW etc.

   e) methods to evaluate future flows and organization performance (5 methods)
- Examples: Value Creation Index – E&Y; Real Options – PL-X Systems; Total Value Creation – Anderson, McLean etc.

The lack of measurement standards in this field, the lack of quality performance factors will affect portfolio administrators. The lack of unitarily processed information makes performance comparison difficult, or even impossible. The current interest in new measurement indicators is advantageous for managers, who can use a wide range of performance management instruments. The lack of benchmarking in the respective domain regarding quality performance is a drawback as far as the variety of measurement systems is concerned.

CONCLUSIONS

When evaluating intangible assets in knowledge societies, we must take into account the following aspects:
- the difficulty to identify intangibles makes it difficult to identify the result that generates added value to organizations;
- the lack of an active market with similar assets;
- the risks generated by intangibles can be seen as different from the global risk of an organization;
- high risk when it comes to intangibles that undergo many changes in time;
- indicators must allow that all information be compared among knowledge societies;
- the relation between evaluation method and the phenomenon that is assessed must be taken into consideration;
- the connection between organization strategy and intangible assets to be evaluated must be found (if evaluation helps to develop new strategies);
- the evaluation method must be auditable (by an independent auditor);
- the evaluation method that has been chosen must provide necessary information to stakeholders.

Analyzing evaluation methods for intangible assets, we may conclude that the main challenges in designing an evaluation model are the following:
- ways of finding methods to collect proper information for various non-material assets;
- establishing real objective values for intangible assets;
- the financial effort required to implement the respective model;
- designing a model that makes comparison among different companies possible;
- limited access to financial information;
- the lack of proper information when it comes to create added value by means of intangible assets, which leads to the lack of interest in evaluating them from the perspective of management;

Important work is necessary when building concepts and evaluation methods in order to generate improvement regarding accounting information. The first step to re-examine traditional approach of bookkeeping and accounting principles and practice is to understand the role of information within companies. Internally generated intangible assets internally are difficult to assess, to amortize/depreciate. This means that an (adjusted) evaluation model is highly necessary, according to the features of financial information. Such a model is useful as a framework for standardization and further research.

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*** The Value Measurement Reporting Collaborative – VMRC, available at: http://www.valuemeasurement.net/

A COMPARISON OF DEFINED BENEFIT AND OPTIONAL RETIREMENT PLAN RATES OF RETURN IN HIGHER EDUCATION

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EXTENDED ABSTRACT

Investors have endured a tumultuous twelve months as equity values declined in the wake of the global economic crises. The Dow Jones Industrial Average, for example, fell from nearly 13,000 in January 2008 to less than 6,500 in March 2009. With more than half of Americans now owning stocks, many of which are held in retirement accounts, millions of people have become increasingly worried about the future value of their savings. While state employees have not been exempted from this turmoil, they face a different set of uncertainties compared to most private workers because they must choose between defined benefit (DB) or defined contribution (DC) plans, commonly referred to as optional retirement plans (ORPs). Whereas participants enrolled in a DB plan receive a fixed payment upon retirement based on earnings and years of service, those enrolled in an ORP receive retirement benefits based on their total account balance.

This paper analyzes individual retirement benefits offered at public universities across the United States to provide a framework for deciding whether to participate in a state's DB plan or its ORP. Specifically, the paper provides breakeven annual rates of return between DB and ORP plans for 44 states (Alabama, Hawaii, California, and South Dakota have no DC plans. Both Alaska and Maine discontinued their DB plans after 1996). Employees of each state faced with choosing between participating in these two. Retirement systems can view the breakeven rate as a target rate of return. For instance, if workers believe their own investment portfolio can at least match this rate of return, they may be better off by participating in the state's ORP. Our results show that the mean breakeven rate of return (across all states) is 5.99 percent, with a standard deviation of 1.24 percent. Given that the lowest 30 year rate of return for the market (from 1926 to 2000) exceeds 8 percent, new employees of most states should be able to meet or exceed their breakeven rates. See Ibbotson Stocks, Bonds, Bills, and Inflation http://www.efficientfrontier.com/BOOK/chapter2.htm

A worst case scenario for participants in a DC plan, in which the funds are fully invested in equities, is a market downturn near the time of retirement. Such a downturn can be particularly harmful late in one's career because the individual may not have enough time to recoup losses prior to retirement. Furthermore, most faculty earn higher salaries near the end of their careers, thus providing what appears to be a distinct advantage to DB plan participants. For these reasons, we examined an alternative breakeven rate of return which accounts for such a situation.   In this scenario, we assumed a representative faculty member would earn 20 percent more than his/her starting salary for the last three years of employment, thus providing a distinct advantage to participating in the DB plan. Under this alternative scenario, the higher breakeven rate is still less than the 30 year geometric mean returns for both the Dow Jones Industrial Average (8.28 percent) and the S&P 500 (7.76 percent).

Our main calculations are done on a state-level basis, assume that participants will work for 30 years, and that participants' ending average annual salary will be $105,000. This ending average salary is the median level for the combined faculty category for new hire assistant professors for all public colleges accredited by the AACSB-International (2008-2009). To calculate expected benefits from the defined

benefit plans, each state's published formula is used.   To calculate contributions into the defined contribution plan, each state's published contribution percentages (for the employer and employee) are used. All of the retirement plan information was taken from each state's website. The analysis suggests that, in general, employees who choose to participate in defined contribution plans (with a 100% equity investment allocation) will earn higher returns than those who join defined benefit plans.

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THE USAGE OF ANTI-DUMPING BY US AGAINST CHINESE IMPORTS: WOODEN BEDROOM FURNITURE CASE STUDY

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ABSTRACT

The author argues that the usage of anti-dumping (AD) as a domestic market protection measure by the US cannot help the affected sector to sustain the global trade environment. The arguments were made through analysis of the US anti-dumping case against Chinese wooden bedroom furniture in conjunction with data analyses including US furniture trade, employment of furniture manufacturing sector, consumer furniture expenditure, and consumer price index from 2000 to 2008. The results demonstrated that from the beginning of this AD case to the present, the US furniture import has seen a steady increase except 2008 (housing bubble) while domestic employment in furniture manufacturing has decreased. The consumer price index increased in the bedroom furniture category in 2004 (+2.5%), 2005 (+3.93%) and 2006 (+1.95%) in comparison to a decreasing trend in the years before and after. In conclusion, the anti-dumping measure has not helped the US domestic furniture manufacturing industry, and it may have shifted some US furniture import away from China to other countries such as Vietnam. The AD margin is calculated by using a 'surrogate' country's cost and price such as India due to China's non-market status, and the method tends to favor the US petitioners.

SEARCHING FOR TAX-EVASIVE TRANSFER PRICING IN MULTINATIONAL ENTERPRISES

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ABSTRACT

In this paper we analyze possible source of tax evasion in the multinational entity (hereinafter "MNE"). We show that the tax obligation of the whole MNE depends on the ownership structure of companies, which form MNE and that the structure could be described by matrix form. Therefore the basic tax optimization tasks of MNE via transfer pricing can be understood as linear programming problems. In addition we propose a way to identify possible tax evasion realized via transfer pricing in MNE.

JEL: D21; D29; G39

KEYWORDS: Transfer Prices, Tax Evasion, Multinational Enterprises, Mathematical Taxation, Linear Programming

INTRODUCTION

Literature on transfer pricing was quite rare for a long time – until the 7th decade of the 20th century. One for all we shall mention (Schmallenbach, 1908/1909) and (Hirshleifer, 1956), which created the theoretical base for further research. With the grow of importance of multinational enterprises (MNEs) and economical globalization the significance of transfer pricing issues grows. The obstacle to better understanding of transfer pricing is that transfer pricing is considered to be confidential issue at most MNEs. Thus empirical studies are rare, though number of theoretically aimed articles in the recent past (nineties of the 20th century) is pleasant.

Both the newer and the older literature deals mainly with the following problems: 1.)   the   general problems of central setting of the transfer price, 2.) preference of the system of transfer pricing (centralized or decentralized), 3.) impact of information asymmetry and managers' compensation, 4.) optimization of transfer pricing with respect to taxes and other criteria, 5.) regulation of transfer pricing.

The first mentioned theme has been discussed in the literature quite a long time, but we are afraid to say that in most cases it is a solution based on using of similar methods and assumptions (which are sometimes widened or narrowed), but the results are in most cases similar to the pioneering articles, from the point of view of the conclusions of general problems of transfer pricing. Due to articles (Smallenbach, 1908/1909) and newly (Hirshleifer, 1956) are still in the microeconomic textbooks used theses that the most appropriate transfer price in the vertically integrated MNE are the marginal costs of intermediate product. We can give some examples like (Pappas, Brigham and Hirschey, 1983), (Soukup, 2003), among articles in journals (Gatti, Grinell and Jensen, 1997) or (Baldenius, Melumad and Reichelstein, 2004) as examples. This theory is in our opinion in contrast with the contemporary business practice and it is based on assumptions, which do not hold in practice. The evident collision of the marginal cost transfer pricing theory can be shown in case of (OECD, 2001). We have concluded in (Buus and Brada, 2008) that the optimal transfer price from the point of view of resource allocation and efficient production of intermediate product is under neoclassical assumptions the average cost of intermediate product.

The methods of transfer pricing advised to be used in OECD countries are (among others): arms-length method, cost plus method, formula apportionment method and profit split method, which in all cases directly or indirectly use a premise that the fair transfer price is on the level of price achieved at the market transaction, which equals to marginal cost only in the extraordinary cases (perfectly competitive market of the intermediate product). If there is no market for intermediate product, the cost-plus method is used, which does not use marginal cost, but the average cost of intermediate product. These can be also the optimal solution, which does not require some necessary conditions used or implied by articles deriving the optimality of marginal cost transfer pricing, as Buus and Brada (2008) show.

Otherwise the contemporary literature aims rather on the information asymmetry, integration of manager's and tax objectives or setting of the optimal transfer price with respect to the particular problems of financial management.

The problem of transfer prices and their effect on the possibility of active fiscal policy is compelling as Bartelsman and Beetsma (2003) show. Nevertheless the number and size of possible tax evasions is greater at commodities, which are not standardized (not quoted), whereas at the commodities traded at the commodity exchanges the variance of transfer price and difference between transfer price and arms-length price is substantially smaller (Bernard, Jensen and Schott, 2006), which can be nevertheless interpreted similarly as some of the conclusions of (Gresik, 2001) – there, where the MNE has an advantage against the tax authority due to the information asymmetry, is the space for larger tax evasions. Even the measurement becomes a problem in the contemporary globalized world, because the size of transactions inside MNE is so tremendous that it influences the benchmarks used for derivation of arms-length price (Eden and Rodrigues, 2004).

Indeed the situation is worsened by governments themselves, because due to the attempt to achieve as high as possible tax income they continuously tighten transfer pricing regulation rules, which leads to the double taxation and depression of international trade or on the other hand (depending upon the way, which the national tax legislations chose) to the harmful tax competition, as Raimondos-Moller and Scharf (2002) or Masonri and Weichenrieder (1999) conclude. Raimondos-Moller and Scharf (2002) also derive the condition of Pareto-optimal transfer pricing regulation solution – harmonization of behavior of particular national tax authorities under conditions of compliance with Nash equilibrium conditions. We think that it would be desirable to find a mechanism ensuring the equilibrium even in the conditions of non-cooperative behaviour of tax authorities.

Further we can find literature discussing the effectiveness of particular methods of transfer pricing regulation. For example Sansing (1999) concludes that method of transfer pricing regulation systematically influences profit allocation and that methods based on profit split or profit margin act in favour of the countries with higher taxation in this case. Similarly Schjelderup and Weichenrieder (1999) conclude that the use of methods based on profit split causes distortions in the pricing and international trade. Wellisch (2003) concludes that standard methods (arms-length price based methods) cause suboptimal results of decision-making.

In our last paper (Buus and Brada, 2008) we have provided comparison of transfer pricing techniques proposed by OECD (2001) transfer pricing guidelines. The result was that the only transfer pricing methods, which do not distort prices and thus do not lead to pressure to produce lower or higher than optimal quantity of intermediate product (or in other words, which does not cause departure of tax-optimal and profit-optimal quantity of production) is Cost+ method or Comparable Resale Price method with percentage markup/discount. Other methods distort optimal quantity, while the most distortive method was profit split method. We have gained these results using simulation on maximization of profit and tax revenue, while having only profit taxed. It is however clear that the above conclusions about

optimality of transfer pricing methods are valid also for other taxes used for taxation of factor cost (capital, labour).

With respect to the contemporary practice and theoretical findings and with respect to the importance of MNEs we consider to be highly desirable to widen the theory of transfer pricing and derive a solution for transfer pricing regulation, that will lead to Pareto-optimal equilibrium even in the case of non-cooperative behavior of particular tax authorities. It can be shown on the latest steps of CEE governments (and even the German government) leading to lower corporate income tax rates, that we cannot expect a cooperative behavior.

When looking for literature, which would help us, we concluded that we would probably have to rely on our own. Firstly the literature on transfer pricing in vertically integrated industries mostly recognizes the marginal cost as the best transfer price (as could be seen above). Secondly most of the conclusions based on which an optimal taxation system could have been found do not deal with transfer pricing (e.g. Haufler and Schjelderup, 2000 examine taxation of capital or Keen and Wildasin, 2004 examine tax systems in general). Bond and Samuelson (1989) derive that the preferred tax scheme are tax deductions, which are preferred to tax credits, because of distortive potential of tax credits. The most suitable conclusions from our point of view were derived in (Raimondos-Moeller and Scharf, 2002), that the harmonization of transfer pricing rules leads to Pareto-optimization. These conclusions in some cases rely on an assumption that taxation is an instrument to get resources for provision of services (possibly public goods), therefore taxation itself is not harmful.

In the subsequent part of paper we show that tax base of whole MNE depends on the ownership structure companies included in MNE and motivation to use tax-evasive transfer pricing depends on the ability to shift tax base among MNE members. We also set up indicator, which could be used as the estimator of possible tax evasion via transfer prices within the whole MNE. However, in this paper does not look into ways of finding possible tax evaders among various types of MNE in given economy.

MODEL OF TAX OPTIMIZTION OF MNE

In this part of paper we describe setup of simple model of optimal economic behaviour of companies included in MNE while assuming maximization of net profit of whole MNE - via shifting tax base through transfer prices. Based on model of optimal economic behaviour of companies within MNE we setup indicator of potential tax evasion rate - i.e. indicator or potential transfer prices using in the whole MNE. For the methodology of advanced linear algebra could we have used, please look at e.g. (Steven ,2005).

Terms used in model:

MNE multinational enterprise - group of companies, which existing in different countries are subject to various tax conditions. Members of MNE coordinate their economic activities in order to achieve maximal profit of the whole MNE. In this paper we consider profit maximization being achieved via reducing special costs - tax cost, which is paid by every member of MNE.

tax base For simplicity we assume that tax base is the same as EBT (Earnings Before Tax) and that tax base of every member company of MNE is nonnegative and total sum of all companies tax bases are positive.

tax entity group of firms (usually members of MNE), which coordinate their economic activities in order to achieve total sum of payable taxes as low as possible. From the point of view of pure economic theory there is not important whether tax entity is also some type of "legal entity" or just some group of firms,

which coordinates their economic activities on base of gentlemen agreements. For simplicity we assume that tax entity is subject of MNE and MNE simply consists group of legally co-owned companies. MNE is therefore possible to describe as matrix of owners relations. Note: Without loss of generality also other type of MNE is possible to describe as "owner`s rights"-matrix where "owner`s rights" are not subject any type of legal arrangements. I.e. members MNE could reduce tax base by coordination prices for goods and services among companies within MNE. Let us denote:

n number of firms, which are members of MNE

S matrix is n x n matrix, which fully describes ownership structure of MNE. $S = [\ s_{i,k}\ ]$, where i^{th} row denotes that i^{th} firm own share (e.g. trade deal, share deal, authorized capital deal and so on) in k^{th} firms, $s_{i,k} \in [0,1]$. (Note: Cross-ownership could be included in matrix S too. For example when $s_{1,3} = 0,1$ (i.e. 10% of own share) and $s_{3,1} = 0,2$ then - firm 1 owned 10% of firm 3 and firm 3 owned 20% of firm 1.) By definition diagonal elements $s_{k,k}$ ($k = 1,2,...,n$) represents share (in authorized capital of kth company) which is held by firms which are not described by matrix S - i.e. share on k^{th} company, which could be held by any economic subject "outside matrix S" and share (shares) owned by k^{th} company too!
Note: Own shares (share on authorized capital) which are held by i^{th} firm are included in *free shares* on diagonal of matrix S too. **C**learly own shares cannot be hold by any subjects "outside" of ith firm. There exists two basic approach to solve taxation of "own shares":

Situation when received profit (e.g. dividends) from own shares and this profit is fully transferred to other owners (shareholders).

Situation when received profit (e.g. dividends) is subject of standard taxation in i^{th} company.

After "excluding" both situation there arises new matrix S which will be denoted M and this matrix M will have on the diagonal just true *free shares,* i.e. shares which could be hold by anyone (with exception of companies which "take part" in matrix M). For simplicity we describe situation when j^{th} company owns x_j authorized capital on itself (e.g. if company own 30 % of authorized capital on itseft, $x_j = 0,3$).

ad 1.), i.e. *Situation when received profit (e.g. dividends) from own shares and this profit is fully transferred to other owners (shareholders):* To exclude "own shares" (x_j) from diagonal of matrix S , we have to transform matrix S into matrix M in the following way:

$$m_{i,j} = s_{i,j} + \frac{S_{j,j}}{\sum\limits_{\substack{k=1 \\ k \neq j}}^{n} S_{k,j}} \quad \text{for}\ i = 1,2,...,n,\ i \neq j \tag{1}$$

and

$$m_{j,j} = s_{j,j} - x_j,\ m_{i,j} = s_{i,j}\ \text{otherwise.}$$

ad 2.) i.e. *Situation when received profit (e.g. dividends) is subject of standard taxation in i^{th} company.):* To exclude "own shares" (x_j) from diagonal of matrix S , we have to transform matrix S into matrix M in such way: We add new (dummy) company into model and this company owns only x_j shares of jth company. We add $(n+1)^{th}$ row and $(n+1)^{th}$ column to "original" matrix S in so that new matrix M arises:

$$m_{n+1,j} = x_j,\ m_{j,n+1} = 1\ ,\ m_{j,j} = s_{j,j} - x_j$$

$$m_{n+1,k} = 0\ ,\ m_{k,n+1} = 0 \quad \text{for k} = 1,2,...,n+1\ (k \neq j)\ \text{and again}\ m_{i,j} = s_{i,j}\ \text{otherwise.} \tag{2}$$

In the above described way we receive matrix *M*, where:

M   matrix is *n* x *n* matrix, which fully describes ownership structure of MNE. $M = [\ m_{i,k}\ ]$, where i^{th} row denotes that i^{th} firm own share (eg: trade deal, share deal, authorized capital deal and so on) in k^{th} firms, $m_{i,k} \in [0,1]$. (Note: Cross-ownership could be included in matrix *M* too. For example when $m_{1,3} =$ 0,1 (i.e. 10% of own share) and $m_{3,1} = 0,2$ then - firm 1 owned 10% of firm 3 and firm 3 owned 20% of firm 1.) By definition diagonal elements $m_{k,k}$ ($k = 1,2,...,n$) represents share (in authorized capital of kth company) which is held by firms which are not described by matrix M - i.e. share on k^{th} company, which could be held by any economic subject "outside matrix M".

Note: In the above-described matrix *M* is therefore not allowed to any company held own share (on authorized capital) - i.e. k^{th} company does not have any share (e.g. on authorized capital) in itself! Diagonal matrix *M,* where on diagonal are only 1, describes multinational enterprise, where the only owner on shares of subsidiaries within MNE is the headquarters (but there can be other owners of those shares outside MNE). For simplification of our text let be $m_{k,k}$ ($k = 1,2,...,n$) called *free shares* ,i.e. e.g. shares which could be used for "building special portfolio of shares" which is called usually "Multinational Entity".

$\bar{v}$ column vector, which describes part of shares of subsidiaries, which is directly owned by MNE headquarters - i.e. row vector $\bar{v}^T = [v_1, v_2, ..., v_n]$, where $v_k \in [0,1]$ represents relative share at *free shares*. (Eg.: $m_{11} = 0,7$, $m_{2,2} = 0,5$, $m_{3,3} = 0,8$ - then vector $\bar{v}^T = [1, 1, 0,5]$ represents situation when MNE owns own share such that 70 % of firm 1, 50 % of firm 2 and 40 % of firm 3. Clearly situation when vector r $\bar{v}^T = [1, 1, 1]$ denoted that MNE owned 70 % of firm 1, 50 % of firm 2 and 80 % of firm 3 - i.e. that MNE from pure economic view own directly or indirectly full 100% of free shares of all three firms! From point of view of mathematical model vector $\bar{v}$ describes the top level of MNE ownership (relative to *free share*), i.e. vector $\bar{v}$ describes the portfolio of companies (tax entities), which build MNE.

E unit matrix ($e_{k,k} = 1, e_{k,r} = 0$ $k \neq r$ for k,r = 1,2,...,n).

$\bar{1}$ column vector of real numbers 1 (so called summation vector), i.e. $\bar{1}^T = [1,1,...,1]$.

$\bar{t}$ column taxation vector, i.e. $\bar{t}^T = [t_1, t_2, ..., t_n]$, where t_k is tax rate of kth company (k^{th} members of MNE) Even if this paper is oriented on MNE in the presented here model is not necessary to assume that different companies have to be in different countries and also not only corporate income tax should be considered (VAT taxes, payroll taxes, etc.).

W diagonal *n* x *n* matrix describes taxation of members of MNE. On diagonal is taxation vector **W** = $[w_{i,k}]$, $w_{k,k} = t_k$, $w_{k,r} = 0$ for $r \neq k$ where $k,r = 1,2,...,n$, $\bar{t}^T = [t_1, t_2, ..., t_n]$ is taxation vector, and t_k is tax rate of kth company.

$\bar{z}$ column tax-base vector, i.e. $\bar{z}^T = [z_1, z_2, ..., z_n]$, where z_k is tax-base of kth company (members of MNE). This vector is fully observed from reality and it is known (eg. on the base of statement of taxable income) fully observed, i.e. $\bar{z}$ is vector of parameters. For simplicity we assume that tax-base is the same as EBT (EBT - Earnings Before Taxes) and tax-base vector $\bar{z}^T \neq \bar{0}^T$ and $z_k \geq 0$ $k = 1,2,...n$ (i.e. MNE generates positive profit.).

t_tax   is total amount of tax paid by whole MNE in matrix form, i.e. $t\_tax = \bar{v}^T M W \bar{z}$

t_NET   is total amount of net profit attributable to MNE (in matrix form) i.e.

$$t\_NET = \bar{v}^T M (E - W) \bar{z}$$. (3)

This scalar (value) is *fully observable from reality and it is known* (usually from various tax forms).

$\bar{1}^T M \bar{z}$ is total sum of EBT of all companies in MNE - i.e. this amount can not be influenced by taxation of EBT in single companies.

Let be further vector of (unknown) variables:

$\bar{x}$ column tax-base vector, i.e. $\bar{x}^T = [x_1, x_2, ..., x_n]$, where x_k is tax-base of kth company (members of MNE) which could be subject of changes. This vector is therefore vector of variables, which could be subject to profit shifting among MNE members via transfer pricing. We still assume that tax base is the same as EBT (EBT - Earnings Before Taxes) and tax base vector $\bar{x}^T \neq \bar{0}^T$ and $x_k \geq 0$; $k = 1, 2, ..., n$ (i.e. at least one company of MNE generates positive profit.)

From pure view of theory every MNE could solve two important tasks: 1. maximize total net profit of MNE and 2. minimize total net profit of MNE.

While solving both MNE is bound by fact that total sum of ot EBT of all companies which are included in MNE is the same.

Hence it follows:

1. MNE maximizes total amount of its own net profit

$$\bar{v}^T M (E - W) \bar{x} \rightarrow \max_{\bar{x}} ,$$ (4a)

with respect to
$$\bar{x}^T \bar{1} = \bar{1}^T M \bar{z} , \quad \bar{x} \geq \bar{0}$$. (4b)

Let be optimal solution (i.e. column vector of real numbers) of this task denoted $\bar{x}^*_{\max}$. The smallest total sum of all tax paid by MNE (via MNE shares in various companies) is then

$$\bar{v}^T M W \bar{x}^*_{max}$$. (5)

2. MNE minimizes total amount of its own net profit

$$\bar{v}^T M (E - W) \bar{x} \rightarrow \min_{\bar{x}} ,$$ (6a)

with respect to
$$\bar{x}^T \bar{1} = \bar{1}^T M \bar{z} , \quad \bar{x} \geq \bar{0}$$. (6b)

Let be optimal solution (i.e. column vector of real numbers) of this task denoted $\bar{x}^*_{min}$. The largest possible total sum of all tax paid by MNE (via MNE shares in various companies) is then

$$\bar{v}^T M W \bar{x}^*_{min} \qquad (7)$$

Then $\bar{v}^T M W \bar{z}$ is total amount of tax paid in reality by whole MNE.

ECONOMIC RESULT OF MODEL

From the point of view of common practice of various tax authorities it is necessary to answer two important questions:

Is it possible to assume that profit is shifted via transfer prices among companies inside MNE?
Is it possible to find companies in MNE between which profit is shifted via transfer prices?

Answer to the first question is quite easy. On the base of above solved optimization tasks looks be acceptable to define indicator, which could be considered as measure of potential rate of tax evasion as follows

$$TaxEvasionRate = 1 - \frac{\bar{v}^T M W \bar{z} - \bar{v}^T M W \bar{x}^*_{min}}{\bar{v}^T M W \bar{x}^*_{max} - \bar{v}^T M W \bar{x}^*_{min}} \in [0,1] \qquad (8)$$

where by economic assumption $\bar{x} \geq \bar{0}, \bar{x} \neq \bar{0}$.

Level of *TaxEvasionRate* close or equal 0 (zero) indicates that there is almost surely none tax evasion commited by analyzed MNE and *TaxEvasionRate* close to 1 indicates that there could be some tax evasion in MNE - i.e. tax paid by whole MNE is very low. We stress the expression "could be", because the proposed indicator shows only overall taxation of MNE and compliance or non-compliance with transfer pricing guidelines is the only acceptable proof for court. So the proposed indicator is a preliminary measure for tax authorities, but possibly very efficient measure for further research.

Answer to the second question is rather more complicated and less clear than the first one. If there were no penalties for tax evasion, $\bar{x}^*_{min}$ and $\bar{x}^*_{max}$ would be zero vector in which one item is positive (corner solution). This is direct consequences fact that both optimized functions are linear and constraints are linear too. More mathematical proofs and more detailed specification conditions of validity of this fact are beyond scope this paper. Nevertheless in the following text we will assume that there could be more positive items in optimal solutions vectors.

Vector $\bar{x}^*_{min}$ indicates situation of spreading the tax bases among member companies of MNE from point of view of tax authority - when MNE pays the highest taxes and vector $\bar{x}^*_{max}$ indicates situation when MNE pays the lowest taxes.

Positive items (e.g. 4th item is 4th company of MNE) in vector $\bar{x}^*_{min}$ (i.e. highest taxes paid by MNE in total) indicate situation that e.g. 4th company could possibly want to reduce all positive items in real vector tax base $\bar{z}$ too - i.e. there is potential pressure to reduce positive items in vector $\bar{z}$ at the same position as positive items in vector $\bar{x}^*_{min}$ - via buying for inflated prices or selling for artificially deflated prices.

Positive items in vector $\bar{x}^{*}_{max}$ (i.e. lowest taxes paid by MNE in total) indicate situation that such company could possibly want to increase items in vector $\bar{z}$ at the same that were found to be positive in vector $\bar{x}^{*}_{max}$. Therefore we can suspect that MNE will try to increase tax base of these companies via buying for artificially deflated prices or selling for artificially inflated prices.

For example: If $\bar{x}^{*T}_{max} = (0, 1000, 0, 0)$ and $\bar{x}^{*T}_{min} = (0,0,0,1000)$ and $\bar{z}^{T} = (50,200,300,450)$ the company "Nr. 2" (second position in vector $\bar{x}^{*}_{max}$) might want to increase own tax base *et vice versa* for the company "Nr. 4" (fourth position in vector $\bar{x}^{*}_{min}$) I.e. for tax authorities (or tax authority) would be appropriate to analyze sell and buy prices of company "Nr. 4" and sell and buy prices of company "Nr. 2" also, the other are not so significant. For the sake of reducing of total amount of total tax paid by MNE we might expect to shift profit between companies "Nr. 2" and "Nr. 4".

CONCLUSION

In the presented paper we have shown that tax base of whole MNE depends on the ownership structure of companies contained in MNE, which could be described in quite simply matrix form. It was shown that basic tax optimization tasks of MNE are the linear programming problems. In addition we have developed formula (the indicator) of potential tax rate evasion (i.e. tax evasion of bundle firms which are joined in MNE).

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RETHINKING THE SHAREHOLDER VALUE PARADIGM IN THE AFTERMATH OF THE FINANCIAL CRISIS – THE UK PERSPECTIVE

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ABSTRACT

In light of the increasing significance and vivid dynamism of corporate governance practices, a debate concerning the purposes of the corporation has been raging, particularly since the onset of the global financial crisis, as to whether shareholder value should continue to take precedence in the UK – a leading country featuring the Anglo-American corporate governance system. Providing insight into the future direction of Anglo-American corporate governance practice, this article seeks to identify the critical role of the predominant objective of corporations – the shareholder value paradigm – in contributing to the global financial crisis, and its potential development afterwards. Significantly, possible trends and reform measures in the realm of corporate governance in the aftermath of the crisis will be explored. It will be recognized that as a principal corporate objective, the scope of shareholder value, at least in the legal perspective, is not limited to short-run profit chasing, which arguably was one of the key factors leading to the global turmoil. Rather, narrow pragmatic interpretation for short-termism and managerial exploitation of shareholders' interests in governance practice were contributing to the expansion of the financial crisis. Given its strength in minimizing the principal-agent diversity and restoring investors' confidence, it is anticipated that the overriding shareholder value paradigm in the UK would be preserved and even intensified in the post-crisis context in an enlightened way.

JEL: G3; K1; K2; L2

KEY WORDS: Shareholder Value, Financial Crisis, Corporate Governance, Corporate Law, Corporate Objective

INTRODUCTION

Following the bursting of the housing bubble in 2006, rising defaults of subprime mortgages in the financial market triggered a global credit crunch and the subsequent financial crisis. A number of large financial institutions and banks, including Merrill Lynch, Lehman Brothers and Northern Rock, have failed or been nationalised over the last two years. The volatility in financial markets, accompanied by the rising level of unemployment, further triggered a global economy recession. As commented by Charlie Bean, the Bank of England's deputy governor, this was "the largest financial crisis of its kind in human history".

As stated by Moxey & Berendt (2008: 3), "We know a lot about what has happened, but less about how or why". Consensus so far has not been reached on the wider implications of the crisis. Nevertheless, it is now generally believed that a nexus of factors in various domains, including but not limited to, excessively loose banking regulation, dysfunctions of credit rating agencies, and inadequate accounting and reporting regimes, have all contributed to this worldwide social-economic crisis (Moxey & Berendt 2008; ACCA, 2008; Baker, 2009; House of Commons Treasury Committee, 2009a). In particular, weaknesses in the realm of corporate governance, for instance, unreasonable executive compensation, reckless board performance, and lax corporate oversight, have been identified as key elements leading to the turmoil (Finch, 2008; Moxey & Berendt, 2008; Plath, 2008). At the core of this view is the belief that the financial crisis is attributable to a fundamental failure of the Anglo-American corporate governance regime – the shareholder value paradigm (Dahl, 2009; Visser, 2008; Yuan, 2009). The predominance of

shareholder value orientation in the Anglo-American regime has been interpreted as the major factor leading to short-term and reckless corporate governance performance, which has destroyed the long-term growth of banks and public corporations, and resulted in the subsequent crisis and the downturn of the global economy.

The UK has always been well-known for its unique features in terms of corporate governance – regardless of the fact that it geographically locates within Europe and is a significant member of the European Union (EU), it is seen as a representative country within the Anglo-American corporate governance regime, rather than the Continental European system (Aguilera et al., 2007; La Porta et al., 1999; Williams & Conley, 2005). In this financial turmoil, compared to the other two major EU economies, France and Germany, which adopt the Continental system, the UK has been hit harder by the crisis and even brought to the edge of economic catastrophe (BBC News, 2009a; Pollock, 2009). The central pillar of the UK corporate governance model – the shareholder value paradigm – has been blamed as one key factor resulting in the severity of the financial turmoil in this country.

By giving close scrutiny to the causes and impacts of the recent financial crisis upon corporate governance, this article will critically examine the rationale of the argument that the predominant corporate objective – shareholder value orientation – has led to short-termism in corporate governance, the near-collapse of financial markets and the volatility in the world economy. The UK will be applied as a national-specific example of the Anglo-American group in discussing the implications of overriding shareholder value upon corporate governance practice. Through a comprehensive discussion of the UK shareholder value paradigm in both legal and commercial contexts, it will be discovered that shareholder value itself is not necessarily equivalent to the pursuit of short-termism. Rather, the narrow interpretation of shareholder value for short-run profits due to pressures from business practice and the managerial exploitation of shareholders' interests are the major weaknesses in existing practice. By examining the implications of the recent credit crunch upon corporate governance, the continuing predominance of shareholder value in the UK is further asserted.

This article will begin with an overview of the genesis of the shareholder value paradigm in the UK. This will allow for an exploration of the rich divergence between legal and commercial recognitions of the shareholder value paradigm. In the following part, major corporate governance failures identified in the global financial crisis will be discussed in detail, followed by implications of the financial crisis upon the development of the shareholder value paradigm in the UK. Last but not least, a number of suggestions will be offered in response to the challenges posed by the crisis. Providing insight into the future direction of corporate governance practice, it is suggested that shareholder value would be maintained as the predominant corporate objective in the UK, and should be further enhanced in the aftermath of the crisis in response to the increasing demand for restoration of investor confidence and revitalisation of the market economy.

AN OVERVIEW OF THE SHAREHOLDER VALUE PARADIGM

Shareholder Value Predominance in Anglo-American Corporate Governance

A corporate governance model incorporates theories and practices on various aspects, including corporate values, corporate objectives, ownership structures, internal control structures, as well as external rules and regulations in relation to corporations. Generally, the comparative literature divides the corporate governance world into two ideal-type models: the Anglo-American model (exemplified by the United States and the United Kingdom) and the Continental model (exemplified by Germany and Japan), characterised by diversified ownership patterns, managerial strategies and structural elements (Aguilera et al., 2007: 844).

As Parsons (1960: 63) argues, "(the) defining characteristic (of corporations) is the attainment of a specific goal or purpose." A fundamental difference between these two models lies in their diverse purposes of the corporation, which lead to further divergence between core corporate strategies and corporate performance. Corporations residing in Anglo-American countries generally apply the shareholder value paradigm and recognize the maximization of shareholders' wealth as the fundamental corporate objective, while in jurisdictions in favour of the Continental approach, the stakeholder perspective (alternatively referred as pluralism in the UK Company Law Review) is adopted, which argues that benefits of other constituencies who have a relevant stake in the company should be equally taken into account as those of shareholders (Dodd, 1932; Freeman, 1984; Clarkson, 1995; Rowley & Moldoveanu, 2003). "A stakeholder approach rejects the idea of maximizing a single-objective function as a way of thinking about management strategy. Rather, stakeholder management is a neverending task of balancing and integrating multiple relationships and multiple objectives" (Freeman & McVea, 2001: 194). Corporations adopting the Continental approach tend to embrace broader concerns regarding various stakeholders – employees, creditors, suppliers, customers, local communities and environment into the managerial realm. Diversified corporate objectives have resulted in different arrangements of ownership and control in these two major models. As central themes of corporate governance (Berle & Means, 1932), "ownership" signifies the legal allocation of property rights among corporate principal stakeholders and key constituencies, such as shareholders, creditors and employees, and "control" indicates the way directors establish and maintain the balance of power among constituency groups (Deakin et al., 2006: 156). In practice, countries that feature the Anglo-American shareholder-oriented system are characterised by dispersed ownership, shareholder exit, and liquid markets for corporate control. In contrast, in Continental European and East Asian countries in which stakeholder value prevails with fewer market-oriented rules for corporate control and immature equity markets, concentrated ownership tends to exercise direct supervisory influence on management (Aguilera & Jackson, 2003: 448).

Defining Shareholder Value

"The lack of a broad defining paradigm has created a sense of intellectual vertigo in the increasingly intense debate over corporate governance reforms" (Pound 1993: 1003). Regardless of the fact that shareholder value orientation has long been established as the dominant corporate objective and the basis for corporate law in the Anglo-American context (Keay, 2007a), practical diversities among the developed capitalist economies have so far defied a common definition of shareholder value. Traditionally, this term has been used interchangeably with "shareholder primacy principle", or "shareholder wealth maximization norm". In recent literature, shareholder value has been defined as incorporating dimensions of shareholder wealth maximization and shareholder primacy in corporate control. According to Carlson et al. (2004:55), " Firstly, it reminds all interested parties – executives, directors, creditors – who is the ultimate owner of the company: the residual owners; second, it is precisely consistent with sound principles of corporate governance, which may be described as the prudent and active use of shareowner rights to increase shareowner wealth". In the author's opinion, this interpretation of shareholder value overlooks the variety of approaches for achieving ultimate shareholder wealth. In addition to shareholder control advocated in the definition contended by Carlson et al., interests of shareholders could also be and have been commonly realized by managerialism over the past few decades. In the UK, asserting the rationale behind agency theory, shareholder control via equity operates as an irresistible force in corporate control. In America, in contrast, managerialism, which emphasized the ultimate discretions of managers rather than investors, had been the dominant corporate practice until the 1970s, and its direct influence can still be perceived in certain fields today, especially among corporate practitioners who view corporate governance simply as a topic concerning the separation of ownership and control (Chandler, 1962; Bratton, 1989; Learmount, 2002). In this article, the shareholder value paradigm is regarded as primarily referring to the welfare priority in corporate governance, i.e., the maximization of shareholder wealth. It embraces the idea that shareholders' interests should be regarded

as the ultimate interests of the company and the company should pursue the objective of maximizing shareholders' interests.

It remains a contentious topic whether the shareholder value paradigm involves the increase of shareholder value in the short or the long-term (Keay, 2008: 671; Simon, 1959: 262). At common law, the scope of the interests of shareholders was once defined by Lawton LJ as only referring to interests of current shareholders but not those of future shareholders. "Where the directors must only decide between rival bidders, the interests of the company must be the interests of the current shareholders. The future of the company will lie with the successful bidder. The directors owe no duty to the successful bidder or to the company, after it has passed under the control of the successful bidder. The successful bidder can look after himself, and the shareholders who reject the bid and remain as shareholders do so with their eyes open, having rejected that price which the directors consider to be the best price reasonably obtainable." This view is now widely criticized and it is increasingly recognized that the interests of shareholders should encompass the interests of both present and future shareholders. After the *Savoy Hotel* case, the scope of the paramount objective – shareholder value – was further clarified by Holland (1954:16) that the concept "company" did not refer to "the sectional interests of some (it may be the majority) of the present members or even … of all the members but of present and future members of the company … on the footing that it would be continued as a going concern, balancing a long-term view against the short-term interests of the present members." Even in *Gaiman v National Association for Mental Health* in which the separate personality of a corporation was emphasised, Megarry J acknowledged the significance of shareholder value orientation by concluding that it is not easy to determine what is in a company's best interests without paying due regard to its present and future members as a whole (French et al., 2007, 456). As stated by Ferran (1999:126), the reference to "future shareholders" does not mean that the directors are under the obligation to specially consider the interests of any particular person who might invest in the company in the future. "The directors' duty is not related to the individual personal interests of the persons who happen to be shareholders at any particular time, but is concerned with the collective interest of the group over time" (Ferran, 1999: 126). By recognizing that interests of shareholders should encompass both "immediate revenue and long range basic profitability of wealth-producing resources" (Drucker, 1958: 82), the interests of shareholders are positively associated with long-term interests of the corporation, at least in the legal field. In the UK, this common law interpretation has perceptibly paved the way for the inclusion of long-term shareholders' interests in the range of factors that directors should take into account under the Companies Act 2006 (Ferran, 1999: 126), and the principle of shareholder value not equivalent to short-run profits was succinctly presented by CLRSG (1999a, para 5.1.12):

"The ultimate objective of companies as currently enshrined in law – i.e. to generate maximum value for shareholders – is in principle the best means also of securing overall prosperity and welfare…however, in practice neither maximum value for shareholders, nor overall prosperity and welfare, may be achieved…It is argued that exclusive focus on the short-term financial bottom line, in the erroneous belief that this equates to shareholder value, will often be incompatible with the cultivation of co-operative relationships, which are likely to involve short-term costs but to bring greater benefits in the longer term."

Stakeholder Thinking

Traditionally, the overriding shareholder value paradigm in Anglo-American countries is often recognized as contradictory to the stakeholder approach, which plays a predominant role in countries featuring the Continental system. It considers a corporation as an institution in relation to a wide range of external constituencies' interests, rather than mere shareholders' interests. In recent decades, growing awareness of firms' stakeholding issues and institutions' societal performance has been observed in Anglo-American countries, which, arguably, comes as a result of integrating stakeholder considerations into its narrowly-defined shareholder value.

Stemming from Dodd's famous view (1932: 1148) "of the business as an economic institution which has a social service as well as a profit-making function", the rationale of stakeholder management has been justified and advanced on various grounds, of which the most important three being descriptive accuracy; instrumental power; and normative validity (Donaldson & Preston, 1995). The descriptive aspect focuses on the illustration of specific corporate features and activities, for instance, the nature of the firm (Brenner & Cochran, 1991), corporations' multilateral relationships with stakeholder groups (Jawahar & McLaughlin, 2001) and the way corporations being managed (Clarkson, 1991; Kreiner & Bambri). The instrumental aspect, in conjunction with the descriptive argument, examines the possibility of interconnections between stakeholder management and the achievement of traditional corporate objectives, involving profitability, corporate growth and so on (Donaldson & Preston, 1995: 71). The normative approach is mainly on a moral/ethical basis and suggests corporate accountability incorporate a broad range of constituencies' interests even in the absence of any apparent financial benefit to the corporation (Gibson, 2000; Marcus, 1993; Kuhn & Shriver, 1991).

The major reason for the increasing scale and influence of stakeholder thinking in the Anglo-American shareholder-oriented context is its instrumental effect, i.e., the consideration of stakeholders' interests would be beneficial to the growth of the corporation and the interests of shareholders in a long-term manner. This financially viable effect was firstly contended by Wood in 1950: "all I can say is that if the other three parties (customers, employees, community) are properly taken care of, the stockholder will benefit in the long pull".

Freeman, the leading scholar within the stakeholder domain, attempted to justify this instrumental consideration on the ground of the extended contractual theory. The traditional nexus of contracts theory argues that corporations are nothing more than a collection of bilateral contracts between corporations and different constituencies – primarily shareholders, directors, employees, customers and suppliers, and the resolutions of corporate disputes should refer to those contracts (Williamson & Winter, 1991; Easterbrook & Fischel, 1991). Shareholders are the only group granted with controlling rights because they are regarded as the only residual claimant group within a company. Freeman and Evan (1990: 352) have made an extended stakeholder interpretation of this theory, to regard a firm as a set of multilateral contracts involving the consideration of interdependencies among stakeholders, "Managers administer contracts among employees, owners, suppliers, customers, and the community. Since each of these groups can invest in asset specific transactions which affect the other groups, methods of conflict resolution, or safeguards must be found." According to their interpretation, stakeholder management is the ideal way of building up successful relationships with parties who contribute to business success, and promoting corporate performance and economic efficiency in the end. Similarly, Jones (1995) advocates that a corporation will have competitive advantages over others by contracting with its stakeholders on the basis of mutual trust. "Corporations practicing stakeholder management will, other things being equal, be relatively successful in conventional performance terms" (Donaldson & Preston, 1995: 67). In modern Anglo-American corporate governance, driven by such instrumental motive, stakeholder thinking is cautiously embodied by virtue of directors' pursuing shareholder value in an enlightened and inclusive way, to foster the positive association between stakeholder consideration and corporate performance. It is anticipated by CLRSG (1999a, para 5.1.22) that such an inclusive approach would set up "long-term and trusting relationships with employees, suppliers, customers and others, as appropriate, in order to secure the success of the enterprise over time".
(OMITTED)

CONCLUSION

A long-standing topic in the realm of corporate governance concerns the purposes of the corporation – whose interests should a corporation serve? Rather than a discussion at the general level, this article concentrates on the origins, magnitudes and rationale of the predominant corporate objective – shareholder value maximization – in the UK. It starts by reviewing the genesis and nature of the shareholder value paradigm in the UK, followed by the implications of the financial crisis upon the attainment of this overriding corporate objective. Under close scrutiny of the legal and commercial recognitions of the scope of shareholder value, it is recognized that the scope of shareholder value, at least in the legal perspective, is not limited to short-run profits. Furthermore, through a comprehensive discussion of causal factors triggering the global turmoil and relevant implications upon future corporate governance practice, it is discovered that the short-term pragmatic interpretation of the shareholder value paradigm is one key factor resulting in this unprecedented turmoil, and shareholder value has been seriously impaired as a consequence. Insight gained from the global turmoil intensifies calls for directors' accountability to shareholders' interests in future Anglo-American corporate governance. With respect to the corporate objective debate, the continuing predominance of shareholder value in the UK in the aftermath of the crisis is sufficiently justified, and is likely to be further enhanced if suggested changes actually take place in the realm of corporate governance.

ENDNOTES AND REFERENCES

Please Contact the Author for Endnotes and References

ENLARGE THE CORPORATE RESPONSIBILITY IN THE MIDST OF FINANCIAL TURMOIL: MORE SOCIALLY RESPONSIBLE CORPORATIONS?

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ABSTRACT

There is nothing small or trivial about the 2008 financial crisis. The 2008 global financial crisis has now put the entire financial market in turmoil and resulted in severe losses and a possible slowdown of the whole world economy since 2007. Environmentalists and other pluralists in all corporate law and corporate governance areas are worrying that sustainability and enlarged corporate responsibility towards the social and philanthropic directors are falling off the boardroom agenda as companies are trying to tighten their belt in the face of turbulent stockmarkets, the "credit crunch" and a looming economic slowdown. And it could be argued that CSR could be regarded by corporations as a "fad whose time has come and gone". Of all the destabilising factors leading to this social-economic crisis, many seem to be inextricably linked to failures in existing corporate governance practice, for instance: the lack of common understanding of the purpose and scope of corporate governance among board members, shareholders and stakeholders; the unaccountability of boards towards shareholders and stakeholders; poor directors' performance; and the poor corporate monitoring and corporate control. This articles is going to specifically focus on the relationship between CSR and Financial crisis and answer the question on how to promote the corporations to be more socially responsible and competitive to avoid or minimize the opportunity in getting into financial crisis again. Attention will be paid to Section 172 of recently enforced Companies Act 2006 and benefit its enforcement might potentially bring in response to the financial crisis.

JEL: G3, K1; K2; L2

KEY WORDS: Corporate Social Responsibility, Financial Turmoil, Corporate Law, Corporate Objective, Corporate Governance

INTRODUCTION

There is nothing small or trivial about the 2008 financial crisis. The 2008 global financial crisis has now put the entire financial market in turmoil and resulted in severe losses and a possible slowdown of the whole world economy since 2007. This financial crisis was initiated in America, where there has been a sustained period characterised by growing loan incentives, declining lending standards, and rising housing prices. This acceleration of defaults and foreclosures triggered a liquidity crisis and subsequently the global financial crisis. Heralded by the bankruptcy of Lehman Brothers – a 158-year-old investment bank on Sunday, September 14th 2008, the financial crisis deepened towards the end of 2008 and the entire banking system became close to collapse. The decision on Lehman brothers, a major Wall Street investment bank, sent the prices of financial assets in a massive downward spiral and banks' shares were especially badly affected because of "the freezing of the inter-bank loan market, inadequate disclosure and massive doubt about the state of the bank's balance sheets" (Avgouleas, 2009: 23) . The US, the UK and most of the other EU nations were force to piece together massive bank rescue package and a considerable number of banks in these jurisdictions have been nationalised.

Even standing on historical bases, the 2008 crisis is distinctive. Difference from the Asian and Latin American crises in the 1980s, this crisis is truly global and countries like Iceland or Pakistan are threatened by bankruptcy. In Japan, the country has been hit by huge volatility in the markets. Also

China is suffering from the crisis as a result. It is argued that the growth rate of the world economy has slowed down noticeably and there are more uncertain and volatile factor in the international economic climate result from the negative impact on China's economy mainly result from less export from China because of the global financial crisis.

During the hard time that the world faces the worst financial crisis, who wants to hear about CSR? It is only logical that attentions of both academics and practitioners have turned to profit making and profit maximisation to diminish the negative effects of the on domestic economy brought by financial crisis. However, does this mean that the goal has to be achieved at the expense of CSR? Environmentalists and other pluralists in all corporate law and corporate governance are worrying that sustainability and enlarged corporate responsibility towards the social and philanthropic directors are falling off the boardroom agenda as companies are trying to tighten their belt in the face of turbulent stockmarkets, the "credit crunch" and a looming economic slowdown. And it could be argued that corporate social responsibility could be regarded by corporations as a "fad whose time has come and gone" (Macalister 2008).

The article attempts to answer the following questions: why will the CSR survive the 2007-2008 financial crisis; what are the possible reasons leading to the financial crisis and why it is related to CSR and what role can company law play in achieving goals in promoting the success of the corporations and avoiding this kind of financial turmoil from happening again.

This article initially lays out relevant basic terms such as CSR, financial crisis, stakeholder theory and enlightened shareholder value principle. Irresponsibility and short-termism will be argued as two main reasons behind the 2007-2008 financial crisis. If the financial crisis actually provides an opportunity to move corporate objective towards more responsible perspective, where there is an incentive for a long-term vision rather than short-term gains, directors and shareholders have to look beyond immediate financial performance and look into how businesses are run. The corporate objective beyond maximising the return of investments will expanded towards more healthy, productive and sustainable economies and societies in large.

BASIC TERM AND RELEVANT FACTS

A few core terms will be introduced and defined in the following section in order to maintain the consistency of the entire article.

CSR

CSR is a very broad subject by its nature ranging from community relations to sustainable development. It is important, under the principle of CSR, to conduct the business in an economically, socially and environmentally responsible manner.

CSR is a "concept whereby companies integrate social and environmental concerns in their business operations and interaction with their stakeholders on a voluntary basis." More often, its meaning is expressed in "moralistic catchwords", as well as basic definition statements such as "human dignity, equality, and the social good", although these definitions might themselves be unclear and subjective (Frederick 1994). Making corporations engage in good CSR policy is another advantage in adopting stakeholder theory. CSR can contribute to a number of social environmental and economic policy objectives. What good CSR policies can bring includes "the advisements of competitive advantage, better reaching market segments like ethical consumers and socially responsible investors and enhanced opportunities for strategic alliance or other partnership as major business opportunities for corporations with external constituencies, and, for an internal point of view, enhancement of labour rations and

employee commitment, and the achievement of overall better financial and strategic results" (Keinert 2008:90). It is recognised that one major development in the market sector in the last twenty years, i.e. the rapid growth of CSR and socially responsible investment performance of institutional investors, has had the practical effect of bringing social, environmental and ethical concerns into the realm of Anglo-American corporate governance.

The CSR movement has been a major factor in moving corporate governance theory in the direction of a stakeholder model by requiring companies to go beyond the creation of short-term shareholder wealth in pursuit of broader objectives such as sustainable growth, equitable employment practices, and long-term social and environmental well-being (Williams & Conley 2005: 493). There is evidence that businesses of all sizes are taking CSR seriously (Lynch-Wood, Williamson & Ramsay (2005). The triple bottom line of CSR is taken as a point of departure, focusing on people and planet dimensions, in particular human rights, labour rights and environmental protection (Buhmann 2006: 188-189). CSR is often divided into four areas: workplace, market-place, environment and community although there areas inevitably overlap in practice. Effective CSR requires dialogue and partnership with stakeholders such as trade unions, public authorities, non-governmental organisations, and business representative organisations.

Directors of socially responsible companies have a network of related duties towards various stakeholders. For a socially responsible company, it is important to ensure diversity in the workforce and provide suitable conditions for employees; it is also crucial to minimise the impact of products and process on the quality of land, air, water and the ecosystems that make up the environment, and to maximise the positive impact of the companies' operations through support for and involvement in the local communities where it operates (Smerdon 2004: 250-251)

CSR, which is still often of a voluntary nature, largely parallels the concept of "stakeholder theory", which emphasises the intertwined relationship between enterprise and individuals and organisations larger than the ones traditionally accounted for by businesses and professionals. CSR is able justify its existence since it has successfully proven how social and environmental corporate engagement can substantially benefit society and the enterprise itself (Keinert 2008:43). The adoption of stakeholder theory seems to be a logical step towards the development of more ethical corporations.

Relevant Fact on 2007-2008 Financial Crisis

Following the bursting of housing bubbles in 2006, it is agreed by 2009 that the world economy has been seriously damaged by this financial crisis: stock markets are crashing worldwide; retail sales are recording their biggest decline since 1992; equity funds, hedge funds and insurance companies are facing financial difficulties and the risk of failure, and markets are becoming significantly dysfunctional. In addition to the situation in the US, the EU, another influential regional economy, has now officially slipped into its first recession since the Euro's creation in 1999 According to the statistics, the total value of US subprime mortgages amounted up to $1.3 trillion as of March 2007 (Bernanke 2007). Around 7.5 million first-lien subprime mortgages were outstanding at that time, accounting for about 14% of all first-lien mortgages (Bernanke 2007). According to Bank of England's recent Financial Stability Report, government worldwide have already pledged more than $7 trillion in loans, guarantees, capital injection and other assistance in their coordinated effect to rescue the global financial system. It is estimated by the ILO that the crisis will cost 20 million jobs by the 2009.

The stage of this exceptional financial instability may be divided into two overlapping phrases: what started as a global credit crunch in August 2007 was transformed in September 2008 into a global financial crisis, because of the panic asset selling and massive deleveraging by global financial institutions. The UK has also suffered significantly in this crisis. The initial phrase of the crisis had already led to the first depositors' run in the UK in 150 years and the near collapse of Northern Rock, a

medium-sized UK mortgage provider. Between July and September of 2008, the UK economy shrank for the first time in sixteen years, which indicated that the UK had entered a recession. The economic downturn is expected to continue for a period of time: the UK economy is anticipated to further contract by 0.8% in the final quarter of 2008; and continue to shrink in the subsequent following three quarters before it begins to recover in 2010. John Cridland, the CBI deputy director general, has commented that "what is clear is that the short and shallow recession we had hoped for a matter of months ago is now likely to be deeper and longer lasting" (Goodman & Story 2008). It is also suggested that this worldwide turbulence will continue to develop for some time and its impacts could be further extended.

IRRESPONSIBILITY, SHORT-TERMISM AND FINANCIAL CRISIS

"We know a lot about what has happened, but less about how or why" (Moxey & Berendt 2008: 2). A great amount of academic literature and official reports have attempted to identify the origins and implications of this worldwide financial crisis in order to minimise its negative impacts. However, there is no consensus about the implications of the crisis. It is broadly believed that multiple causal factors in various domains have played their role in this worldwide social-economic crisis, including but not limited to, corporate governance, banking regulation, and accounting and reporting schemes. There is no doubt that current regulations, policies and practice within the two archetypal corporate governance models will also be challenged and developed according to the recent context of economic rescue. Of all the destabilising factors leading to this social-economic crisis, many seem to be inextricably linked to failures in existing corporate governance practice, for instance: the lack of common understanding of the purpose and scope of corporate governance among board members, shareholders and stakeholders; the unaccountability of boards towards shareholders and stakeholders; poor directors' performance; and the poor corporate monitoring and corporate control. (Moxey & Berendt 2008: 2) Resorting confidence for the future and preventing regulatory overkill that would damage the entrepreneurialism needed to secure economic growth. Therefore, the global authorities should work with market participants to develop enhanced governance practice that will underpin other actions being taken to address the current problems. From the international perspective, the current turmoil suggests a need for the OECD, through Steering Group on Corporate Governance, to re-examine the adequacy of its corporate governance principles in these key areas (Kirkpatrick 2008: 2). Advice and examples contained in the OECD Methodology for assessing the implantation of the OECD Principles of Corporate Governance might also need to be revised (Kirkpatrick 2008: 2). Without exceptions, it is accepted that a fundamental factor leading to this crisis is that directors of banks and financial institutions failed to perform basic good corporate governance (Moxey & Berendt 2008: 2). For the purpose of this thesis, the weaknesses in corporate governance revealed by this crisis and some potential responses will be discussed. It will be argued that stakeholders' interests should be considered in directors' decisions making process and the importance of purposing long-term interests of the company and danger of short-termism will be discussed.

Above all, lack of accountability both within financial institutions and among management, shareholders and stakeholders (such as banking customers) is also one of the root causes of the global financial crisis (Kirkpatrick 2008: 2). For corporations and institutions, accountability and risk management are among the most fundamental concerns of directors, and from basic elements of their internal control systems (Clarke 2007: 60). Paul Tucker, head of markets at the Bank of England, claimed that "big, perhaps fundamental, changes have been under way in banking and capital markets for a few years now" (Tett 2007) while the increasing use of credit derivatives and the growing involvement of financial intermediaries such as private equity funds and hedge funds have successfully fragmented the debt and divided the risks into different levels.

In addition, an excessive concentration on short-term considerations, the result of a problematic remuneration and a bonuses structure that encouraged excessive short-termism by ignoring stakeholders'

interests, is another reason for the rapid financial growth in the last decade and the ongoing worldwide crisis. A lack of long-term goals and investment in human and social capital has been regarded as a rigorous problem for Anglo-American corporations, which leads to competitive disadvantages. Influenced by the fast growth of structured products and a heavy reliance on leverage, boards of banks and other financial institutions have been increasingly motivated to use borrowed money to create short-term profits rather than considering the long-term risks (Eckman 2008). Their short-term motivation has led to the pursuit of short-term reckless business strategies and insufficient risk management. The financial failures proved the pathology of the shareholder model, under which the company directors focus on short-term considerations. The facts that management vacancies tend to be filled through an external open labour markets and managers' performance over a relatively short-term period matters a lot in their career prospects, have also become significant factors in further stimulating them to increase the firm's short-term financial performance, mostly by increasing the share price of the company.

Furthermore, this short-term consideration in financial activities has arguably been exacerbated by the rapid growth of hedge funds and private equities as financial intermediaries. Those funds are well known for their speculative investment strategies and their goal of short-term financial gains, which further contributed to a lack of managerial accountability to their shareholders. It is now evaluated that hedge funds account for around 40–50% of all market trading activity worldwide (Hurst 2007 228). As of March 2007, private equity funds, hedge funds and other non-bank credit investment groups held over 50% of all lending to higher risk European companies, indicating that those speculative traders in assets have now become major players in the worldwide financial activities. The major focus for these traders in assets is to generate short-term positive "absolute returns" at the expense of long-term growth. In practice, those funds tend to deeply involve credit derivative trades, and use complex financial arrangements which make the investments more complicated and increase the difficulty of financial monitoring. In addition, the fact that in most countries hedge funds are facing less regulatory control than investment trust or mutual funds, also facilitate them to seek short trades, or even fraudulent commitments for returns (Hurst 2007 228). The short-term investment perspective and largely unregulated state of private equity groups and hedge funds are considered as significant factors in the instability of current financial markets.

Currently, most corporate governance recommendations in response to the crisis concern the future role and responsibilities of the directors of banks and financial institutions (Yip 2008: 493) Nevertheless, it is anticipated that this improvement in corporate governance in the banking and financial sectors will also shed new light on the performance of public company directors. In particular, recommendations for the enhancement of directors' accountability to shareholders, stakeholders' participation in corporate governance, and defects in short-term strategies are expected to further strengthen ESVP in the UK corporate governance regime.

PROMOTING CORPORATIONS TOWARDS A MORE ETHICAL LEVEL THROUGH COMPANY LAW?

In this section, Section 172 of the recently enforced Companies Act 2006 will be examined, mainly focus on emphasis of "long term" interests of the company and inclusions directors' duties towards various stakeholders explicitly mentioned in subsections of Section 172.

The Companies Act 2006 received Royal Assent on 8 November 2006, after a long period of debate in Parliament. Margaret Hodge, the Minister of State for Industry and the Regions, stated that the Companies Act 2006 "will bring major benefits to business by modernising and simplifying company law". The Companies Law Act 2006 has the purpose of introducing a modern, updated and flexible legislative corporate framework with clear and simple rules, in order to promote the competitiveness of UK corporations. This should bring significant benefits to UK businesses. The Companies Act 2006 is written in simplified language, and the Government claimed that the Act would help businesses save £250

million a year, including up to £100 million for small businesses. Based on the fact that the main framework of company law was constructed on foundations which were shaped by the Victorians in the middle of the last century and additions and amendments to this framework have resulted in "*real and substantial*" costs and problems, the reform to the UK corporate governance framework seems necessary. It is claimed by the Government that this piece of legislation is in effect the biggest revolution since the modern registered company was formed in 1844 (Birds 2007: 13). It is envisaged that the implementation of this Act will simplify the company law framework, enhance shareholder engagement, sustain effective long-term relationships with stakeholders, and balance the impact of corporate operations on the community and the environment.

The rule governing directors come from several sources and the general duties have been governed by the common law and developed over many years in case law with additional rules from the Companies Act 1985 (in particular, Part X). Companies Act 2006 sets out a new statutory statement on directors' duties which is described as their "general duties" in place of the common law and replaces Part X of Companies Act 1985. Most codified sections on directors' duties have been enforced in the UK since October 2007. The revised goal for corporate management pursuant to this duty has been termed as ESVP, a hybrid corporate governance model. Significantly, the new codified expression of directors' "good faith" fiduciary duty in Section 172(1) "captures a cultural change in which companies conduct their business" by introducing the concept of ESV into the UK corporate governance. Under Section 172 of the Companies Act 2006, directors are now subject to a "duty to promote the success of the company as follows:

(1) A director of a company must act in a way that he considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole, and in doing so have regard (amongst other matters) to –

(a) the likely consequences of any decision in the long term,

(b) the interests of the company's employees,

(c) the need to foster the company's business relationships with suppliers, customers and others,

(d) the impact of the company's operations on the community and the environment

(e) the desirability of the company maintaining a reputation for high standards of business conduct, and

(f) the need to act fairly between the members of the company.

(2) Where or to the extent that the purpose of the company consist or include purposes other than the benefit of its members, subsection (1) has effect as if the reference to promoting the success of the company for the benefit of its members were to achieving those purposes.

(3) The duty imposed by this section has effect subject to any enactment or rule of law requiring directors, in certain circumstances, to consider or act in the interest of creditors of the company.

This initial statement of directors' duties for the benefit of company's members reaffirms the shareholder value principle as a primary motivation in making corporate decisions. The interests of companies' members, namely its shareholders, are quoted as primarily purpose of promoting the success of the company. However, in fulfilling this duty, the directors are required to "have regards to" interests of various stakeholders for the long term interests of the company. By explicit recognition of the interests of

non-shareholder stakeholders, and of the long-term interests of the company, the ESVP approach advocated in Section 172 (1) was considered as an improvement to UK company law because it broadens the traditional narrow corporate governance framework.

In the Grand Committee stage in the House of Lords and throughout the passage of the Bill at issue was whether the duty to promote the success of the company was a new duty which therefore required a change in implementation arrangements to support this duty or whether it simply made no difference. It was suggested by Lord Sharman that a new duty would be formed to push the Anglo-American model of corporate endeavour "to a more not quite pluralist society but rather a northern European model where a group of stakeholders are involved". Lord Sainsbury, Under-Secretary of State for the Department of Trade and Industry, when clarifying the Government's position, contended that the Act would make a substantive difference by identifying specific factors that are relevant to the success of the company. The codification of directors' duties in the new Companies Act could be regarded as "a monitoring cost imposed on directors so that shareholders and prospective shareholders could better assess the risk/return profile of UK firms" (Clark & Knight 2008: 21) As implemented law, Companies Act 2006 embraces new elements concerning the interests of stakeholders and the way directors operating the company.

Considering the Long-term Interests of the Company

Before the Companies Act 2006, the maximisation of shareholder wealth was not only a theory, but also a basic feature of corporate ideology and public belief in the UK (Armou, Deakin & Konzelmann 2003: 535). This long-term privileged and deeply-rooted shareholder-centred culture pushed many directors towards the narrow belief that they were obliged under the current legal framework to take a more short-termist and shareholder-centric view at the expense of other corporate groups. The preceding legal framework, as a consequence, was criticised on the grounds of "limiting any accountability to stakeholders within a framework of, and to the overall purpose of, profit-maximization for shareholders" (Dean 2001: 70) ESVP emphasises the significance of coordinating stakeholder relationships for the corporations' long-term development, aims to make directors aware of the gradual transformation occurring in legal and social frameworks in which corporations exist and operate, and to subsequently adjust their managerial routines. For those directors who are enthusiastic in balancing the shareholder and stakeholder concerns, this provision offers them legitimacy to do so and not being sued, provided that their action does benefit shareholders too. Over the past few decades, the UK and the US have been striving to overcome this short-sighted weakness, and increased stakeholder consideration in corporate governance. The ESVP in new UK company law is a significant attempt at introducing such stakeholder considerations into the shareholder-centred scheme: it is hoped that the growing consideration of stakeholders' interests in codified directors' duties will be an efficient means of establishing a long-term corporate culture; and the systemisation of corporate disclosures will further enhance directors' regard for stakeholder interests.

By explicit recognition of interests of non-shareholder stakeholders and the long-term interests of the company, the ESV approach advocated in s 172 (1) was considered as a big improvement to the UK company law regime by potentially broadening the traditional narrow corporate governance framework. This enlightened approach emphasises the significance of coordinating stakeholder relationships for corporations' long-term development, with the aim of making directors aware of the gradual transformation occurring in the legal and social frameworks in which their corporations exist and operate, and thereby promoting them to adjust their managerial routines.

Also, the implementation of Section 172 (1) will help to reduce the "undue focus on the short term and the narrow interest of members at the expense of what is in a broader and a longer term sense the best interest of the enterprise". The requirement is corresponding to the requirements of hybrid model laid out in chapter 4 on directors' duties to increase the overall long-term market value for the company as a

whole on purpose of promoting the entity maximisation and the fostering of entity wealth. The legitimacy of allowing directors in pursuing long-term interests of corporations also allow directors to maximize shareholders gain while minimizing stakeholders losses while being social responsible corporations and make the convergence of corporate governance in the UK towards more enlightened directors possible and practical. This ESVP emphasis on the long-term development of the company has further implications for the development of the new UK business climate under the current worldwide economic recession, since short-termism has been criticised as an important reason behind the financial crisis which has been ongoing since 2007 (Coffee 2009:1).

Considering the Interests of Various Stakeholders and Judicial Interpretations of Section 172 (3)
Another big achievement in the Companies Act 2006 is the explicit inclusion of various stakeholders' interests in the section concerning the directors' duties to promote the success of corporations. Various stakeholders, including employees and members of the company (as the primary internal stakeholders) creditors, suppliers and customers (as the primary external stakeholders), and local communities, environment and the media (as secondary external stakeholders) were all taken into account in Section 172 of the new Companies Act. The new law spelt out a statutory duty to recognise the effect of their decisions on a wider public (Tricker 2009: 352). Although there are other stakeholders (for example, government and international organisations), Section 172 includes all the economic power stakeholders which are closely related to the corporate and financial markets. Taking these economic power stakeholders' interests into account will complement other internal and external monitoring mechanisms, and thereby promote greater managerial accountability.

CONCLUSION

Recent developments in CSR theory provide a socially responsible performance paradigm to establish a solid foundation for stakeholder management strategies. Recent developments in relation to CSR: corporate strategic policies, environmental stewardship and sustainability may all be viewed as implementations of stakeholder theory (Zambon & Del Bello 2005: 130). Since 2007, unusually at a time when life for most corporations has grown decidedly tougher due to the global financial crisis, businesses as diverse as KPMG, the German chemical giant Bayer, the tobacco multinational Reynolds, Ford, Starbucks, BP and Shell have all issued CSR reports, reaffirming their commitment to one of the most significant causes of the twenty-first century (Wild 2008). It is worth mentioning that the FTSE Group, an independent company jointly owned by The Financial Times and the London Stock Exchange and a world-leader in the creation and management of over 120,000 equity, bond and alternative asset class indices, sets FTSE4Goods inclusion criteria which are designed to measure the performance of companies against globally recognised corporate responsibility standards, and to facilitate investments in those companies. Apart from working towards environmental sustainability, it demands member stocks develop positive relationships with stakeholders, uphold and support universal human rights, ensure good supply chain labour standards and act to counter bribery.

In the UK, recent responses to the financial crisis from various authorities and firms further assert the importance of promoting stakeholders' interests for the long-term interests of the company. In the unfolding of this financial crisis, many of the factors seem to be inextricably linked to a failure in corporate governance. The disadvantages of the shareholder value principle, particularly the pursuit of immediately short-term interests and a lack of responsibility to stakeholders (primarily customers) have been suggested as the main reasons for the global financial crisis. The state of the global economy since 2007, in which there has been an excessively narrow focus on "the business of business" in the finance sector, has almost brought the global economy to its knees (Carey 2009). "It has been both a failure of governments to regulate and the failure of businesses to understand their broader ethical responsibilities and focus too narrowly on short-term profits" (Carey 2009). During the 2008 financial crisis, when there is a very serious economic downturn in the global economy, there will be a temptation, under the pressure

of low budgets, to disregard stakeholders' interests and downgrade CSR. However, in line with the suggestions of officials in the UK, it would be extremely dangerous for corporations to ignore stakeholders' interests and ethical concerns for corporations, particularly because this crisis was partly caused by an ethical failure in the first place (Carey 2009).

The progressive ESVP approach adopted in Section 172 is a positive step forward to the formation of more ethical companies and a more Europeanised corporate governance model which combines continental corporate governance characteristic into the shareholder primacy model. The Section, apart from putting much weight on the "long-term interests of the company", gave considerations on not only primary stakeholders, such as employees and creditors, but also secondary stakeholders, such as customers, suppliers, environment, local communities and media, in the context of directors' duties to promote the success of the companies for the benefit of its members. It is also observed that the Companies Act can only be regarded as a principle-based guidance for directors, in granting them legitimacy in considering the interests of stakeholders. However, the detailed duties of directors, as the deciding mind of the company, still rested very much on other legislations related to each individual type of stakeholder.

Please Contact the Author for Endnotes

LEADERSHIP IN THE HOTEL INDUSTRY: WHERE ARE WE?

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ABSTRACT

This research explored the relationships between the leadership competencies of Canadian hotel general managers and their impact on hotel performance. This timely study captures general managers during times of extreme environmental challenges and used the New Zealand Institute of Management Capability Index to capture leadership competencies. A regression was used to analyze the relationship between leadership competency and hotel performance as measured by revenue per available room (RevPAR). Findings indicated that one of the three leadership competencies, Visionary and Strategic Leadership had a statistically significant positive impact on RevPAR. This confirms leadership research in the field demonstrating that aspects of transformational leadership lead to improved organizational performance.

INTRODUCTION

The hotel industry falls within the realm of services and as such, carries with it all of the business characteristics of a service in contrast to a product. These differences include perishability, intangibility, variability, and inseparability (Kotler, Bowen & Makens, 2006). A hotel room is perishable as the inventory cannot be stored and a room not sold is revenue lost forever. The service travelers receive at the hotel depends on the front line employees and hotel organizations attempt to differentiate themselves on this feature through training and motivational proponents within their human resource strategies. It is vital in the service industry to have motivated and efficient personnel on the front line to ensure customer satisfaction. This is how profits are made in the service industry, by delivering customer service and great customer service is vital in the hotel industry for success (Ford & Heaton, 2001).

Characteristics of the hotel industry's work environment include long operating hours, a fast pace of activities, a labor intensive diverse work force, growing competition, and dynamic travel patterns which can lead to high levels of stress for those managing in it. It is also very capital intensive with large amounts of money tied up in physical structures, furnishings and equipment. The lodging industry at its best can be difficult to manage. The capabilities required of a hotel general manager are demanding due to the unique characteristics of the industry. This is because, typically, hotels operate 24 hours per day, seven days a week, and 365 days a year; demand fluctuates significantly by season and/or economic factors; there are high labor costs; and unique management skills are required to motivate a highly diverse complement of staff and team members. Compared to managers in other industries, these job characteristics may exert increased daily management pressures on hotel managers (Rutherford, 2002). Kay and Moncarz (2004) stated that due to the hotel industry's challenges of terrorism, political unrest, economic upheavals, technological advances, and overall travel patterns, there is a need to re-examine the knowledge, skills and abilities required for success. This paper will explore the importance of leadership both in these trying times and in the service industry such as hotels. It will also discuss the findings of an instrument used to assess the capability levels of managers with a special focus on the leadership component of this instrument.

TODAY'S ENVIRONMENT

The unsettled economic conditions in the travel industry in Canada from 2000 to the present have resulted from acts of terrorism, public health concerns such as Severe Acute Respiratory Syndrome (SARS) and

H1N1, Bovine Spongiform Encephalopathy (BSE or Mad Cow), forest fires, wide spread power outages and severe weather such as hurricanes and snowstorms with the year 2008 heralding the downward slide of the economy. Many challenges were created from this severe revenue loss and uncertainty and the most arduous test of a leader's abilities is during times of extreme stress.

Today's environment involves great changes and is more "dynamic and complex – different than it has ever been before" (Chathoth & Olsen, 2002. p. 7). The economic downturn has created great challenges. The occupancy level in Canadian hotels began to drop in the last quarter of 2008 and reached a new low in the first quarter of 2009. However, in a comparison to the United States (US), Canada's hotel financials dropped less. In occupancy, Canada dropped 6.1% compared to 9.8% in the US, average daily rate (ADR) by 0.6% compared to 7.1% ,and in revenue per available room (RevPAR) saw a 5.5% drop in comparison to a large 16.3% drop in the US. The downturn had the greatest impact on the luxury hotel market. The impact on the Canadian hotel industry was less as there are only a total of 53 luxury hotels in the Canadian market (Canadian Lodging Outlook, 2009). The travel market continues to struggle with a decline of 13% of international travelers to Canada in August 2009 compared to August 2008, and most notably a decline of 55.1% in Mexican travel due to H1N1 and the new Visa policy (Canada Tourism Commission, 2009).

Other challenges in the hotel industry in Canada included the current labor shortage, the rising price of gasoline, a strong Canadian dollar and large decreases in visitors. "By 2025, the potential labor shortage for the tourism sector is projected to balloon to nearly 257,000 jobs" (Canadian Tourism Human Resource Council). All of these factors are creating a "perfect storm", a culmination of factors that may never be experienced with this intensity again and are creating an alien environment for business leaders. During this time, leadership cannot take halfway measures to guide their organizations. "Leaders need to stay calm, look beyond the negative numbers and despite the near-term pressures plan for the future with a cool head" according to Roeland Vos, President Europe, Middle East and Asia Starwood Hotels and Resorts (Alessie, nd).

Leaders in the hotel industry have been sought and interviewed in attempts to identify solutions to the challenges of global recession. Two themes appear to run through the responses. One, that today's leaders have to rethink the business model and that what worked before may not work again in this different environment. Two, the leader must be visible, communicate, and build a strong committed top team. "It is the people in the company that make the company; they are the most valuable asset in leading any change" says Jean Gabriel Peres, CEO Movenpick Hotels and Resorts (Alessie, nd).

Research (Greger & Peterson, 2000) indicates the future of the hotel industry will include the following elements: Consolidation – there will be only five or six major players or hotel companies left due to mergers, acquisitions, and restructuring; Technological influence – Internet usage will continue to increase and greatly impact how people purchase their travel products; Globalization – hotel companies will continue to expand into new markets such as India and China; Diversity of guests – women will continue to make up 50% of the business traveler and will demand different treatment and amenities; Greater competition – even in this economic crisis, new hotels are being planned and built; Decreased gap between limited service and middle service; Economic instability

The above elements will ensure that effective leadership will become a competitive advantage and good leaders will become valuable. Also, these stressful times will create leaders with better skills and good leadership acumen may be forged from the turmoil. The timing of this study identifying leadership competencies during a lengthy difficult economic downturn was important in order to measure the cumulative effect.

LEADERSHIP

The definition of leadership can be defined as directly or indirectly influencing others, by means of formal authority or personal attributes, to act in accordance with one's intent or a shared purpose (Hillier, 2005). Leadership theories involve a level of control by the manager and the subordinate (Blake & Mouton, 1964; Kouzes & Posner, 2002; McGregor, 1960). When the manager is dominant, this is a directive style of leadership. As the employee becomes more dominant, the style becomes more empowering; giving the employee more control (Clark, Hartline & Jones, 2009). This is more of the transformational type of leadership that Covey (1992) refers to in his research in which a leader transforms the people and the organization with a vision and purpose that then bring about the changes required. See figure 1 for a diagram of the control continuum in these different types of leadership styles.

Figure 1: Leadership Continuum
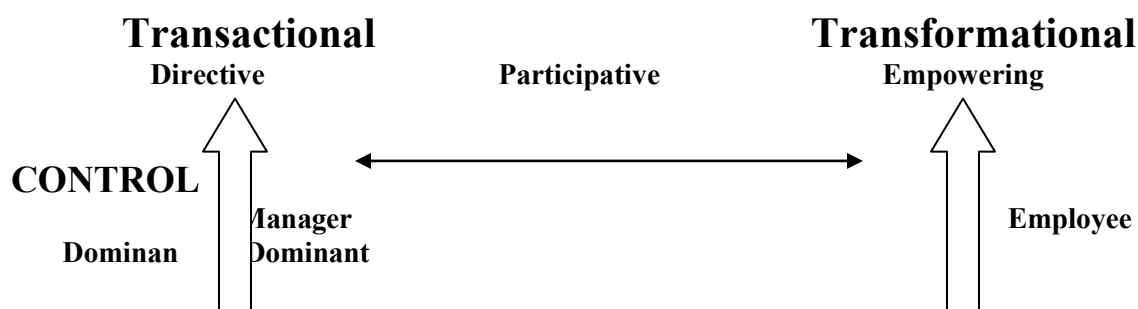
This figure shows the continuum of the directive or transactional style of leadership and the empowering or transformational style

Leadership styles can have a direct impact on the stress levels of employees and transformational leadership can mitigate stress and burnout as opposed to transactional leadership (Gill, Flaschner, & Shachar, 2006; Lyons & Schneider, 2009). Supervisory styles that undermine empowerment include authoritarian (high control), negativism (focus on failures), and failure to explain reasons for actions or consequences (Conger, 1990).

In every organization, high performance requires high morale. If the conditions outside the workplace do not contribute to the well-being of the employees, then the conditions within the workplace must. One's office, factory or warehouse can be a better place than the environment in which the employee lives; it can be safer and happier, while retaining its identity as a locus of production. Managers can create these conditions without spending a dime; it's not a matter of amenities, but of solicitous leadership. Compassion and communication are imperative during tough times (Carrison, 2009, p.1).

Greger and Peterson (2000) interviewed a number of hotel organization's CEO's asking what was important about leadership and the key themes running through the answers were the components of vision, the importance of communication and of empowering their people. Maier (2009) used the term 'spirit' to describe requirements for success. "In the hospitality industry, I have found the vitality of the organization lies in the spirit of its members: a spirit grounded in work satisfaction and morale of line-level associates" (p. 111).

As the hotel industry relies greatly on its employees to remain successful, the leadership style thought to be most effective is the empowering style where employees are given a large amount of control over their situations. This creates an environment in which employees can act quickly and efficiently when situations occur that require immediate attention such as a service issue. Major hotel companies such as Ritz Carleton empower their employees by entrusting them with the ability to make decisions that may

have a financial impact up to $300.00. The employee can do what is required to satisfy the guest and spend up to a certain amount to make it happen, and management does not question their actions or decisions. Research has found that "The foundations of leadership were summarized as consisting of trust in subordinates, an ability to provide an inspiring vision, communication and perseverance (Whitelaw & Morda, 2004). Also, according to research by Ford and Heaton (2001) on how leaders teach culture,

"The most important job of a leader may be to frame the culture's beliefs, define its values, reinforce the appropriate norms of behavior, recognize and tell stories about those who personify what the culture should mean for the customer, and find every possible occasion to celebrate when the members make good things happen for their customers"(p. 41.)

These findings are consistent with transformational leadership dimensions and link their importance to the service industry of hospitality.

Kouzes and Posner (2002) in their best seller book *The Leadership Challenge,* uncovered five practices common to personal-best leadership experiences. They are: 1. Model the way – behavior wins respect. Spend time, work side by side with colleagues, tell stories that make values come alive, be highly visible during times of uncertainty, ask questions, 2. Inspire a shared vision – speak the language of the constituents, use dialogue, know people's dreams and hopes, are enthusiastic, 3. Challenge the process - search for opportunities, recognize good ideas, problems shape leaders 4. Enable others to act – foster collaboration, teamwork and trust, use of the word "we" 5. Encourage the heart - use genuine acts of caring, recognition and celebration; ensure people see the benefits

These five practices appear repeatedly in research on effective leaders in the service industry and they link managers as leaders to staff as followers. Transformational leadership inspires staff to follow the vision of a manager with leadership qualities. "It is about engaging the emotions of individuals in the organization. It is crucial for leading change today" (Dearlove & Coomber, 2009, p.55).

PERFORMANCE

Measuring performance in service industries such as the hotel industry can be onerous due to the many variables that can influence the outcomes. The environment is extremely dynamic and the market demand can fluctuate dramatically. The performance measures themselves may be short term in nature such as evaluating nightly, weekly or monthly occupancy percentages and comparing to last year, or they may be long term in nature such as determining customer loyalty and employee satisfaction levels (Israeli, Barkan and Fleishman, 2006). Research has indicated that organizational performance is influenced by the characteristics of its leaders and top managers. Hambrick and Mason (1984) put forward the upper echelon (UE) perspective and argued that organizational outcomes, such as performance reflect the characteristics of its leaders.

Common financial metrics for hotel performance include occupancy (Occ %), a percentage calculated by dividing the number of rooms sold by the number of rooms available, average daily rate (ADR), calculated by dividing the revenue by the number of rooms sold, and revenue per available room (RevPAR), calculated by dividing the total revenue by the number of rooms available for sale. These are all commonly used statistics and have become benchmarks for the hotel industry, however, RevPAR is "often considered the most critical measure of operating performance, and by definition, encompasses an element of rate and rooms supply" (Enz, Canina and Walsh, 2001, p. 27). RevPAR was used to assess organizational performance by Namasivayam, Miao and Zhao (2007) in their investigation of the relationship between hotel compensation practices and the hotel's performance.

NEW ZEALAND INSTITUTE OF MANAGEMENT CAPABILITY INDEX

The New Zealand Institute of Management team developed an index used in this study to measure the competency level of the respondents. Doug Matheson (2004), the founding president, developed the New Zealand Institute of Management Capability Index (NZIMCI) to enable the benchmarking of manager performance. This instrument was based on research started in 1993 when the New Zealand Ministry of Commerce commissioned research into management competencies. The researchers (Page, Wilson & Kolb, 1994 as cited in Page, Wilson and Inkson, 2003) conducted a major literature review. The review included six focus groups to concept-map interviews with very successful managers, and a national survey of managers. The second phase of the research distilled the core set of skills and characteristics that were considered to be critical for effective managers.

Matheson (2004) defines capability as putting the competencies into practice and the instrument focuses on eight major drivers which are weighted: visionary and strategic leadership = 15%; performance leadership = 10%; people leadership = 10%; financial management = 10%; organizational capability = 5%; technology and knowledge = 5%; external relationships = 5%; and innovation – product and services = 10%. It also contains a performance measurement in which the respondents self rate their business performance from 0% = no results to 100% = excellent performance and is weighted at 30% (Refer to Appendix 1 for the full description). The NZIMCI has been adopted by the American Management Association and more recently, the Indian Institute of Management. Due to the focus of this paper, the main competencies to be reviewed are the three leadership competencies including visionary and strategic leadership, performance leadership and people leadership. When compared to the Five Practices of Exemplary Leadership as outlined by Kouzes and Posner (2002) these leadership competencies include those practices and align very closely with their theory. It is thought that measuring these three leadership competencies would indicate to what degree these managers are practicing the Five Practices of Exemplary Leadership.

The three leadership competencies of the NZIMCI are:

Visionary and Strategic Leadership
Articulates a clear and inspiring vision, actively fosters and encourages ownership of the vision by staff and ensures the vision is well understood, and motivates the employee to work towards achieving goals
The vision and supporting goals underpin and guide decisions and behaviors
Contributes effectively, with the board, to establishing strategies, objectives and plans with a view to growing the business, while meeting the needs of shareholders, taking account of employee, supplier, customer and other stakeholder interests
Demonstrates an international/global perspective and a good understanding of global markets

Performance Leadership
Ensures the organization is strongly goal, performance and achievement focused
Balances risk with achievement, not risk avoidance – is not risk adverse
The organization consistently meets its performance goals. The organization has a performance track record of growth and or continually improving performance
The organization's performance consistently is better than its competitors or other comparable firms

People Leadership
Attracts, retains, develops, motivates and leads an effective team capable of achieving company objectives
Human resource planning is an integral part of the annual business planning process
Provides enhanced leadership – acts as a role model, committed to developing subordinates and leading people

Strong on empowerment – allows scope for people to grow
Maintains a culture supportive of GEN – X & Y values – not stifled by structure and hierarchy
Grows people (Grows their CV). Demonstrates ability to work effectively with, and achieve results through a diverse range of people
Creates a stimulating culture

These elements are closely related to the dimensions of transformational leadership and are therefore used to measure the transformational leadership competencies of the respondents. If a manager scores high on these competencies, they are said to be using mainly the transformational leadership style, which is accepted to be the most effective style for the hotel industry in it current stressful situation.

GOALS AND METHODOLOGY

The intent of this study was to determine if any relationships existed between leadership competency and hotel performance. The benefits of this research are to increase the ability to predict organizational outcomes, the better selection and development of top managers, and the increased ability to predict outcomes based on the managers' level of leadership competency.

Based on the previous literature addressing managerial leadership, the following hypotheses were tested to investigate the impact of managerial leadership on performance:

H1: Visionary and strategic leadership has a significant positive impact on RevPAR.
H2: People leadership has a significant positive impact on RevPAR.
H3: Performance leadership has a significant positive impact on RevPAR.

A survey was directed to accommodation general managers of Canadian hotel properties with 30 rooms or more using a distribution list compiled from the Hotel Association of Canada membership directory, the provincial hotel associations; membership lists and corporate hotel groups. The survey included basic demographics, the New Zealand Institute of Management Capability Index (NZIMCI), and hotel performance measures. The survey was posted on a web page and emails were distributed to the general managers containing a hyperlink to the survey.

The hotel industry in Canada consists of 6,581 lodging establishments (Hotel Association of Canada, 2004) of which 3,464 operate on a year round basis and contain at least 30 rooms. This criterion is used by KPMG LLP, the consulting company that collects statistics on the Canadian hotel industry for the Hotel Association of Canada. This same criterion was used for this research.

RESULTS AND DISCUSSION

The hotel associations and corporate hotel groups that agreed to participate and circulate the survey to their managers involved a total of 952 general managers. The responses totaled 184 completed surveys of which 183 were usable and gave a response rate of 19.2%. The sample consisted of 112 male general managers (61.5%) and 70 female general manager (38.5%). One respondent did not disclose their gender. Most were graduates of a two-year college program (39.7%), or university undergraduate degree (37.2%). Sixteen percent had completed a high school diploma, while 3.8% had postgraduate university degrees. Three percent had other forms of post secondary training. The average age was 43.9 years and they had been in management positions for an average of 16 years of in the position of general manager for an average of 6.9 years.

The independent variables were the leadership scales of Vision and Strategic Leadership, Performance Leadership and People Leadership. The independent variable was RevPAR. Data were analyzed by

checking for distribution normality for both performance and leadership measures. The distributions were not normally distributed, so they were transformed to achieve normality. The leadership indices were transformed by squaring, while RevPAR was transformed using the square root. Then the transformed variables were subjected to a multiple regression analysis, where the leadership indices were regressed upon RevPAR. The leadership variables were tested for multicollinearity. Variance inflation factors ranged from 1.4 to 1.5 indicating no multicollinearity across the variables.

A regression was then performed that revealed that Visionary and Strategic Leadership had a positive effect on RevPAR, confirming the first hypotheses (F = 3.33, df = 151, p = .022). The regression indicated that there was no statistically significant impact on performance caused by People Leadership or Performance Leadership competencies. The betas for the leadership variables ranged from .033 to .213, indicating that Visionary and Strategic Leadership was a much stronger factor impacting RevPAR. The results are summarized in table 1.

Table 1: Regression Results

Model	Beta	P
Visionary/strategic Leadership	.213	.029
Performance Leadership	.033	.726
People Leadership	.035	.716

This table shows the results from the regression of the three leadership competencies with RevPAR

The results reveal that that Visionary and Strategic Leadership styles are the most effective at creating an increased RevPAR, which is a key consideration, especially during a time of economic challenge in the tourism industry. Visionary and Strategic Leadership mirrors the best-practice described by Kouzes and Posner (2002) that involves creating a shared vision, modeling the way, challenging the process, and enabling others to act.

RECOMMENDATIONS

Managing organizations has become a challenge in today's business climate as environmental pressures present situations that require creative solutions. Leaders are required to facilitate growth in organizations. For profit-based business models it is important that performance be measured using verifiable, comprehensive and objective methods.

RevPAR is the standard in the hospitality industry that captures profitability across organizations regardless of size or service level. Using RevPAR as the performance standard allowed this research to effectively analyze the extent to which three different leadership capabilities contributed to the financial benchmark in the Canadian hotel industry.

The results of this research confirm the findings of previous studies of leadership that show that transformational leadership styles are the most effective approaches to lead an organization during challenging environmental times. Visionary and Strategic Leadership involves transformational leadership styles, combining them with a focus on goals and strategies, and creative solutions. Managers must communicate their vision for the organization, moving followers to embrace that shared vision in order to obtain buy-in, or ownership, of the vision across the organization. Unlike transactional leadership where goal attainment is facilitated by the sharing of something of value between leaders and followers, or reward contingent on accepted performance ((Dearlove & Coomber, 2009; Erkutlu, 2008), transformational leaders are able to deliver goal achievement by inspiring followers to desire the same vision, and outcomes (Dearlove & Coomber, 2009). There is an emotional connection between leader and

follower, between managers and subordinates, that is absent in the transactional leadership environment (Dearlove & Coomber, 2009).

This research also showed that two leadership capabilities, Performance Leadership and People Leadership, did not have a statistically significant impact on RevPAR. Performance Leadership focuses primarily on goal setting, risk assessment, achievement orientation, and competitive performance. This leadership capability does not involve role modeling or leading the human resource in a meaningful and effective way. The inability of this particular capability to influence RevPAR is particularly relevant because it demonstrates that a focus on goals and financial performance does not result in growth for such performance measures. The notable absence in Performance Leadership is its lack of focus on motivating the human side of the enterprise. It is intriguing that the only leadership measure to deal directly with the organization's goals and overall performance achievement does not significantly impact growth. However, this finding is consistent with research on leadership that has repeatedly demonstrated that followers need to be empowered to accept a vision before they will work hard to achieve it.

People Leadership focuses on attracting, motivating and retaining top-notch talent for the organization. While this is an important leadership capability, it was not statistically significantly related to RevPAR in this research. While this capability did focus on empowering subordinates and creating a stimulating culture, it did not focus on sharing an organizational vision. Possibly, it is the sharing of the vision, a fundamental element in transformational leadership that has the edge in bringing team focus to achieving a goal.

There are limitations to this research. The three leadership variables chosen were from the capabilities identified in the New Zealand Management Capabilities Index. These are single-item questions rated based on the extent to which they are used in the firm. Similar research conducted with more complex leadership scales may result in more descriptive results. Also, the Canada-wide focus provides feedback from one industry, in one nation, when a global study would provide more compelling evidence to further understand the relationships in the data.

This research provides a glimpse into the complex and fascinating relationship between leadership and organizational performance. It provides yet more evidence to enhance our understanding of leadership and outcomes. However, more research is necessary. It would be interesting to have a comparative study between the three leadership competencies addressed in this research and RevPAR in non-Canadian industries. It would also be very useful to approach this topic in a way to further isolate and compare the fundamental differences between the People Leadership variable, and the Visionary and Strategic Leadership variable, and their relative impacts on RevPAR. These investigations are strongly recommended for future research.

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IS THE TREASURE HUNT STRATEGY WORKING FOR COSTCO?

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ABSTRACT

The purpose of this paper was to find out if Costco's "treasure hunt" strategy was effectively attracting customers and increasing spending per visit. It was an exploratory research to provide insights in the perceptions of Costco customers in reference to new, seasonal, and premium products ("treasure hunt") in their shopping habits, in comparison with purchasing regular items. An initial survey was developed for this purpose and sent to a sample of 150 individuals with a 55.33 % response rate (83 completed the survey), and a second survey was sent to the same sample to find out additional complementary information, this time with a 29% response rate. The results showed that only 4% of the sample population (that shop every three months at Costco) was predominantly attracted to these seasonal and premium items; however, all respondents agreed that these items are an important complement to the regular purchases, and that they increase their spending per visit. On the other hand, results also confirmed that these items do not necessarily increase the frequency of visits for Costco members of this group.

KEYWORDS: Costco, treasure hunt, merchandising strategy, marketing, consumer behavior, shopping habits, strategy

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).

Costco's key strategies consist of low prices, limited selection, and a treasure-hunt shopping strategy which generates excitement and surprise to the customer. The latter consists of having 1,000 items (out of 4,000 total) to be seasonal or specialty type of products that are constantly changing (Thompson, 2007). The purpose is to attract shoppers to buy more than they do otherwise by offering them irresistible premium items. "We try to get that sense of urgency in our customers" says Sinegal (Thompson, 2007).
His overall 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 became 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 Wal-Mart, 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 expensive 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 to entice higher purchases more frequently.

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. 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. Costco is the world's largest seller of fine wine (Thompson, 2008). On a recent survey conducted by consumerreports.org to more than 6,903 subscribers, Costco was rated the highest of all retailers with 85 points (out of 100). Furthermore, for purchases of jewelry and clothes, subscribers buying at Costco were significantly more satisfied with the quality of these products, versus the other eight retailers (Kohl's, Target, JCPenney, Sears, Sam's Club, Macy's, Walmart and K Mart), including some more specialized in these products like JCPenney and Kohl's (Consumer Reports, 2009). Even on the verge of an economic recession at the end of 2008, Costco's TV sales were up 50% versus the previous year, and traffic in the stores increased 2.8% although the average transactions declined by 7.5%, same as net sales by 3 percent (Wolf, 2008). This data validates how strong the preference for this type of "treasure hunt" products is for the Costco member, despite difficult times.

Regarding advertising, Costco has also broken all paradigms of traditional retailing by using the most inexpensive and effective way of promotion: 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), that reached revenue of $ 1.1 billion dollars in 2006, which compensates for lower margins in all items, as mentioned before. These merchandising tactics combined can create a compulsion 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.

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 and a 24-hours free technical assistance for any electronic items purchased at the store. 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 more 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 influence 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 previously, using a direct approach and an exploratory research methodology with a sample of 150 individuals (convenience sample). The basic research questions are: 1) How much are Costco members attracted to distinctive seasonal and premium items? 2) do seasonal and premium items foster more frequent visits and larger disbursement each time?

The first 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.

The second survey (Appendix B) was sent by email a few months later to the same population, but this time with only a 29% response rate. The ten questions on the second survey inquired about the population characteristics and options to shop at other competitors, as well as types of memberships held (basic, business, or executive) and amount of money spent per visit and per year, to complement the data from the first survey.

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, which is precisely the case for this paper.

SAMPLE CHARACTERISTICS

The sample consisted of 150 persons, adult oriented and predominantly Hispanic. For the first survey, out of 77 respondents, 57% were male and 43% female. It is interesting to highlight that no respondent was under 25 years old. In fact, 56% of the population surveyed was between 25 and 50 years old, and 44% were older than 50 years. The most relevant feature of this sample is that 70% were Hispanic and 24% Caucasian. So, our exploratory study of Costco's treasure hunt strategy comes from an adult and predominantly Hispanic population.

DATA ANALYSIS AND DISCUSSION

In order to evaluate how much Costco customers are attracted by regular or seasonal/premium items, we analyzed first the shopping pattern of our sample. Ten respondents (14%) declared that they shop at Costco 4 times per month and 25 of them (35%) shop 2 times per month. These two categories are roughly the frequent clients that go to Costco for 'regular' items and maybe also some 'seasonal/premium' items. Then, we have 27 (38%) respondents that visit Costco once per month. This may be a good representation of the group that looks for 'seasonal/premium' items, or just a group with preferences similar to the preferences of the frequent clients but because of 'small' families they do not need to go to Costco for regular items more than once per month. The next categories contain 3 respondents (4%) that visit Costco once each 3 months and 6 respondents (8%) that go to Costco only occasionally. These two groups are not regular clients, so certainly they are more likely driven by seasonal/premium items, but it may be also that they are just looking for bulk items.

The first approach to distinguish these groups is by considering their own perception about why they shop at Costco. This self-perception was captured by the second question in survey 1, which is an open-ended, word-association question that asks for the first word that comes to mind when thinking of Costco. The results show that the most important reasons to shop there, irrespective of the frequency of shopping (once a week, every two weeks, once a month, every three months or occasionally), are price The price category includes the following answers: discount, cheap, bargains, low prices, competitive, and savings, quality, bulk items, service, and value. Only 8% of responses (6 individuals) mention that seasonal and/or premium items are important reasons to shop at Costco.

In order to better understand the shopping patterns of our sample, we developed a cross tabulation of frequency of shopping and the important reasons to shop at Costco, shown as Table 1 below. To analyze this table, we distinguish three zones. The top zone includes the top three lines where the reasons mentioned by respondents are important or very important for 80% or more of the respondents. Then, price and quality, for instance, are important or very important for 100% of respondents that buy 4 times and 2 times per month at Costco. We think that the reasons included in these top zone are categories that strongly determine buying patterns at Costco. The bottom zone includes the last three lines where the reasons mentioned by respondents are important or very important for less than 20% of respondents. We can see that food samples and seasonal items, for instance, are important for 0% of occasional buyers. We think that the reasons included in this group are not determinants of buying patterns. There is an intermediate zone between the top and bottom sections that includes reasons important for less than 80% and above 20% of respondents. We think that we cannot conclude if those are strong reasons to determine buying patterns without a larger sample and explicit statistical hypothesis testing. Therefore, we focus only on the top and bottom sections.

Given the previous framework, we conclude the following from the data in Table 1:

1. Price (p) and quality (q) are key for regular buyers (4 and 2 times per month) and also for once per month buyers. Price is still important for buyers who show up every 3 months, but not so for occasional buyers. Quality is not that relevant for the latter two groups.
2. In addition to price and quality, the most frequent buyers consider return policy (R) and service (Sr) as fundamental reasons to go to Costco, and are the only group that cares about service. The Return policy is also significant to attract buyers that shop once per month. Return policy makes sense with seasonal/premium items, so it seems the most frequent buyers and monthly buyers may be acquiring not only regular stuff but also seasonal/premium items.
3. However, the only group which directly recognizes that new and premium products (N and S) are very important is the clients that shop every 3 months.

Table 1: Frequency of shopping at Costco and Important Reasons of Buying at Costco

Percentage	about once a week	about every two weeks	about once a month	every three months or so	ocassionally
100	P,Q	P,Q		P,N	
90-99	R		P,Q		
80-89	Sr		R		
70-79		R,L,V			P
69-69	L,V	N,Sr	L,N,V,Sr	R,L,Q,S,V	Q
50-59	S,N	S	S		
40-49					
30-39		F	F	F,Sr	L,N
20-29					
10-19	F				R,V,Sr
1-19					
0					F,S

Note: P is price; Q is quality; R is return policy, Sr is service; L is location, V is variety; N is new products; S is seasonal products, F is food samples. The Percentage on the left is the accumulated percentage of respondents that said, each of the previous variables, say P, is 'very important' and 'important.' Data comes from cross tabulation of questions 3 and 8 of Survey 1.

Direct results that address the seasonal and premium items are presented in Table 2 below. The group that buys once every 3 months is clearly the group that goes to Costco for this type of items. All of them, 100% say that seasonal and premium products are important or very important for them (Table 2, first question). These answers within the other groups are in the range of 53% and 59%, being the lowest for the most frequent buyers.

It seems that the most frequent buyers are attracted by regular items rather than seasonal/premium items. This is based not only on the previous results of frequency buying patterns, but also on spending patterns. As we can see in Table 2 (Question 2), only 23% of the respondents that visit Costco every week declared that seasonal/premium items represent more than 20% of their weekly receipt. However, for buyers that visit Costco once every 3 months, this percentage is 67%. Therefore, buyers who visit Costco once every 3 months, non frequent buyers, are not only attracted by seasonal/premium items, but they spend most of their purchases in these items. Frequent buyers are most attracted by regular items and these account for most of their spending at Costco.

Finally, when Costco buyers are asked if seasonal/premium products make Costco more attractive than competitors, 70.1% of all respondents say that they agree or strongly agree (Table 2, question 3). However, this answer is 100% for once every 3 months buyers and 62% and 63% for frequent buyers (Table 2, question 3). Again, reinforcing the idea that non frequent buyers are more attracted to seasonal/premium items than frequent buyers.

Table 2: Cross table questions for Seasonal and Premium Items

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 is this to make you go to COSTCO.

Answer Options	How often do you shop at COSTCO?					Response Percent	Response Count
	about once a week	about every two weeks	about once a month	every three months or so	ocassionally		
Very important	2	3	7	1	0	16.9%	13
important	5	13	8	2	0	36.4%	28
Somewhat important	6	9	4	0	2	27.3%	21
neutral	0	1	3	0	2	7.8%	6
not important	0	1	5	0	3	11.7%	9
total answers	13	27	27	3	7		77
important and very important (%)	**53.8**	**59.3**	**55.6**	**100.0**	**0.0**	**53.3%**	

What percentage of your typical COSTCO purchase is comprised of new-to-the-store or seasonal items?

Answer Options	How often do you shop at COSTCO?					Response Percent	Response Count
	about once a week	about every two weeks	about once a month	every three months or so	ocassionally		
0 to 10%	8	11	16	0	5	51.9%	40
11 to 20%	2	8	5	1	1	22.1%	17
21 to 40%	3	6	6	1	1	22.1%	17
41 or more	0	2	0	1	0	3.9%	3
answered question	13	27	27	3	7		77
0 to 20%	**76.9**	**70.4**	**77.8**	**33.3**	**85.7**	**74.0%**	
Above 20%	**23.1**	**29.6**	**22.2**	**66.7**	**14.3**	**26.0%**	

The fact that COSTCO has new, seasonal and ever-changing products makes it more attractive than other similar retailers

Answer Options	How often do you shop at COSTCO?					Response Percent	Response Count
	about once a week	about every two weeks	about once a month	every three months or so	ocassionally		
Strongly agree	2	5	4	0	0	14.3%	11
Agree	8	17	12	3	3	55.8%	43
indifferent	3	3	8	0	4	23.4%	18
disagree	0	2	2	0	0	5.2%	4
strongly disagree	0	0	1	0	0	1.3%	1
answered question	13	27	27	3	7		77
Agree and Strongly Agree (%)	**61.7**	**63.1**	**44.6**	**100.0**	**42.9**	**70.1%**	

The second survey revealed additional information including demographics, and results show that 63% of the sample had 3 to 5 family members, 30% had only two members, and the rest had more than five people in their families. 53% of them were relatively close to the store (5 miles or less), 33% live between 6-10 miles, and only 13% were further away from a Costco warehouse. Regarding the type of membership in the sample, 54% had executive, 38% basic, and 8% had the business membership, which is consistent with the expected purchases for both business and personal purposes (53% personal only and 47% both).

Regarding possible alternative options with Costco's competitors, 48% had other similar stores available within 10 miles from Costco, which means increased competition for the same target market. 15% had similar warehouse stores between 11-15 miles, and another 15% had other stores located 16-20 miles away. The rest did not know or were not sure, but only 27% were members of a similar warehouse store. 50% of the respondents have access to use a car, 37% can use a van, and 13% can use pickup trucks.
In reference to the amount of money spent per visit, 43% responded they spend between $ 100-200, 33% less than $ 100, and the rest spend more than $ 200 per visit. On a yearly basis, 30% of the responses stated they spend less than $ 1000 a year, 15% between $ 1000-3000, another 30% spend between $ 3000-5000, and 25% of the sample spend more than $ 5,000 dollars a year. Two of the respondents to this question said they buy more than $ 15 000 a year in Costco.

CONCLUSION

The answer to the research question to explore how much of this "treasure hunt" strategy is really enticing customers to shop more often or buy more as a result of impulsive tendencies rather than cognitive perception was proven only for buyers who visit the store once every 3 months, but was not demonstrated for frequent buyers of four, two and one visit per month.

The answer for the second question regarding seasonal/premium items fostering more frequent visits and higher expenditure per visit has two parts. On the one hand, we can say with certainty that these items do not promote more frequent visits because it is the once every 3 months group of buyers that is strongly attracted to it. The more frequent buyers just find a complement but not a strong reason to go there. On the other hand, tickets amounts are higher because of these items for all groups. This is also valid for the frequent buyers that spend 23% of their expense on seasonal/premium items. Therefore, we can imply that the seasonal and premium items do increase the total purchases per visit, but not necessarily the frequency of visits.

The group that seems to be very attracted to seasonal/premium items is not big respect to the others, only 4% of our sample. The bulk of Costco clients in our sample dominated by Hispanic adults are buyers that shop twice per month and once per month. The average visit is 20 times per year, just a little bit below the 22 average mentioned by Boyle (2006) for a Costco members. Price and quality are very important for our sample but not seasonal/premium products. It may be that price or a combination price/quality and limited selection of regular items is enough arguments to entice buyers to buy more frequently. It may be also that the combination price/quality of bulk items is the argument of competitive advantage against close competitors that may only have price advantage. There is no doubt that seasonal/premium items generate some level of excitement for all Costco members but the effect on incremental demand seems to be still marginal.

One possible limitation of this research was the sample population, which consisted of mostly Hispanic adults, based on convenience sampling selection, although we do not have clear evidence that shopping habits of this sample differ from the rest of Costco members.

This exploratory research supports the possibility for developing the hypothesis that:
H_1= the "treasure hunt" merchandising strategy implemented by Costco is a determining factor in increasing store sales for the non-frequent buyers. A subsequent descriptive, conclusive research study will be necessary to test that hypothesis with a larger sample.

APPENDIX A: SURVEY ONE

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 II: SURVEY TWO

1. How many people are in your household?
2. How many miles (approximately) does it take for you to travel to Costco?
3. How many miles is it for you to an alternate Club (Sam's, BJ Wholesale etc)?
4. Do you have a membership in more than one club?
5. What is the largest vehicle regularly available to you?
6. What type of membership do you have?
7. Do you shop at Costco primarily for Personal, Business or a combination?
8. Approximately how much money do you spend each year at Costco in US dollars or equivalent?
9. Approximately how much do you spend (in dollars) at Costco on eachvisit?
10. About what percentage of your total purchases are made at Costco? Including not only food and cleaning items, but also electronics, clothing, gifts, etc.

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STICKY SG&A COST BEHAVIOR AND ITS CHANGES IN JAPAN

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ABSTRACT

This study examines whether Japanese firms' SG&A costs are sticky. We also investigate the determinants of cost stickiness in Japan and test whether Japanese managers changed their cost behavior after the stock market collapse in 1990. We find that similar to US firms, Japanese firms also demonstrate sticky SG&A cost behavior; however, the stickiness of SG&A costs in Japan is less likely to be adjusted due to temporary changes in their performance. We also find that there is a significant decrease in the magnitude of stickiness in Japan after the asset bubble burst, showing that Japanese managers adjusted their cost behavior in the post-bubble era.

ANALYSIS OF THE DAMAGES OF THE FINANCIAL CRISIS 2008 ON THE FINANCIAL STATE OF JAPANESE LISTED FIRMS AND STOCK MARKET PERFORMANCE

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ABSTRACT

Financial crisis 2008 has caused a significant decline in the world economy, stock prices tumbling, companies going bankrupt, banks bailouts etc. This research focuses on the negative impact of the financial crisis on Japanese leading companies which are listed in the Tokyo Stock Exchange market (TSE). Statistical data analyses are carried out on the time series of their financial state (such as, ordinary income, ratio of labor cost to sales, ratio of cash and deposit to sales, ratio of special charge to sales etc), and the stock market indices (such as, PER, PBS, EPS, BPR etc) before and after the crisis. The results of our statistical analyses show that, the financial crisis has damaged both the state of corporate finance and the stock market performance seriously. The problems of the inefficient capital market and the underestimated share prices are pointed out and discussed based on numerical analyses. And how to estimate the probability of rare event of a listed firm, such as the probability of bankruptcy or the amount of VaR (Value at Risk) is proposed in this study based upon a simulation approach.

JEL: G01; G32; C15

KEYWORDS: financial state, performance of stock market, Value at Risk

INTRODUCTION

It is well reported that the financial crisis 2008 broke out with the collapse of Lehman Brothers. The financial crisis has damaged the global economy significantly. By now it has been one year more since the crisis broke out. During this period, all firms suffered from the sudden change of the business environment and struggled for survival. Some of them survived, and some of them went bankrupt. And financial state of many firms fell into red. Many ones are burdening of a hefty loss, though, they luckily survived aftermath of the crisis outbreak.

Japanese industries which are heavily damaged by the financial turmoil are finance sector, real state sector, and other export-oriented sector, such as, the automobile industry, the breaking news surprising everybody in Japan is Toyota, the giant of the world automaker, falling into deficit financial state after it kept steady profit for 71 years.

There are also other worried events being observed in Japan.
1) Tumble of the stock market
The Nikkei225 Index dropped from about 10,000 to 7,162 points on Oct. 27, 2008. Most of the listed stocks were sold lower than the prices which were bought before. The collapse of DOW INDEX and NIKKEI225 INDEX are plotted in Figure 1 and 2. For example, the stock price of Citibank in Japan was traded about \4,500 per share before the crisis, but it dropped to about \100 at its hardest time after the crisis, almost a 45 times shrink! Now it climbs up to around \400.
2) Chaotic foreign exchange market

Being short of belief in US dollar, many institutions or individual investors have adjusted their portfolio components in foreign currencies, by selling US dollar and buying Japanese Yen. On the other hand, the production of natural resources, such as iron ore mined in Australia, was shrunk due to the reduction of buyers' demand. It caused the slope of Australian economy. The value of Australian dollar fell into its bottom point during this decade.

3) Deflation

Recent consumer prices are dropped compared to those in the last quarter, according to the announcement of Bureau of Statistics of Japanese Government. Consumers tend to control their consumption fees to deal with the uncertainty in the future.

Figure 1: The Collapse of DOW
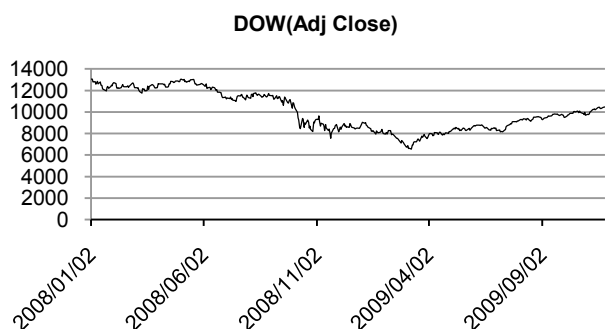
This Figure shows the collapse of DOW INDEX from Jan. 2008 to Sept. 2009.

Figure 2 :The Collapse of NIKKEI225
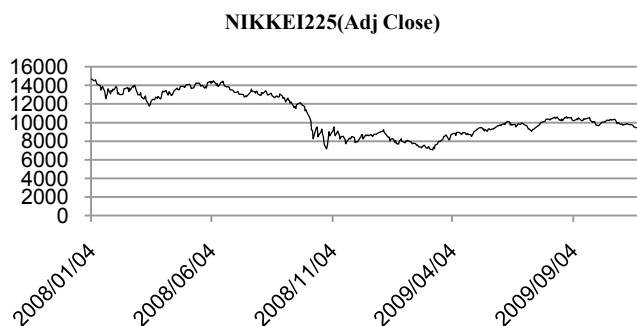
This Figure shows the collapse of NIKKEI225 INDEX from Jan. 2008 to Sept. 2009.

Under such circumstances, it is clear that the economy is confronting with serious challenges. In this work we firstly analyze the main financial ratios of the firms listed in Tokyo Stock Exchange, to see what kinds of changes happened aftermath of the financial turmoil, as to grasp the whole picture of the damages quantitatively, mainly based on the time series data of their balance sheet (B/S) and profit-loss report (L/P). Then results of analyses of TSE market performance are shown and market inefficiency is discussed. And we also discuss the possibility of making use of the finite data observed during the crisis for predict or risk management. The data sets used here obtained from Nomura Database, and NikkeiNeeds Database, and Yahoo Finance.

This paper is organized as follows. In section 2, we list up what financial ratios are studied and give the results of statistical analyses of banking sector, as an example. In section 3, analysis results on the indices

of the performance of TSE before and after financial crisis are listed up and summarized. In section 4, we propose to apply Bootstrap method to the finite data observed in the financial turmoil, as to predict or measure the risk, such as estimating the VaR. Section 5 we provide some concluding remarks.

FINANCIAL RATIOS AND INDICES OF MARKET PERFORMANCE

There are many financial ratios being used in evaluating corporate state. And some are accounting for stability; some are accounting for development; and some are accounting for productivity etc (Okuno, 1978). Here, since the limited space, although each sector in TSE has been analyzed, we just give an example of banking sector, and present a few of important ratios calculated from the sector. The following ratios are selected from our analyses. Namely,

1) Ordinary Income
2) Ratio of Labor Cost to Sales
3) Ratio of Cash and Deposit to Sales
4) Ratio of Special Charge to Sales

The results are summarized in Table 1, 2, 3, and 4. Seen from the Table 1, the mean and median of ordinary income became smaller and smaller as time went on. And it reached its bottom point in 2008. Furthermore, the minimum was -78.47%, the ever worst record during four years.

Table 1: Ratio of Ordinary Income

Year	2005	2006	2007	2008
Mean	0.24806	0.27975	0.27594	0.24006
Median	0.21505	0.23679	0.21455	0.17078
S.D.	0.24614	0.25425	0.22588	0.29312
Kurtosis	3.18092	2.88385	4.68294	3.51991
Skewness	1.13560	1.11036	2.30091	0.80900
Range	1.39920	1.41051	0.96786	1.76448
Min	-0.42064	-0.44399	0.00667	-0.78470
Max	0.97856	0.96652	0.97453	0.97978

This table shows the Ratio of ordinary income. S.D. means Standard deviation. From 2006 to 2008 the mean and median indicate that the ordinary income reduces.

Seen from Table 2, the mean and median of labor cost reduced every year. One factor is that salary or allowance of bank employee was cut while bank bailouts were carried out by the Japanese government several years ago. Another considerable possibility is that banks may have reduced their employees after the outbreak of the financial crisis, instead of employing part time staffers. The standard deviation in year 2008 reached the minimum as well. It seems that the whole bank sector was doing worse.

Table 2: Ratio of Labor Cost to Sales

Year	2005	2006	2007	2008
Mean	0.232726269	0.21816671	0.208614998	0.192335555
Median	0.264124388	0.258309724	0.238178722	0.225757266
S.D.	0.089463861	0.088015314	0.084440949	0.082104334
Kurtosis	0.978564898	0.494002072	0.496869181	0.227034152
Skewness	-1.33996112	-1.24636108	-1.189246873	-1.110403764
Range	0.349355592	0.322324117	0.325427462	0.308003635
Min	0.004111969	0.002973806	0.00355443	0.004883231
Max	0.353467562	0.325297923	0.328981892	0.312886866

This table shows the Ratio of Labor Cost to Sales. S.D. means Standard deviation.
Seen from the table, the mean and median of labor cost reduce every year..

Seen from Table 3, the cash and deposit to sales reduced as well, both mean and median reached their recent minima in 2008.

Table 3: Ratio of Cash and Deposit to Sales

Year	2005	2006	2007	2008
Mean	1.669729073	1.505518732	1.099028515	0.951461393
Median	1.654398499	1.275987362	0.934874402	0.827024478
S.D.	0.944394489	1.383953398	0.767968122	0.549873842
Kurtosis	-0.792035139	23.80848494	3.712781515	1.116948394
Skewness	0.083298956	4.088646382	1.658497675	0.694576074
Range	3.706189837	10.10179791	3.955506118	2.739232597
Min	0	0	0	0
Max	3.706189837	10.10179791	3.955506118	2.739232597

This table shows the Ratio of Cash and Deposit Sales. S.D. means Standard deviation.
The mean and median show the lowest level due to the crisis.

The special charge is an item for recording the special loss of a bank, such as, loss of bad loan, and loss of devalued securities etc. Seen from Table 4, the special charge to sales reached the largest value in recent years. It means the larges loss occurred after this crisis.

Table 4: Ratio of Special Charge to Sales

Year	2005	2006	2007	2008
Mean	0.100244771	0.071590512	0.022848483	0.101035345
Median	0.038718291	0.041947068	0.028993911	0.061700238
S.D.	0.240920695	0.12066669	0.281125572	0.135104506
Kurtosis	40.50122968	3.28914024	56.68531198	7.592365317
Skewness	5.904574848	0.841079098	-7.322591709	2.456321106
Range	1.891528253	0.75461547	2.419015996	0.8446791
Min	-0.097589244	-0.323962165	-2.118440425	-0.126020733
Max	1.793939008	0.430653305	0.30057557	0.718658367

This table shows the Ratio of Cash and Deposit to Sales. S.D. means Standard deviation.
The mean and median show the lowest level due to the crisis.

These are the results we obtained from the banking sector. Those descriptive statistics have shown us how deeply the banks are damaged by the financial crisis. Actually other sectors are heavily damaged as well. However, we just omit and skip listing up all those results here to save some spaces.

Table 5: Firms, PER, PBR, EPS, BPS, and Average Stock Price (From 2004 to 2009)

	Firms	PER	PBR	EPS	BPS	Average Stock price
Mean	1663	55.497	1.392	11.546	296.703	413.456
Median	1690	36.1	1.4	12.41	289.29	440.46
S.D.	61.982	92.382	0.288	3.051	19.674	88.679
Kurtosis	-0.085	33.194	-0.187	6.405	-0.754	-0.0197
Skewness	-1.108	5.394	-0.237	-2.604	0.694	-0.714
Range	210	658.6	1.2	13.59	70.48	362.08
Min	1516	18.3	0.8	0.6	270.65	218.06
Max	1726	676.9	2	14.19	341.13	580.14

Descriptive statistics on the number of listed firms, PER, PBR, EPS, BPS, Average Stock Price

PERFORMANCE OF THE STOCK MARKET

Here in this section, we discuss the following indices of the performance of Tokyo Security Exchange (TSE) market. Namely,
1) PER (Price earning ratio)
2) PBR (Price book-value ratio)
3) EPS (Earnings per share)
4) BPS (Book value of equity per share)
5) Average Stock Price.
Those values are calculated ranging from 2004 to 2009. And original data are daily, and monthly data obtained from Nikkei & Nomura Database.

The descriptive statistics shown in Table 5 are calculated from Jan. 2005 to May. 2009. Seen from Table 5, the lowest records of PER, PBR, BPS, are 18.3 (Feb. 2009), 0.8 (Feb. 2009), 270.65 (May. 2009) respectively. It indicates that it was the hard time for TSE during the first half of year 2009. The number of listed firms, and the average of PER, PBR, EPS, BPS, Stock Price of all listed firms are summarized in Table 6. Figure 3 to 6 are corresponding to the rows in Table 6 from Row 3 to 6.

Table 6: Time Series of Firms, PER, PBR, EPS, BPS, and Average Stock Price (From 2004 to 2009)

Year	Firms	PER	PBR	EPS	BPS	Average Price
2004	1550	155.833	1.317	6.993	329.178	430.651
2005	1638	39.742	1.525	11.783	309.31	467.692
2006	1686	39.975	1.700	12.414	290.594	493.033
2007	1716	33.033	1.542	13.432	285.543	441.735
2008	1710	23.683	1.108	13.074	278.823	309.671
2009	1691	10.010	0.960	4.558	260.961	248.278

The time series of the number of listed firms, PER, PBR, EPS, BPS, and Average Stock Prices

Seen from Figure 3: the PER reached its lowest record 10.01 in 2009. It means that earnings of firms have been reduced, especially after the crisis outbreak.

Figure 3: Plot of PER from 2004 to 2009
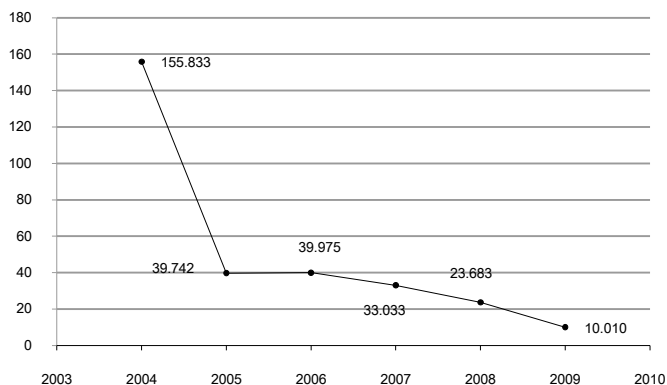
This figure gives the plot of the PER from 2004 to 2009.

Figure 4 is the plot of the average PBR from 2004 to 2009. PBR of a share was sometimes less than 1.0 during the first half year of 2009. It indicates that investors lost their belief in stocks even if a share price

was lower than a share's book-value. Seen from Figure 4, the PBR in 2009 was the lowest one during these years. For some individual shares, for example, on Nov. 6, 2009, the share price and the PBR of Bank of Mitsubishi UFJ were \486 and 0.92 respectively; and the share price and the PBR of Fukuoka Financial Group were \335 and 0.57 respectively.

Figure 4: Plot of PBR from 2004 to 2009
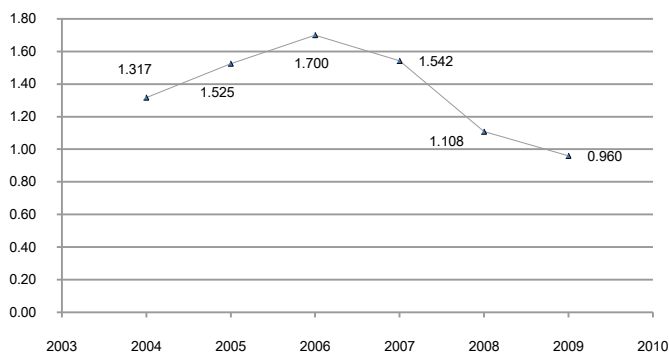
This figure gives the plot of the PBR from 2004 to 2009. The record reaches lowest in 2009.

Seen from Figure 5, from 2005 to 2007, the EPS just slightly changed, about 1 in each of year. But in 2009, it suddenly fell down to 4.558. A year changed over 8 already.

Figure 5: Plot of EPS from 2004 to 2009
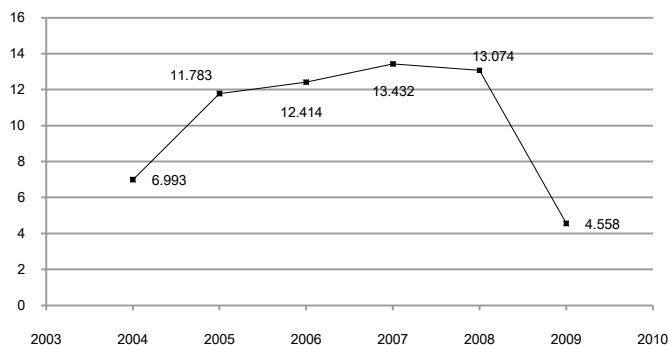
This figure gives the plot of the EPS from 2004 to 2009.

Seen from Figure 6, the BPS has tumbled down since 2004. The lowest record has been reached after the crisis outbreak. It indicates that most firms' assets have been devalued.

Figure 6: Plot of BPS from 2004 to 2009
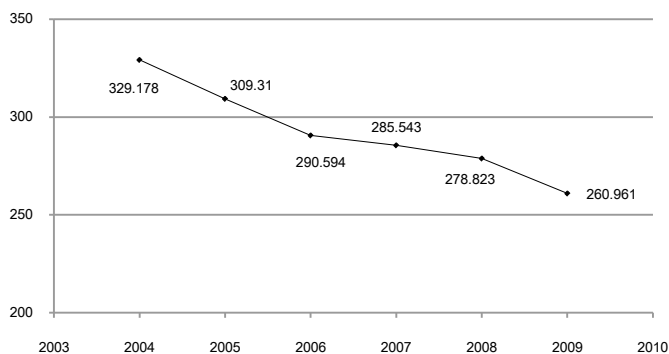
This figure gives the plot of the BPS from 2004 to 2009.

ESTIMATION OF RARE EVENT

In this section we show how to estimate rare event by using the finite data obtained from the crisis period. Why we need to use those finite data is that those data were observed during the crisis and represented some characteristics of the financial markets under the stress. It would be useful if we can estimate some statistical properties from those data. For example, to estimate the VaR for risk management. But, the data are finite, and sometimes it is not enough to be used to make some useful statistical inference.

To solve this problem, we propose to use Bootstrap method. Bootstrap method is a well-established method for estimating some statistical properties from finite data set (Efron, 1981, 1982, 1993). Here we computed the returns of the NIKKEI225 from Jan. 2008 to Nov. 2009. And we apply Bootstrap method to estimate the VaR of these returns. Seen from Table 7, the estimated values of the VaR computed by Bootstrap method are different from the ones directly calculated from the data set. In this numerical experiment, resample of 10,000 times has been implemented.

Table 7: Estimated VaR by Traditional Quantile and Bootstrap Method

Percentile	Quantile	Bootstrap
1%	-0.0174315	-0.0174418
5%	-0.0101729	-0.0101609

This table shows the difference between quantile method, and Bootstrap method on VaR estimates.

CONCLUDING REMARKS

In this work firstly we have investigated the damages to the financial state of Japanese listed firms in TSE. Worsening finance state of listed firms has been confirmed and been analyzed quantitatively. And secondly the damages to the performance of TSE have been analyzed. An inefficiency stock market has been pointed out by showing those unreasonable market performance indices, such as PER, EPS, PBS, BPS. The share value has been underestimated due to the recession of the economy. It drives money away from the financial market. It causes liquidity crisis, and puts those companies which are eagerly seeking financial support from financial market into abyss. Moreover, even though the data set observed during the crisis is finite, we have proposed to use Bootstrap method to solve the problem of being short data. It can be used in estimating the VaR, for example. The advantage of Bootstrap method is that it can

resample from distribution with heavy-tails, or distribution with jumps. That means it can be applied to predict the worst situation based on the finite data set observed from the crisis.

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WHAT DOES PREDICT THE FIRM'S NET TRADE CREDIT POSITION? EVIDENCE FROM THE ITALIAN MARKET

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ABSTRACT

Large and financially strong firms extend trade credit to small and financially weak ones (Schwartz, 1974). Empirical evidences confirm the intense use of trade credit by small firms (Berger and Udell, 1998), but show that even large firms receive it (Rajan and Zingales, 1995), these results are explained by some recent literature through the market power (Van Horen, 2008; Wilson and Summers, 2002). Moreover, in light of the multiple motivations of the trade credit existence, firms tend to supply and receive trade credit at the same time and so the choices could be influenced each other (Kiyotaki and Moore, 1997). The paper reviews the literature on the motivations of the supply and the demand of trade credit and it tests if an analysis based on net exposure address the same results of an analysis based on gross exposure. Novel contributions of the paper includes: firstly, it tests the relevance of the traditional motivations of the trade credit use and the market power at the same time; secondly, it compares the relevance of the motivations of the trade credit use on both the firm's gross and net position the firm's; lastly, the empirical analysis is developed on a internationally relevant market for trade credit (the Italian market).

LITERATURE REVIEW

According to the traditional theories, trade credit supply and demand are determined by the economic sector features and the firm's characteristics (Petersen and Rajan, 1997). Trade credit allows to separate the delivery of the good/service respect to the payment of the price, therefore the buyer benefits from a period to verity the quality of the supply (Long et al., 1993): credit terms are influenced by the relevant economic sector as they vary according to the innovation, complexity and perishability of the supply. Besides the relevant economic sector, trade credit use is influenced by the firm's characteristics. According to the real motivations, suppliers extend trade credit to support the sales (Nadiri, 1969), while financial motivations stress the relevance of trade debt in the firm's financial structure (Lewellen et al., 1980). To support the sales, suppliers can use trade credit to discriminate the price (Ng et al., 1999) or to stabilize the demand to: protect the non salvageable investment in the relationship with buyers (Smith, 1987); transfer the inventories warehousing costs to buyers (Emery, 1987); benefit from the customer's inertia (Summers and Wilson, 2003); support sales during economic downturns (Meltzer, 1960).

Trade debt allows buyers to delay the payment of the inputs after the revenues are encashed (Lewellen et al., 1980), therefore they can use it as either a substitute or a complement of other financial sources. Theories on the substitution effect indicate that firms use trade debt when market imperfections prevent the access to other financial sources (Meltzer, 1960; Jaffee and Stiglitz, 1990). Theories supporting the complementary use of trade and financial debt (Mian and Smith, 1992) stem from the competitive advantage of the seller in the following areas of credit management: information acquisition on firm's creditworthiness (Berger and Udell, 1998); control of the customer during the trade relationship (McMillan e Woodruff, 1999); recovery ability of the supplied assets (Myers e Rajan, 1998).

As trade credit is intended for traders or intermediaries in the distribution channel, large buyers with a relevant market power can exploit it by assuming the role of trade credit net takers, as it was confirmed by

empirical evidences for developing countries (Van Horen, 2007) and small firms (Summers and Wilson, 2002).

SAMPLE

The analysis considered the Italian market and the sample is constructed from AIDA - Bureau Van Dijk database. The choice to consider this market allow to study the commercial credit characteristics on one of the more developed world market (Klapper et al., 2005) and the choice of the data provider ensure the highest coverage for the Italian market. All information collected are balance sheet data and so the frequency of observations is compulsory defined as yearly. On the basis of the database coverage, the analysis considers the time period 1999-2008. The overall sample constructed encompasses 11824 firms well diversified on the basis of the sector and of the geographical area.

METHODOLOGY

The empirical analysis is aimed to test the relevance of the variables that the literature identified to explain the supply and demand of trade credit assumed by the firms. Following Wilson and Summers (2002), the use of trade credit was analyzed in terms both of the granted amount and the delay payment period, but adopting both a gross and a net analysis approach. Literature relevant variables on the use of trade credit (see the Annex) were grouped into:
   a) sector characteristics;
   b) firm's specific features;
   c) market position.
For studying the role of different types of variable, a cross section analysis for each year is released in order to evaluate the role of each variable in explaining the trade credit dynamics. Formulas considered are the following:

$$Trade\ Credit\ Amount_t = \alpha_t + \sum_{i=1}^{n} \beta_{it} X_{it} + \sum_{j=1}^{m} \gamma_{jt} Y_{jt} + \sum_{k=1}^{o} \delta_{kt} Z_{kt} + \varepsilon_t \qquad (1)$$

$$Trade\ Debt\ Amount_t = \alpha_t + \sum_{i=1}^{n} \beta_{it} X_{it} + \sum_{j=1}^{m} \gamma_{jt} Y_{jt} + \sum_{k=1}^{o} \delta_{kt} Z_{kt} + \varepsilon_t \qquad (2)$$

$$Trade\ Credit\ Duration_t = \alpha_t + \sum_{i=1}^{n} \beta_{it} X_{it} + \sum_{j=1}^{m} \gamma_{jt} Y_{jt} + \sum_{k=1}^{o} \delta_{kt} Z_{kt} + \varepsilon_t \qquad (3)$$

$$Trade\ Debt\ Duration_t = \alpha_t + \sum_{i=1}^{n} \beta_{it} X_{it} + \sum_{j=1}^{m} \gamma_{jt} Y_{jt} + \sum_{k=1}^{o} \delta_{kt} Z_{kt} + \varepsilon_t \qquad (4)$$

where the variable representing the time/amount of trade credit/debt is regressed on some features of the firm (X_{it}), the sector (Y_{it}) and the market (Z_{kt}) that have been identified in the literature as possible explanatory variables or indices.
The analysis proposed is repeated considering the net exposure respect to the gross one using the following formulas:

$$Trade\ Credit\ Amount_t = \alpha_t + \tau_t Trade\ Debt\ Amount_t + \sum_{i=1}^{n} \beta_{it} X_{it} + \sum_{j=1}^{m} \gamma_{jt} Y_{jt} + \sum_{k=1}^{o} \delta_{kt} Z_{kt} + \varepsilon_t \quad (1a)$$

$$Trade\ Debt\ Amount_t = \alpha_t + \tau_t Trade\ Credit\ Amount_t + \sum_{i=1}^{n} \beta_{it} X_{it} + \sum_{j=1}^{m} \gamma_{jt} Y_{jt} + \sum_{k=1}^{o} \delta_{kt} Z_{kt} + \varepsilon_t \qquad (2a)$$

$$Trade\ Credit\ Duration_t = \alpha_t + \tau_t Trade\ Debt\ Duration_t + \sum_{i=1}^{n} \beta_{it} X_{it} + \sum_{j=1}^{m} \gamma_{jt} Y_{jt} + \sum_{k=1}^{o} \delta_{kt} Z_{kt} + \varepsilon_t \qquad (3a)$$

$$Trade\ Debt\ Duration_t = \alpha_t + \tau_t Trade\ Credit\ Duration_t + \sum_{i=1}^{n} \beta_{it} X_{it} + \sum_{j=1}^{m} \gamma_{jt} Y_{jt} + \sum_{k=1}^{o} \delta_{kt} Z_{kt} + \varepsilon_t. \qquad (4a)$$

The huge number of regressors identified in the literature makes it necessary to define selection criteria for reducing the number of estimators. The approach selected is the stepwise forward approach, with the cutoff for including a variable fixed at 0.01%. The final step of the analysis is to study the main differences between gross and net models to evaluate whether the second approach displays any distinctive features compared to the standard gross approach.

RESULTS

Trade credit and debt choices are closely related, and the strategy adopted by each firm cannot be explained by looking only at one side of its trade policy. Considering the amount of credit, the choice of gross or net exposure does not affect the type of explanatory variables used, but this choice significantly affects the fitness of the model: models of net trade credit/debt exposure demonstrate double the statistical significance of their gross counterparts. Looking at the duration of the trade credit, the difference in the significance of models based on gross and net exposures is smaller, but the effects of this choice could significantly modify the types of explanatory variables that are the most relevant for each model.

The main policy implication concerns the approach that must be adopted in evaluating the trade credit/debt dynamics: normally, firms adopt a trade credit/debt structure that is coherent for the amount and for the duration, so it is important to pay attention to all events (i.e., the dilution risk) that could affect this close relationship. On the basis of the results obtained in this study, financial instruments constructed on trade receivables (i.e., factoring, asset-based lending) must not only consider the characteristics of the credit assigned, but also evaluate the overall credit/debt trade exposure of the seller.

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REMITTANCE AND THE SCHOOL PARTICIPATION RATES, CASE CENTRAL LOMBOK, WEST NUSATENGGARA

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ABSTRACT

The low participation rates of the basic school ages are predominant in Eastern part of Indonesia and also in Central Lombok region of West Nusatenggara Province. Poverty is one the key factor determines this low number. In addition, West Nusatenggara province has the highest number of migrant workers. The decrease in the number of productive and young worker due to migration may cause the excess demand for productive worker in the villages. As a consequence children at the basic school age attracted to enter the job market because of high wage rates. As a result the drop-out from school rates increase. Not only that the migrant worker cause the increase of the wage rate at the village area, effort to eradicate poverty will be endanger because the higher the drop-out rates the lower the quality of the labor and the human resource in general in the near future. Low quality of human resource results in higher poverty. But the remittances also increase the income of the migrant family that can also be spent on the school purpose and reduce the drop-out rates. Based on the survey in Central Lombok, East Nusatenggara we argue that whether the family has a migrant or not will not influence the drop-out rate. However, higher remittance will certainly reduce the drop-out rates

INTRODUCTION

Literatures confirm that poverty and other social factors determine the drop-out rates. UNESCO for example reported that the probability of drop out for children from the poor family is tripled than those of the have, UNESCO (2005). Thus effort to eradicate poverty will decrease the drop-out rates. However, many studies also confirm that poverty is not the min issue on its self. The drop-out rates also influence by both the supply and the demand sides of the basic education service, Tendon (2006). The supply factors include the location, the school buildings, the number and quality of the teachers, and the quality of the education process itself are matter. On the demand side, factor such as the family condition of the children, their parent's education, financial profiles, and other social conditions also play and the number of drop-out. The role of the remittance and the interaction between demand and supply factors is unique to each region that increases the need to examine its empirical evidence to set a necessary policy. The high drop-out rates also influence the achievement of the Millennium Development Goals in 2015.

This research examines the high drop-out rates in Central Lombok Region in both migrant and non migrant families. We survey 100 families and record their social and economic characteristics, the remittances and the drop-out. The maximum likelihood estimator is implemented on the Logistic function to estimate the role of remittance and the migrant status on the drop-out rates.

FINDINGS

We survey 100 families in villages: Bonder, Puyung, Tenandon, and Penunjak. We distributed evenly the sample as follows.

Table 1: Sample Distribution

	Yes Migrant	No Migrant
Yes, Drop Out	24	26
No, Drop Out	24	26

We define drop outs are those who are not graduate from the elementary school, graduated but not continue to the secondary school, and not graduated from the secondary school. From the 50 drop out children, 15 of them who are not graduated from elementary school there are 12 boys and 3 girls. Thirteen of those who are not continue to secondary school: 10 are boys and 3 girls. From 21 of the secondary school drop out, 9 are boys and 12 are girls.

Those who are drop out may work or do not work. Thirty-five of the drop-out are working while 15 of them are not. The reason for drop out are helping the family for house work, get married (early married), and also doing nothing. Those who are working mostly help their parents for the rice field work and also become informal worker. The average income for these drop-out workers is 429,095.23 rupiahs per month, with the highest at 2,100,000 rupiahs and the lowest is 30,000 rupiahs. There are 4 drop-out children who become migrant worker.

Other reasons for drop-out include the high cost of school (25 respondents), even though tuition fees are free up to secondary school. Laziness also mentioned by 10 respondents, while 5 parents mentioned that school is not important. The family member who become migrant workers, 24 of them are the father, 19 are the children, while only 7 are the mother. Most of them become the house helper (18 persons), while the man works at the palm plantation (17 persons). The average income of the migrant worker at 500,000 earned by 15 respondents, 1000,000 earned by 5 respondents and 2,500,000 by 15 respondents. Most of the remittances were not sent at a certain schedule (31 respondents).

The family education reveals that the never go to school is 39 percent while the mother 49 percent. There is only one couple who went to university. Such education profile may reflect the high drop-out rates. The highest income earner is elementary teacher whose income is 2,500,000 rupiah per month. The majority of the respondents are farmers (father 36 respondents, mother 42 resondents). Their average income is 675,543.3 rupiahs for the father and 331,983.3 rupiahs for the mother.

The logistic model indicates that the probability of the dropout will decrease when the income increase. The status of the family, whether migrant or non migrant is not relevant to whether the children do drop-out or not. We also learn that distance from school, tuition free, and the village characteristic (distance from the city) do not influence the drop out rate.

Table 2: The Logit Estimation

Covariance matrix computed using second derivatives				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-0.598	0.25	-2.00	0.0454
MIGRAN	-0.003	0.26	-0.01	0.9906
I	5.87E-07	2.22E-07	2.641	0.0083
Mean dependent var	0.500	S.D. dependent var		0.50
S.E. of regression	0.481	Akaike info criterion		1.34
Sum squared resid	22.48	Schwarz criterion		1.41
Log likelihood	-63.82	Hannan-Quinn criter.		1.37
Restr. log likelihood	-69.31	Avg. log likelihood		-0.64
LR statistic (2 df)	10.98	McFadden R-squared		0.079
Probability(LR stat)	0.004			
Obs with Dep=0	50	Total obs		100
Obs with Dep=1	50			

CONCLUSION

This paper reports the case study of 100 families in Central Lombok regions, West Nusatenggara. We focus the study on how migrant worker and the remittance related to the school drop out. We conclude that:

1. The drop out rates is related to the characteristic of the parents. Lower educated parents have higher probability of having drop-out children than those of the more educated.
2. While the status of migrant family does not influence the drop-out rate, the income determines the probability of the drop out.
3. We also argue that educating the parent is important in reducing the drop out rate. Effort to eradicate poverty through free basic education need to be complement by the education for parents.

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MARKET CONCENTRATION MEASURES AND INVESTMENT DECISIONS IN MEXICAN MANUFACTURING FIRMS

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ABSTRACT

We study how alternative measures of market concentration may explain investment decisions of Mexican manufacturing firms. The measures used include the Herfindahl-Hirschman Index (HHI) and the Dominance Index (DI). The HHI is the traditional measure of market structure concentration. The DI is a competition measure used by Mexican regulators. The results suggest that investment decisions of Mexican firms might be explained better by the DI measure than by the HHI one. Thus our results might suggest that the Mexican Dominance Index may be a feasible measure of market competition. Such conclusion is reached for micro, small, medium and large size firms. In all cases we control by firm size, cash flow, investment opportunities and capital intensity. The former three determinants are significant.

JEL: L40; L22; L60

KEYWORDS: Investment, Hirschman-Herfindahl Index, Dominance Index, Manufacturing, Mexico

SHORT VERSION

Investment decisions are fundamental to understand the performance of organizations. They are important elements in the strategies of firms. Investment decisions influence other firm decisions as employment, output and growth ones.

Investment decision maker try to make and efficient allocation of available resources within the business environment, specifically when it is competitive. Investment decision maker try to get the highest return on investment and to respond to the market demand. So, firm responds to investment opportunities.

Traditionally it is assumed that investment decisions are taken on basis of rational processes. This approach focuses on how decisions should be taken; but not necessarily on how the process really occurs. This is the main goal of this investigation.

Here we study the internal and external determinants of investment decisions. Internal determinants include firm size, cash flow and capital intensity. External ones include investment opportunities and market structure concentration.

In economic theory market structure concentration is used as proxy indicator of market power. Empirically the Herfindahl-Hirschman Index (HHI) is the traditional measure of market structure concentration. However it is not the unique one. An alternative measure is the Dominance Index (DI). This is a competition measure used by Mexican regulators.

Regulation is related to market structure concentration. Regulation policies try to promote firm efficient behaviors. Regulation authorities consider market concentration information in order to promote competition and investments. Also, this information is useful to regulatory policies evaluation. Additionally, it is useful to focus on a specific sector.

Here we study how alternative measures of market concentration explain can explain the investment decisions of the Mexican manufacturing firms. The measures used include the HHI and the DI. We analyze micro, small, medium and large size firms. We control by firm characteristics: firm size, cash flow and capital intensity. Additionally, we control by investment opportunities.

The contributions of this investigation focus on three main areas. First, we analyze a model of investment decision determinants, which includes firm characteristics, market structure issues and competition regulation. Second, we use alternative measures of market concentration to explain investment decisions. Third, we do a comparative analysis among the micro, small, medium and large size firms of the Mexican industry. Most of studies in Latin America focus on credit access as investment determinant.

We present the following hypothesis:
- Industry structure determinants and the characteristics of firms explain investment decisions of the Mexican manufacturing firms.
- Industry characteristics (market concentration and investment opportunities) influence investment decisions of Mexican Manufacturing firms.
- Firm characteristics (firm size, cash flow and capital intensity) affect investment decisions of Mexican manufacturing firms.
- From a regulation perspective, the DI is a better measure than the HHI to explain investment behavior.

We use the estimation by Ordinary Least Squares Method (OLS). Results allow us to validate our hypothesis. We find evidence that the industry structure and firm characteristics may explain investment decisions of Mexican manufacturing firms. Considering firm characteristics, particularly firm size seems an important determinant. Investment increases when the firm grows. Cash flows have a negative effect on investment. This finding is remarkable because most studies suggest a positive relationship between cash flows and investment. Capital intensity does not influence investment decisions. This finding supports the idea that Mexican manufacturing firms are intensive in labor factor.

An important contribution of our research relates to market concentration measures. Our findings suggest that the Dominance Index is a better determinant of investment decisions than the Herfindahl-Hirschman Index. We believe that our findings have implications for regulatory and policy purposes. The models for medium and large firms show than increases in market concentration decreases investment. Thus our findings support the necessity to promote competition to increase investment. However for small business concentration is not a factor of their investment decisions.

Finally, our results suggest that micro firms take into account other factors of investment decisions. Authors as Ekanem and Smallbone (2007) consider among such determinants intuition, social networks and experience of the entrepreneurs. We believe that our study provides avenues for future research. When available we consider those data of 2008 for comparison purposes. In addition, we may extend our analysis to include commerce and services sectors. Finally, another study suggested by our results refers to the necessity to study further determinants of investment in micro and small firms.

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INFORMATION SYSTEM, DEMAND, AND PROVISION OF HEALTH SERVICES CASE WEST NUSATENGGARA, INDONESIA

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ABSTRACT

This paper examines the structure of demand for health services for delivering baby, its provision, and the information system for the case of West Nusatenggara, Indonesia. The demand factors reveals that the role of the mother is dominant in detemining the types, scale, and quality of the services. These factors influenced by the education level of the mother, the income and also the status of the father, and other socal characteristics of the mother are relevant factors. The provision of the services determined by the quality of tansport, the services provider, and the hospital facilities. The information system will enhance the quality of the services by providing what types of service match with the demand. It will efficient the local government budget allocation in determining what type of services necessary to better help the elivery process in each regions and sub regions.

INTRODUCTION

The World Health Organization (WHO, 2004) estimated around 585.000 pregnant women past away from delivering baies each year. This means that each minutes there is one mother past away in relation to their birth deliveries. Ninety-nine percent of this mortality occured in less developing countries. In addition, the infant mortality rate was about 44 per 1000 life birth.

Based on the Indonesian Health and Demographic Survey 2002/2003, the Berdasarkan Survei Demografi dan Kesehatan Indonesia (SDKI) 2002/2003, the mom mortality rate of those delivering baby was 307 per 100.000 life birth or there were 2 moms past away each hour. Also, the infant mortality rate was 31 per 1000 of life birth. The regional distribution of this infant mortality rate were 248 per 100.000 in central java and Yogyakarta; 554 per 100.000 in East Nusatenggara, 686 per 100.000 in West java; 796 in Maluku; and 1,025 in Papua (Hatmadji, ed: 2004:82; Rusman R., 1998). On the average Indonesia has high rates amng the ASEAN countries. In addition, the mom mortality rae in Indonesia was 1 out of 65 higher than that of Thailand which was 1 out of 1,100 (GOI-UNICEF, 2000). The research inquires what the information system should be to better provide the health services to the mom and the infants and characterizes it based on the demand.

FINDINGS

Based on the estimate demand for the baby delivery services, the mom consider the location, means of transportation, the gender of the helper, the type of the services, and the quality of the services in selecting the service.
1.   the closer location was chosen mom whose status are house helper (servant) (OR=3.9), mom who was graduated from high school (OR=2.0) [OR means Odd Ratio], mom who is also an enterpreneur (OR = 1.9), and those who has diploma (OR=1.9).
2.   Pilihan alat transportasi, terdapat 5 variabel yang secara signifikan mempengaruhi probabilitas pilihan alat transportasi khusus ke tempat persalinan yaitu, ayah karyawan BUMN/BUMD (OR=25,8), ibu karyawan swasta (OR=13,7), ayah karyawan swasta (OR=6,0), ayah wiraswasta (OR=3,3), dan ayah PNS/ABRI/POLRI (OR=2,7).

3. Pilihan jenis kelamin penolong persalinan, terdapat 4 variabel yang secara signifikan mempengaruhi probabilitas pilihan wanita sebagai penolong persalinan yaitu, ibu dengan kehamilan pertama (OR=10,9), ibu berpendidikan SMP (OR=3,7), ayah sebagai petani (OR=3,3), dan ibu berpendidikan S1 (OR=2,8).

4. The type of jobs and the mom education and the job of the father determine the type of the services. Mom who is a government office, has a high school degree and the father whi is graduated from undergraduate degree prefer to go to formal helath services (doctor or nurse) in stead of the traditionla helpers (dukun). The higher the education of the family the more prefer to a formal services.

5. Extension and effort to educate couples should also be directed to father since this variable strongly determine the types of the services.

6. Overall, the types of health services especially the baby delivery should be provided in line with the social and economic charecetistic of the people. The higher the income and the education the higher the demand for the formal services. The government should direct the developing of the services to these areas which has these characteristics. We propose to set the information system flows as follows.

Figure 1: Decision on Service Information System
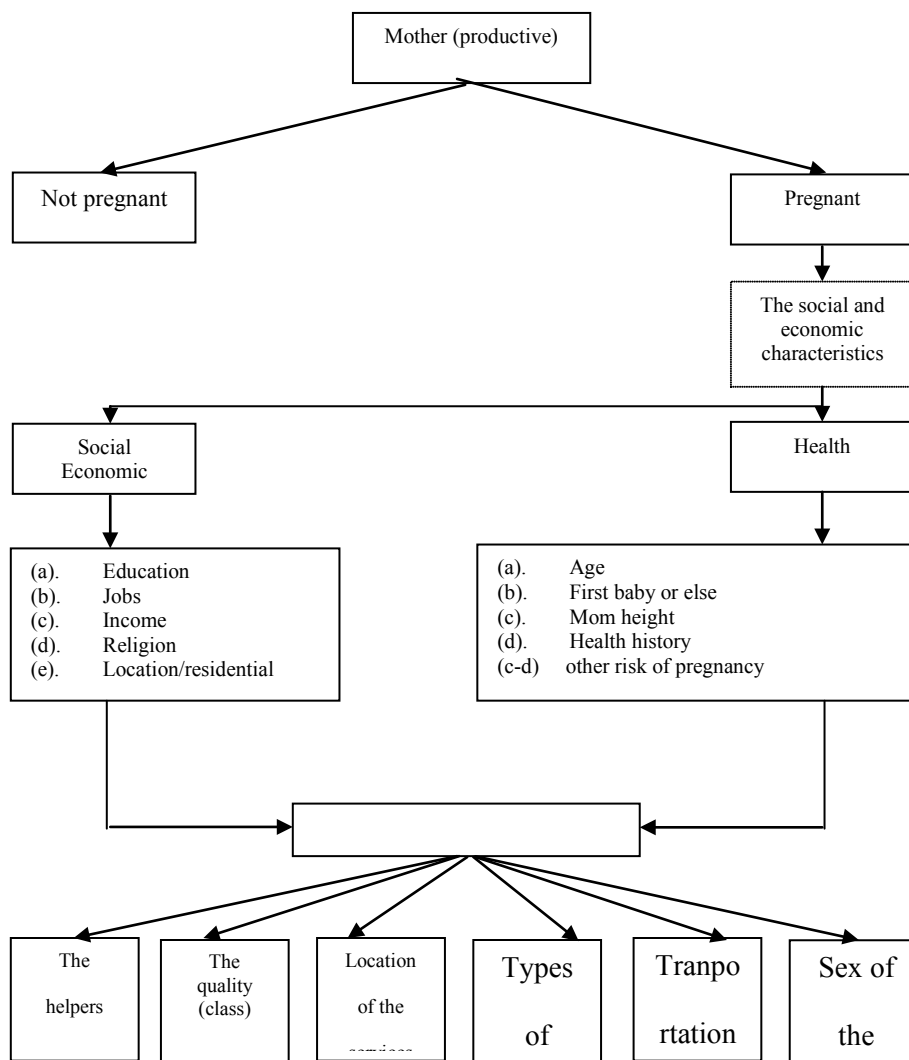
CONCLUSION

The types of health services especially the baby delivery should be provided in line with the social and economic charactetistic of the people. The higher the income and the education the higher the demand for the formal services. The government should direct the developing of the services to these areas which has these characteristics.
A uniform service across the regions with variety of social and economic characteristics will not effective in providing the health services. Need assesment based on the social and economic characteristics of the people will increase the effectivenes of the services.

The key factors determine the types of the services, the degree, and the quality will be determined by the education of the pople, their jobs, and their income. The number of the life birth, whether it is a first or second delivery also matter. Thefore, regiona with younger coulple my need different types of services than that of the older couples.

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THE EFFECT OF THE CHARACTERISTICS OF THE OWNERS' PROPERTY RIGHTS AND THE ADOPTION OF ORGANIZATIONAL INNOVATIONS ON VERTICAL INTEGRATION DECISION IN COOPERATIVES

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ABSTRACT

The characteristics of property rights in the traditional model of the cooperative reduce the members' incentive to invest in activities which increase the value added of the products delivered to the cooperative. In order to increase the incentives to invest in cooperatives belonging to traditional or defensive models, organisational innovations in property rights have been designed. In addition to the adoption of these organizational innovations in property rights, other variables related to the characteristics of the owner's property rights have been analysed as determinants in the decision of incorporating within the cooperative one more stage of the production cycle. Therefore, the objective of the paper is to determine the variables affecting the decision of downstream vertical integration in the agrarian cooperatives. The empirical analysis is done over a sample of Spanish cooperatives and the results show that both, the adoption of organizational innovations and characteristics of the owners' property rights are determinant variables in the decision of downstream vertical integration .

DID FASB 157 CONTRIBUTE TO THE FINANCIAL CRISIS?

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ABSTRACT

As a result of the financial meltdown that followed the bankruptcy of Lehman Brothers in the fall of 2008, there is considered debate on the accounting methodology used to value financial assets. In fact, many analysts on Wall Street argue that much of the blame for the current financial and economic crisis can be traced to mark-to-market accounting and the implementation of FASB 157. The question is whether financial reporting is at the root of the financial crisis or was it lax risk management, flawed models and reckless lending. Should accounting fixes be used to mask poor and reckless performance? This study addresses the question of whether FASB 157 played a role in the current financial crisis.

KEYWORDS: Fair-value accounting, FASB 157, mark to-market, level 1, 2 and 3 assets, subprime mortgage crisis, mortgage backed securities

INTRODUCTION

The financial crisis that impacted the US economy in 2008 was largely caused by the collapse in housing prices. This decline in prices adversely impacted the value of mortgage–related financial products held on the balance sheet of many financial institutions. Financial Accounting Standard 157, which the SEC put into effect for financial statements released after November 15, 2007 required commercial and investment banks and some insurance companies to mark-to market their assets, particularly the mortgage backed securities. As a result, financial institutions recognized large losses in 2007 and 2008 due to marking-down the value of the mortgage backed securities (MBS) on their balance sheets. In addition, the markdowns reduced the value of bank regulatory capital, forcing banks to raise additional capital and creating uncertainty among investors about the health of the banks.

The main criticism of this accounting standard is that assets classified as "other than temporarily impaired" are marketed to market no matter if the security is available for sale or being held to maturity. FASB 157 requires financial institutions to look at market inputs from sales of similar assets even if there is no active trading market. Thus, with illiquid markets financial institutions may be forced to take outsized losses by writing down the value of the security even if they both have the intent and ability to hold the assets to maturity. The resulting lower sale value may be below the security's value based on its future cash flows. The critics of FASB 157 charge that these sharp write-downs contributed to the failure of banks and forced others firms into a difficult financial situation. This study looks at the role played by FASB 157 in the financial crisis.

FAIR VALUE

Contrary to views expressed in the media and by the critics, mark-to-market accounting is not new. It has been used by financial institutions for decades to value financial assets. Nor do financial institutions have to report all of their assets at fair value. Prior to FASB 157 there was no single consistent measure of fair value and the guidance for applying these definitions was limited and inconsistent. What is new is that FASB 157 issued new guidelines on how to measure fair value, especially in the case where there isn't much of a market for the assets. FASB 157 effective for fiscal years ending after November 15, 2007,

was issued by the accountancy board to define fair market value, establish a framework for measuring fair value and expand disclosure about fair market value measurements.

Under 157, the definition of fair market value   retains the exchange price notion in earlier definitions. "This   Statement clarifies that the exchange price   is   the   price   in an orderly transaction between market participants to sell the asset or transfer the liability in a market in which the reporting entity would transact for the asset or liability, that is, the principal or most advantageous market for the asset or liability. The transaction to sell the asset or transfer the liability is a hypothetical transaction at the measurement date, considered from the perspective of a market participant that holds the asset or owes the liability. Therefore, the definition focuses on the price that would be received to sell the asset or paid to transfer the liability (an exit price), not the price that would be paid to acquire the asset or received to assume the liability (entry price)" (FASB 157 Section 5:15).

OTHER ASPECTS OF FASB 157

In the international literature, International Financial Reporting Standard (IFRS) defines fair value as the amount for which an asset would be exchanged or a liability settled between knowledgeable, willing parties in an arms length transaction. The major difference between their measure of fair value is that 157 specifically uses exit price in its determination, whereas the IFRS is not explicit on this issue. FASB 157 makes the distinction between recurring and non-recurring fair value measurements, as well as financial versus non-financial assets. Recurring refers to fair market value measurement on a quarterly basis and includes most of the financial assets as well as derivatives. Non-recurring fair value measurements apply mostly to non-financial securities and many are tested for impairment on a yearly basis. If it is determined that the fair value in these assets is less than carrying value, then an impairment loss is recognized by this difference.

Research is inconclusive, but it has been shown that much of this write down occurs when companies have exaggerated losses so adding more losses has no further effect on stock price-a practice known as "Big Bath Behavior". As such, one can argue that these losses are arbitrary. The latter set of assets would include: property, plant and equipment as well as intangibles. Under FASB 144, impairment losses for property, plant and equipment involve a two step process. First, the question is whether we have impairment. If the carrying value of the asset is greater than the undiscounted cash flows from its use and disposal, then we have an impairment loss. The next step is to calculate the amount of the loss, which is the excess of carrying value over fair market value. If fair market value cannot be determined, as is often the case, then the discounted cash flows must be used as a proxy to fair value.

Under FASB 142, companies must test goodwill and other non–amortizable intangible assets for possible impairment at least on an annual basis. If the fair market value of an intangible asset exceeds its carrying value, then an impairment loss is created. Under FASB 157, company specific information should be factored into fair market value measurements when relevant information is not observable in the market. This is especially true with non financial assets. Clearly, FASB 157 has differentiated the treatment of fair market measurement between financial and non-financial assets. We will now give you our thoughts as to why we believe this is the case.

REASONS FOR DIFFERENCE

We believe that there are four reasons for this difference. First, financial assets are clearly much more material in financial statement reporting than non financial assets. This makes a more conservative definition of fair value much more critical. Second, non financial assts such as land and buildings   are recorded at historical cost and subsequently recorded net of accumulated depreciation. Collectively, non financial assets like fixed assets and intangibles, when totaled, have a fair market value much greater than

its book or accounting value. This will not be the case for each individual asset but will apply to the total of these asset groups. A major reason for this is inflationary effects. Simply put, these assets are reported on a conservative basis. Third, it is easier to put a fair value number on financial assets then non-financial. The cost-benefit of trying to find an exit price for each non financial asset is not feasible. Fourth and last, users of financial statements often back into the fair market value of non-financial assets by an income approach. An internally developed patent has no accounting value but a market value is derived from a cash flow or income approach. Giving a fair value for these assets then would be counter productive

ASSETS CATEGORIES

Under FASB 157, the Board created a hierarchy of fair value methodologies starting with observable prices and moving to unobservable inputs and the use of models. Three categories of assets were created. The classification is dependant as to how and where an asset is traded, as well as to its liquidity.

Level 1 assets are traded in organized exchanges with observable prices. An example of this would be the stock of IBM. IBM is traded on the NYSE, its price is easily and objectively observed and thus a mark-to-market approach can be used.

Level 2 assets are those which do not have a quoted price but whose price can be observed either directly or indirectly. This would include assets which have similar assets traded in an active market, as well as assets traded in a market with low liquidity. A fair market value can be attained for these assets using mark to model guidelines, with a high degree of confidence, but not an absolute value as we have for level 1 assets.

Level 3 assets have unobservable inputs due to their illiquid nature and have traditionally been valued by companies by the use of internal sophisticated models which require the use of many assumptions. Thus, fair value is estimated by the firm itself.

PROBLEM OF LEVEL 3 ASSETS

With level three assets, the intent of the Board was to inform investors that the value of these assets should be treated with some degree of skepticism. It is the less liquid, level 3 assets that are the source of the uncertainty especially in the valuation of complex mortgage and derivative products. Many of these exotic products were developed by market participants like banks and investment companies in which no organized market exists. Trading of these securities were done in private or in the over the counter market (OTC).

Mortgage backed securities originated by private firms such as Countrywide Financial, Lehman Brothers or Wachovia were a main source of the problem. These MBS were backed by pools of subprime or ALT-A loans, which were subject to high default rates. Accentuating the problem, these privately packaged mortgage backed securities were further securitized creating illiquid products such as collateralized debt obligations (CDOs) and structured investment vehicles (SIV). The CDOs and SIVs are examples of level 3 assets and when subprime mortgages began to experience problems, the hedge funds and banks that owned these assets reported large losses.These products are the instruments invented and engineered by Wall Street, are not understood by the public due to their unique nature and are often seem like high grade investments when packaged.

MARK TO MODEL VERSUS MARK TO NOTHING

Until the advent of 157, a mark to model approach was used to value level 3 assets for financial reporting purposes. Mark to model entails valuing an asset on some model, which is often mathematically based. The present value of cash flows is often used as a proxy for fair value. Since no market exists for this type of asset, a model based approach, although imperfect, is a way of obtaining a fair value for an asset. As an example, the value of a unique patent can be modeled to obtain its value by estimating future cash flows over the course of its economic life, and then using an appropriate adjusted rate of return to obtain the present value of its cash flows. This in turn is the fair market value under the mark to model method. Critical to this result, is the reality of the assumptions inherent in the model. Poor or unrealistic assumptions will yield questionable results. Good assumptions will yield a good output.
FASB 157 requires the use of fair market valuation (based on exit price) for tier 3 assets. The result is a mark to nothing model.

Tier 3 assets due to their illiquidity and unique nature have no objective value. They are not traded in any organized market, so consequently, a true market value cannot be observed. However, FASB 157 forces companies to assign a fair market value to these assets. Additionally, models cannot be used to value these tier 3 assets under FASB 157, so a mark to model method, which theoretically is the best approach for asset valuation in this case, is not allowed.
Consequently, a fair market value somehow has to be assigned to these non liquid assets which have no similar assets for comparative value. One then has to realize that the valuation derived is suspect and questionable, and economically may not be viable. Clearly, exit price of illiquid assets can be down in excess of 30 percent.
FASB 157 requires disclosure as to how the value is derived, which we believe will result in a conservative presentation, thereby causing exaggerated write downs and losses to these tier 3 assets.

IMPACT ON THE INVESTMENT COMMUNITY

Multiple and serious repercussions were created to the holders of these level 3 assets in terms of their financial reporting. First, the market value based on an exit price was found to be significantly lower than the value derived internally by the use of models. The results were large write down of assets and consequently large losses in company income statements.

Second, level 3 assets turned out to be much more material than anybody expected. As an example in 2007, Morgan Stanley had a ratio of level 3 assets to its Stockholders' Equity in the amount of 250 percent, while Goldman Sack's ratio was 185 percent, Lehman Brothers was 160 percent, Citicorp was 105 percent, JP Chase was 45 percent and Merrill Lynch was 38 percent. Equally important was that these level 3 assets ended up in the portfolio of pension funds and in global sovereign wealth funds like the country of Iceland. One can argue that since these assets now have to be valued at mark to nothing, it may be in the best interest of a company to arbitrarily place a high value on these assets and minimize their losses. But companies must disclose the inputs used to measure fair market value which will be closely reviewed by the user of financial statements.

Table 1Ratio of Tier 3 Assets to Shareholder Equity (2007)

Company	Percent
Morgan Stanley	250%
Goldman Sachs	185%
Lehman Brothers	160%
Citicorp	105%
JP Morgan Chase	45%
Merrill Lynch	38%

ADVANTAGES OF FASB 157

Proponents of FASB 157 state that the fair value pricing of assets brings about transparency and allows the investment community to learn more about the nature of tier 3 assets, and the amount of these assets held on the company's balance sheet. The goal of FASB 157 is to present financial statements on a conservative basis and this critical condition should be met. Companies will now have to take losses on a yearly basis and will reconsider investing or creating such tier 3 assets with this in mind. Consequently, one can argue that Wall Street's engineering and greed created the economic meltdown and that the FASB 157 potentially discourages destructive Wall Street action in the future by forcing disclosure and close monitoring on such engineered instruments. Eliminating mark-to-market rules would further reduce investors' trust in the financial statements in all companies at a time when ongoing efforts are need to restore investor confidence.

CONCLUSIONS

The results suggest that FASB 157 played only a small role in the crisis. No accounting standard is perfect and FASB 157 did introduce unintended uncertainty and volatility. But it is the step in the right direction in that it provides a measure that best reflects a financial institutions current financial condition. The SEC (December 2008) conducted a study and found that the economic meltdown was due to poor internal decisions by banks and other financial institutions. Loose credit policies, poor internal controls and bad business judgment were the basis for the meltdown rather than FASB 157. FASB 157 was the messenger that just delivered the news and the economic reality to the investment community. Relaxing the rules may encourage banks to hold worthless assets to maturity rather than taking the hit that would result from marking impaired assets to their market value. Future research on FASB 157 should focus on the impact of the accounting change on the stock price of financial firms. The traditional approach would be to conduct an event study on a sample of financial firms.

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THE EVOLUTION OF ENTREPRENEURSHIP RESEARCH IN EUROPE

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Recent entrepreneurship research is characterized by the interest in divergent conditions for entrepreneurship, but also very different research traditions between countries.Entrepreneurship research in Europe has a long tradition and can in many ways be regarded as the birthplace of theoretical entrepreneurship studies. However, in the late 20th century, entrepreneurship re-emerged on the political agenda across Europe, and during the 1980s and especially in the 1990s developed a foothold within European research. Entrepreneurship and small business research is to a great degree international, exhibiting the same positive development in Europe as in other parts of the world.
The aim of this paper is to describe entrepreneurship research in the various parts of Europe.

INTRODUCTION

Entrepreneurship has a long tradition within economics, but it is dificult to identify any uniformity regard the use of definitions. Practical, economists were the fist to attempt to endow the concept of entrepreneurship with greater scientific meaning.

There are ambiguity about the content of the concepts entrepreneurship. Different studies have used many various definitions. For example, Morris found 77 different definitions in a review of journal articles. Some common definitions for entrepreneurship are :
-   Act of innovation that involves endowing existing resources with new wealth-producing capacity (Drucker 1995);
-   Process by which individuals pursue and exploit opportunities irrespective of the resources they currently control (Stevenson 1985);
-   The creation of organizations, the process by which new organizations come into existence (Gartner 1988);
-   Way of thinking, reasoning, and acting that is opprtunity driven, holistic in approach, and leadership balanced (Timmons 1997);
-   About how, by whom, and with what consequences opprtunities to bring future goods and services into existence are discovered, created, and exploited (Venkataraman 1997).

The view of entrepreneurship as the emergence of new organizations has found expression in two international projects: The Entrepreneurship Research Consortium (ERC) and the Global Entrepreneurship Monitor (GEM).
But, the rapid development of entrepreneur concept within the field has had some adverse effects. For example, concerns have been raised in respect of :
1.   the problem of defining entrepreneurship and the uncertainty in the domain of entrepreneurship: some definitions are related to entrepreneurship as a societal phenomenon, while others are related to the need to define entrepreneurship as a scholarly domain. Davidsson argues that we need to distinguish between „entrepreneurship as a societal phenomenon” and „entrepreneurship as a scholarly domain”. Following the reasoning of Davidsson the definition of entrepreneurship as a societal phenomenon is inadequate for entrepreneurship as a scholarly domain because we can indentify a number of fundamental approaches to defining entrepreneurship: entrepreneurship as a function of the market; entrepreneurship as an individul, and entrepreneurship as a process.

2. entrepreneurship research gradually changed from being a topic within economic science, becoming a part of behavioral science, before finally moving into the area of management science.

However, today the efforts to attain coherence by unified entrepreneurship research are open to questions like: What are the contribution of entrepreneurship reasearch? How to remove the difficulties in defining core concepts? What makes entrepreneurship reasearch unique?

THE ENTREPRENEURSHIP RESEARCH IN EUROPE

Entrepreneurship in Europe has several characteristics:
1. entrepreneurship research is characterized by its diversity;
2. in order to stimulate development in society the entrepreneurship research has received more attention;
3. there is an acceptance of a broader range of methodological approaches among European researchers;
4. the diversity of entrepreneurship research in Europe influences not only the methodological approaches used and the topics chosen but is also reflected in the research communities in the various countries.

There is a very great variation in research traditions between countries (Hisrich & Drnovsek, 2002) in terms of not only the size of the research community in each country but also the researchers' disciplinary backgrounds and epistemological concems. Due to the great heterogeneity and diversity of the continent, it seems difficult to give an adequate description of entrepreneurship research.

In Europe, Great Britain was one of the first countries to be hit by the economic structural changes at the end of the 1960s and early 1970s. The Northern part of England was a region especially affected by these structural changes, along with Wales, Scotland and other older industrial areas, resulting in business closures and a high rate of unemployment. It was this recession that prompted increased political interest in entrepreneurship and the small business sector. Due to their ability to create jobs, which large corporations were unable to provide, small firms were regarded as the answer to the employment problems resulting from structural changes. The growing political interest in small firms on the part of the UK government at this time led the British government to initiate a comprehensive inquiry into the role of small businesses in the economy. The final report, the Bolton report, was presented in 1971 and exerted significant infl1uence on politicians, academics and the media. During the 1970s the political parties developed explicit small business policies and the media devoted more coverage to the small business sector, thus leading to an interest in small business research among academics in the UK.

The political agenda in terms of entrepreneurship and small business changed dramatically in the early 1980s when Margaret Thatcher came to power (1979). Thatcher had an ideological view of entrepreneurship and small businesses and initiated a large number of measures in order to change the mentality of the people in the UK - creating an entrepreneurial culture - including privatizations, deregulation, a new tax regime, and a large number of new instruments to stimulate new and small businesses. Entrepreneurship and competition were two central concepts in this policy, concepts which also influenced academia. The universities were expected to be increasingly self supporting, which led to increased competition between them. As a consequence, the research became more empirical and concentrated on areas that were likely to create revenue for the university in question - contract research offered one of few mechanisms for obtaining research funds in a situation where core research funding were extremely limited. At the same time, many education programs focusing on entrepreneurship and small business management were established at different universities, severa1 of which emphasized training and education for small business managers. Thus, Thatcher had a very broad approach to entrepreneurship it was a question of changing the minds of people and she was very influential in this regard.

At the end of the 1980s the UK Economics and Social Science Research Council (ESRC), in collaboration with private sector businesses and some government bodies, initiated a comprehensive small business research program (the ESRC Small Business Initiative) an initiative which could be regarded as a real milestone and put small business research on the map. David Storey was appointed program coordinator. The ESRC Initiative focused on four areas: (1) the economic role of small firms within a national and international context, (2) local labor markets and small firms, (3) structural and organizational issues, and (4) determinants of the birth, survival and growth of small firms. A large number of projects were undertaken and three research centers were established (Kingston, Cambridge and Sussex universities). Storey decided to select several well known researchers who were not regarded as small business researchers, which afforded the program a diversity of interest, a multidisciplinary character, and ensured high quality research. The studies performed as part of the program were all very carefully designed with interesting analyses that have contributed a variety of new knowledge to the research in this field.

In the 1990s the interest changed toward growth oriented established businesses.
The Nordic countries (Denmark, Finland, Norway and Sweden) have, despite their geographic proximity, quite different traditions of entrepreneurship and small business research and must therefore be treated separately.

During the recession in the Swedish economy in the 1970s, great hopes were pinned on small businesses, with the ensuing call for more knowledge about the sector. Research was, however, limited to a small number of researchers and the research began to specialize in studies of networks and local entrepreneurial cultures.

In the 1980s the state made considerable reform to stimulate the small business sector, and throughout the decade there was a vigorous increase in entrepreneurship and small business research. Researchers attempted, in as far as possible, to link knowledge to concepts and models within the area of business administration, which resulted in the limited influence of other disciplines. The growth of research was characterized by (1) the spread of research to many universities throughout the country - a geographic diffusion of the research, (2) a change as regards the object of study - from the traditional family business to new types of small firms, such as technology-based firms and fast-growing businesses, and (3) although the research was rooted in the discipline of business administration, at this time it began to mould an identity of its own - the researchers began to regard themselves as specialists in entrepreneurship and small business.

Among the Scandinavian countries only Finland shows a similar development to that of Sweden within the area of entrepreneurship and small business, and it is primarily since the mid 1980s that the research and education in this subject area have been greatly intensified.

Today almost every university in Finland has a full or associate professorship in entrepreneurship indicating that the number of chairs and researchers is relatively large in Finland, but also implies a fragmentation of the research despite the fact that a number of centers conducting more systematic research within the field have emerged.

Similar to the other Scandinavian countries, interest in the area of entrepreneurship and small business in Norway first appeared on the political agenda in the 1970s when the Norwegian government released a white paper on small business.

Since the 1980s entrepreneurship and small business have been on the agenda in several universities, but the efforts within the field have been uncoordinated and unsystematic. However, during the 1990s, Bodo

Graduate School of Business in Bodo in the northern part of the country and Trondheim University of Technology have turned out to be the leading exponents of entrepreneurship and small business research, and we can find a more systematic form of entrepreneurship and small business research at these two universities. Under the direction of Lars Kolvereid, the business school in Bodo was the first to offer graduate courses in entrepreneurship in 1986, a master program was introduced in 1995, and a PhD program started in the early 2000s.

A key feature of the industrial structure in Denmark i*s* the lack of large corporations. As a consequence, it has proved difficult to distinguish entrepreneurship and small business research from management studies in general. This has also resulted in the fact that there are few research centers dedicated to entrepreneurship and small business research, the research community is fragmented and dominated by researchers with many years experience of entrepreneurship and small business research, for example, Mette Monsted and Poul Rind Christensen to name two of the best known within the field. Traditionally, governmental and regional institutions have also assumed responsibility for counseling and research, even if the importance of these institutions has gradually declined in line with the increasing importance of academic research.

At the same time a couple of other studies emerged which indicated intensified activity in the area of small business research in Denmark. Several quantitative studies were presented, which focused on the number of entrepreneurs and their socioeconomic importance.

The linkage between knowledge development in entrepreneurship and the development of industry and trade has continued. For example, much of entrepreneurship research has been financed by government ministries and the academic interest in entrepreneurship and small business has continued. At the Copenhagen Business School, research has been channeled to the Department of Management, Philosophy and Politics, where the interest has been broadened and today involves several different research themes.

In the German speaking countries there is a long tradition of entrepreneurship research dating back to the early Schumpeterian theory of economic development. However, it is not pure entrepreneurship that has been the main characteristic of the German speaking countries but the dominance of small firms, especially in craft, retail and service businesses. Over the years, a number of research institutes have been established aimed at developing management practice and knowledge, mainly connected to different sectors of industry. Thus, there is extensive research on the small business sector conducted outside the academic setting, but in many cases with some form of link with the universities. The relationship between the Universities and the Institutes can be characterized by a division of labor, with the Institutes focusing on continuous observations of the sector and applied research, mainly on aggregate levels of analysis, whereas the Universities concentrate more on basic research.

These extensive research efforts in the German speaking countries indicate that the research is on the threshold of a breakthrough and is growing rapidly, although some decisive factors should be taken into account.

Both Italy and Spain are countries that have many small businesses, not least in the form of family-run firms in the tourism and service sectors. In common with most industrialized countries, Italy experienced major changes in the industrial structure during the 1970s and at the start of the 1980s with the growing importance of small businesses for economic development and the high proportion of self-employment. The major fluctuations in the world economy in recent decades have had important consequences for Italian industry, as many sectors are strongly dependent on export. Despite this, Italy has been relatively successful, among other things due to the devaluation of the lira and the continuous undervaluing of the currency, which has made Italian products more competitive.

Thus, economists and researchers within industrial economics have dominated Italian small business research for a long time. In recent years we can, however, discern an increasing interest in the situation of small companies among researchers with a focus on micro-level analysis. One of the main characteristics of small business research in Italy is that the research is to a large extent individual and highly fragmented - it is hard to identify a homogeneous research community around small business research. In recent years, however, Italian small business research has increasingly acquired a stronger empirical foundation as well as a more international character.

In Spain there was an early interest and we are talking about the early 1970s in the personal characteristics of the entrepreneur and the attitudes toward entrepreneurship among students and managers, an interest which grew strongly during the 1980s. The research on the characteristics of the entrepreneur as an individual has however stagnated, and research is instead directed toward topics such as the" economic and financial structure of SMEs" and "SME strategies", but also research on family businesses and public policies for SMEs has been fairly prominent.
During the initial period (1980 to 1995), a feature of the research was a lack of empirical studies articles that informed about themes relating to small firms and entrepreneurship, but without a base in empirical studies. In the case of empirical studies, quantitative methodological approaches dominated.

One of the main issues facing the transition countries is the need to develop a private business sector. This development from public to private sector ownership has taken various forms including (1) a direct privatization of former state owned enterprises - in many cases managers of state-owned enterprises as well as former politicians (the nomenclature) have used their influence to privatize "their enterprise", (2) private firms tolerated during the socialist period, for example, craft enterprises in Poland, continued to exist during the transition period, and (3) the creation of completely new businesses, including self-employment and part-time businesses (in many cases in order to provide "self help" for former employees of state-owned enterprises Who were made redundant or have been forced to resign as well as many informal sector businesses).

However, it should be emphasized that each transition was different and that the countries are now at different stages in their development toward a market economy - entrepreneurship seems to have developed more quickly in countries where reforms proceeded smoothly and quickly.

As a consequence, the interest in small business research increased dramatically. For example, considerable research has been conducted in the Czech Republic, Hungary, Poland and Slovakia due to the growth of entrepreneurship in these countries as well as to their membership of the OECD (the Organization for Economic Cooperation and Development) and various EU funding programs that have given domestic researchers the opportunity to collaborate with researchers in western countries.

CONCLUSIONS

In conclusion, Finland today has a large infrastructure in the area of entrepreneurship and small business research, as evident from the fairly large number of chairs and researchers within the field, and the soaring number of dissertations, but a1so a fragmentation and lack of long-term systematic research within the field.

Also, the bulk of research within the German speaking countries has, due to the industrial structure and business culture, been focused on small businesses and to a lesser extent on entrepreneurship. However, for a long times there have been individual initiatives aimed at highlighting entrepreneurship research.
To sum up, entrepreneurship research in Spain can be said to be emerging. As much of the research is performed by doctoral students, it is seldom presented in international scientific journals. The research is

also strongly fragmented among different universities with an interest in entrepreneurship and small businesses.

One main problem is that the quality of aggregated economic data does not follow market principles or Eurostat (the Statistical Office of the European Union) standards, thus research based on official data should be treated with caution. In addition, the informal economy is widespread in the transition countries, which means that a large proportion of actual economic activity is not measured by formal indicators.

The international research community has shown an interest in this transformation process and considerable research has been conducted both by native researchers and visiting researchers from Western countries, the results of which have been presented in many journals and at international conferences. In addition, a couple of specialized conferences have been established thus contributing to the diffusion of knowledge about the transition process.

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BRAND IMAGE OF MAURITIUS: PERSPECTIVE OF EUROPEAN TOURISTS

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ABSTRACT

Brand image is a prominent marketing tool for many destination marketers. A strong brand image is equivalent to a rise in first-time customer purchase, positive word-of-mouth (WOM) and customer loyalty. Having a strong brand image implies having the upper hand over competitors and thus preventing tourists from shifting their purchase intentions to other destinations. Mauritius is a popular holiday destination for Europeans, however, there is a lack of research on the perceptions of the brand image among tourists visiting the island. The current study aims to fill this gap by investigating the brand image of Mauritius among European tourists. A conceptual framework that enables to establish the link between destination positioning, brand image, tourists' expectations and perceptions, customer value, word-of-mouth and destination loyalty is proposed. The research approach for this study is based on a survey questionnaire which was completed by 342 respondents. The results reveal that the brand image of Mauritius is associated mostly with the Sun, Sea and Sand (3S), a peaceful and relaxing environment, and the hospitality of Mauritians. In order to consolidate the brand image of Mauritius, the weak brand image attributes will have to be redressed. Results also reveal positive relationships among perceptions, customer value, loyalty and WOM.

INTRODUCTION

The purpose of this study is to investigate the brand image perceptions among European tourists so as to determine the importance of brand image attributes in destination positioning. Tourism contributes significantly to the economy of Mauritius. In 2006, tourism receipts amounted to Rs 31, 942 million and provided direct employment to 25,798 individuals. In the same year, 788,276 tourists visited Mauritius and the projection is 2 million by the year 2015. Europe is the most important market where 510,479 tourists visited the island in 2006 (CSO, 2007).   Mauritius, an island covering 1,860 square kilometres (720 square miles) with 1.2 million inhabitants is a well known holiday destination for beach-resort tourists. It has a range of positive features upon which its tourism appeal is established including its tropical climate with beaches, lagoon, tropical fauna and flora, as well as a multi-ethnic population. The brand image of Mauritius has been predominantly shaped by the marketing efforts carried out by the Mauritius Tourism Promotion Authority (MTPA) which is the national organisation responsible for promoting tourism internationally in selected markets.   The principal asset underpinned in the communication tools is that of the Sun, Sea and Sand (3S) which depicts Mauritius as a paradise island with friendly multicultural inhabitants. The branding efforts in the European market attempt to position Mauritius as a unique luxury destination. The marketing efforts are also increasingly being placed on the history of the island, spas, therapeutic centres, various sports activities and safety of the destination. Although the MTPA spends considerable effort in creating and maintaining the brand, it is not guaranteed that the European tourists are positively influenced by these marketing efforts. The purpose of this paper is to present the concept of brand image from the tourists' point of view. This study investigates the

brand image attributes that Europeans use to depict Mauritius as a destination and whether there is a gap between the expectations and perceptions in relation to the brand image attributes.

LITERATURE REVIEW

Branding

Branding has been used extensively due to the variety of benefits it offers to a product. Aaker (1991) defines a brand as a distinctive name and/or symbol such as a logo or trademark used to recognise the goods/ services of one seller, or group of sellers, and to differentiate them from competitors attempting to provide similar products/services. Gregory (1993:39) argues that a 'strong brand sticks out in a crowd' and hence, owns a place in the customer's mind. The strong brand reduces the factor of risk experienced by consumers (Berthon, Hulbert and Pitt, 1999), diminishes the marketing and search costs (Assael, 1995), enhances the quality of the product (Erdem, 1998), and differentiates the product from competitors (Gregory, 1993; O'Cass and Lim, 2001). Branding is the best way to make consumers aware of the added value that a product has, and hence largely contributes to customer retention and loyalty.

Destination Branding

Although Destination Marketing Organisations (DMO) can spend a lot of effort in creating and sustaining the brand, it is not guaranteed that the consumers will be positively influenced by these marketing efforts. Prebensen (2007) argues that many destinations struggle to build a powerful brand as they are often unable to distinguish themselves from competitors. Branding a destination is complex due to the characteristics of intangibility, inseparability and interdependence of several components of the destination that represents the holiday experience. Consumers evaluate the holiday experience and spread positive or negative WOM depending on the extent to which they are satisfied with the different elements associated with the holiday destination. Since the intangible nature of the destination implies that such a 'product' cannot be seen or experienced prior to purchase, a successful brand is one where the destination is depicted to target markets in a manner that can persuade tourists to think and react positively to the destination (Martinez and Pina, 2003). Every product has a perceived image and a set of attributes in the consumers' minds, which is the product, service or brand positioning (Dibb and Simkin, 1993). The brand developed is based on the position that a destination seeks to hold in the market place (Ritchie and Crouch, 2003). A tourist attaches significant importance to the position of a brand as the latter influences her/his decision-making process when s/he considers alternative destinations to choose from. Effective positioning of a brand entails that the destination needs to attract tourists from other countries or regions to become competitive.

Brand Image

The brand image is defined as the consumer's mental representation of the offering (Dobni & Zinjkan, 1990) where symbolic meanings are associated with the specific features of a product (Padgett and Allen, 1997) or destination. With a clear and powerful brand image, destinations are able to position their products and directly appeal to the needs of their customers (Aaker, 1991; Baloglu and Brindberg, 1997; Cai 2002). Brands generate sets of quality expectations or images of the destination that individuals usually desire prior to consumption (Metelka, 1981). Since the customers cannot experience the destination's products and services sold to them before purchase, they can solely trust the brand image and value communicated to them through planned marketing communications. In order to develop a strong brand image, it is essential that the communication efforts be carried out over the long-term (Martinez and De Chernatony, 2004). The result is that the desired message about the product/service will reach the consumers and the benefits associated with the former will be vividly present in their minds in the form of images.

The literature reveals that the definition of brand image is complex and creates confusion. Crompton (1979) contends that destination image comprises of beliefs, ideas and impressions that a tourist has of a destination. Ahmed (1991) uses the term tourist image to define the tourists' mental picture of a destination through a representation of what they 'see' and 'feel'. In this study the concept of brand image is defined based on the definitions of tourist image and destination image and acknowledges that these terms can be used interchangeably. The brand image is developed largely from marketing stimuli provided by formal marketing communication tools. The brand image is also influenced by informal promotional tools being WOM (Berry and Parasuraman, 1991) and the consumers own experiences [of the destination] (Berry and Seltman, 2007). These numerous factors create mental pictures representing what tourists observe and feel/experience about the destination. Several studies have also focused on the brand image attributes of destinations (Embacher and Buttle, 1989; Echtner and Ritchie, 1993; Walmsley and Jenkins, 1993). Attributes have been defined as the 'descriptive features' typifying a product or service (Keller, 1998: 93). The brand image attributes can be separated into functional and psychological dimensions (Echtner and Ritchie, 1993). The functional aspects are associated with the tangible or measurable attributes whereas the psychological/emotional aspect comprises of the more symbolic or intangible attributes. The brand images attributes position the destination in the marketplace and distinguish it from competitors.

THE CONCEPTUAL FRAMEWORK

A framework is developed to illustrate the relationship between destination positioning, brand image attributes, expectations and perceptions, WOM, customer value and destination loyalty (Figure I). The framework suggests that both the functional and psychological brand image attributes are fundamental aspects of destination positioning. Brand image attributes create tourists expectations largely through marketing stimuli used by DMO in the forms of traditional promotional tools. Customers' are influenced to visit the destination based on the attractiveness of the portrayed brand image attributes. After their purchase, customers' perceptions are deduced based on their experience of the destination. A high perception will create customer loyalty, generate customer value and contribute to positive WOM. The brand image attributes has been adopted from the work of Echtner and Ritchie (1993). They suggest an eighteen attributes scale to measure tourists' perceptions of the destination and argue that a destination should make a comprehensive analysis of its image by combining together the different image attributes in order to identify the most functional and psychological characteristics of the destination.

The conceptual framework also highlights the importance of measuring the gap between expectations and perceptions which need to be identified to know if the brand image attributes being projected prior to the visit is in line with the actual experience. Research that reveal the link between expectations and perceptions have been numerous and originally carried out by Parasuraman, Zeithaml and Berry (1988) to measure service quality by using the gap model. In this study, this technique has been borrowed from the service quality methodology and applied to the measurement of a destination's brand image attributes.

The framework depicts the impact of perceived brand image attributes on customer value. Customer value has been described as the perceptions of customers regarding the trade-off that they experience between the benefits they receive from a service and the sacrifice components (Cretu and Brodie, 2007). For the purpose of this study, customer value is defined as a destination experience which represents value for money.

METHODOLOGY

The study was based on the design and administration of a survey questionnaire. An 18-attributes Likert-scale developed from the study of Echtner and Ritchie (1993) is used to measure the customers' expectations and perceptions. Figure II refers to the brand image attributes which has been amended to

include specific features of the destination that is presently under scrutiny. The intention is to measure if the perceptions of the tourists are similar to the desired brand images that have been used to position Mauritius. The respondents were asked to rate the importance of each attribute using a 5-point Likert Scale. Open-ended questions were designed to support the tourists' perceptions with regard the brand image attributes of the destination.

Data were collected from departing European tourists at the airport of Mauritius which was considered the most appropriate place to obtain the opinion of travellers about their perceptions of the destination. It was important to survey departing tourists as they would be in a better position to express their views based on their experience with several aspects of the destination. The survey was carried out over a 4 weeks period in March 2007 at the check-in-line and departure lounge. The convenience sampling technique targeted European travellers who were keen to complete the questionnaire. 400 self-administered questionnaires were distributed mainly to French, British, German, Belgian, Italian and Swiss tourists.

RESULTS AND DISCUSSION

Out of 400, only 342 (85.5%) respondents completed the questionnaire. Approximately the same percentage of male and female tourists was surveyed (51.1% and 48.9% respectively). The majority of the respondents were aged between '30 – 39' and '40 – 49'. 56.7% of the European respondents were on their first visit, 43.3% were repeaters among which 17.0% had visited the island twice and were on their third visit.   Those who stayed for 1 week were mainly first-time visitors usually on honeymoon or have planned short vacation trip with their family due to limited working holidays. 97.1% of the European tourists would recommend Mauritius as a tourist destination to their friends and relatives. 97.4 % felt that their holiday experience was value for money.

Tourists were asked to rate their expectations of the brand image attributes prior to their visit on a Likert Scale (1 *least important – 5 most important*).   The mean value obtained was 3.79 for their overall expectations across all attributes (Table I). The mean values for functional and psychological dimensions were 3.7 and 4.4 respectively. The highest mean value for the functional attributes related to "sunny and warm climate" and "white sandy beaches" with mean values of 4.6 and 4.4 respectively. These were followed by "local cuisine" and "standard of hotels" both with mean values of 4.3. However, relatively low expectation scores (3.0) were found for "family activities", "spa facilities" and "festivals, events and handicrafts" (3.1). The highest mean scores for the psychological attributes were 4.6 for "peaceful and relaxing" and 4.5 for "hospitality of Mauritians".

The findings also revealed that the functional attributes mostly appreciated by tourists during their stay were 4.5 for "white sandy beaches" and "sunny and warm climate", followed by 4.3 for "standard of hotels". These attributes indicate that Mauritius as a tourist destination is well positioned in the European countries for its beaches, quality of hotels and service delivered by the hotel staff, who are extremely polite and 'pamper' the tourists. However, there was a relatively low perception score of 3.2 for "family activities" followed by "festivals, events and handicrafts" (3.3).

Tourists were also required to rate their perceptions of the brand image attributes after their visit on a Likert Scale (1 *least appreciated - 5 most appreciated*).   The most appreciated psychological attributes were "hospitality of Mauritians" with a mean value of 4.6. This is supported by the opinions of tourist obtained from the qualitative responses generated from the survey. The hospitality aspect played a crucial role in the respondents' experience and satisfaction at the destination. They felt that their presence on the island was most welcome by ever-smiling friendly people, who build up a sense of security and reduce their uncertainty about the destination. This may influence the purchase behaviour of tourists as they may develop an emotional attachment with the destination. Another important psychological attribute was

"peaceful and relaxing" destination which scored 4.5. Visitors stated that Mauritius is "a getaway, free of stress and suitable for rest".

They also perceived the destination to be a paradise tropical island which resulted in making their holidays, enjoyable, relaxing and pleasant. The respondents stated that although they have to travel a long distance and spend at least 12 hours to reach Mauritius, it is a privilege to be in a calm and restful environment surrounded by beautiful beaches and wonderful local people. This shows that the destination setting is vital for the tourist experience and consolidates the brand image. The least performing psychological attribute was "safety and security" with a score of 3.9 as a few tourists were robbed during their stay.

The largest gap scores were found with respect to functional attributes, such as "spa facilities" (+ 0.5) and "reasonable price" (- 0.3). This indicates that tourists were more sensitive about tangible attributes. Regarding the psychological attribute, tourists felt that "safety and security" (-0.2) was the largest gap.

Paired *t*-tests were carried out to investigate if there was a statistically significant difference between the expectations and perceptions scores. The paired-sample *t*-tests between the two sets across all attributes indicate a statistically significant difference on 13 of the 18 items examined. Within these 13 attributes, only four attributes, "medical expertise" (-0.2), "reasonable price" (-0.3), "sunny and warm climate" (-0.1) and "safety and security" (-0.2) have negative gap scores. The attribute regarding "sunny and warm climate" was below the expectations of tourists as Mauritius was under the influence of cyclones and this has had an impact on the climate.   The results indicate that in most cases tourists perceived the destination brand image as being higher than they expected it to be. In addition, the overall gap (defined as perceptions-expectations) score was +0.05 (Sig. 0.013), which indicates that the destination performed better as compared to the expectations of visitors.

Correlation analysis is used to examine the rationale that high perceptions will lead to creation of customer value, generate WOM and destination loyalty. Thus, as a preliminary step the simple correlation coefficients for these variables are examined (Figure I). The findings show that there are positive relationships between perceptions and customer value (r=0.12), perceptions and WOM (r=0.25), perceptions and destination loyalty (r=0.52), customer value and WOM (r=0.34), WOM and destination loyalty (r=0.26). Though indicating a weak relationship, this shows that the tourists perceived that the destination represented value for money and are likely to spread positive WOM. Hence, WOM is a factor which influences brand image and is an integral part in consolidating the brand image of a destination. The perceptions of brand image attributes also strongly determine tourists' repeat purchase intentions.

The comparison between expected and perceived image reveals that the brand image of Mauritius as depicted by destination marketers is largely confirmed by the European tourists. The results confirm that no repositioning of Mauritius is needed as the brand image reflects that the destination has been strongly positioned in the European market. The brand image addresses the needs of the Europeans and motivates them to travel long distance to reach the destination. The findings support view of Echtner and Ritchie (1993) that both the functional and psychological attributes are important in evaluating the brand image of the destination.

The strongest brand image attributes are the "white sandy beaches", "hospitality of Mauritians" and "standard of hotels".   It should be acknowledged that these strong attributes are synonymous to the Mauritian brand. They are images that have been extensively portrayed through numerous marketing efforts over decades. Therefore, it supports the literature which reveals that creating a brand image is a long process and successful brand images are carefully conceived over a period of time (Martinez and De Chernatony, 2004). It has been found that the motivation behind European travel was for peace and relaxation. They sought calm, restful and relaxing environment for their holidays and so prior to their

visit, this specific attribute was highly important as they valued it the most after the beaches, sunny climate and hospitality of the locals.

Although Mauritius is famous for its 3S and perceived as a friendly destination, tourists have had experiences which may impinge on its future brand image.   A positive image may continue even long after the factors that moulded it have changed (Fayeke and Crompton, 1991: 10) and therefore although the present image is one where the local inhabitants are hospitable, the negative incidents such as tourists being victims of robbery and exploited in their shopping activities are likely to spoil the brand image of the destination over the long-term. Another factor which impinges on the brand image is unclean environment and litter which should be managed by sensitising the locals about environment issues, such as not protecting the environment will result in damaging one of the most important brand attribute underpinning the destination's tourism appeal.

More resources should be directed towards improving the weak image attributes and maintaining the strength of the existing attributes. The majority of the tourists have stated that family activities are not strongly depicted in the marketing efforts in Europe. It is recommended that promotion of family activities should increase as many tourists after their visit believe that Mauritius is ideal for families. The study also revealed that improvement should be made in the following areas: road networks, road signage, traffic congestion, pollution, and wreckless taxi drivers. It is also crucial for local inhabitants of a tourism destination to know what the brand image of their destination stands for (Kotler, Bowen and Makens, 2003) as it largely influences the brand image of a destination. The DMO depict the brand image which is a promise about the holiday experience but it is essential for the visitors to enjoy an experience that 'corresponds to their needs and matches the image that they hold of the destination' (Joppe, Martin and Waalen, 2001: 252).

CONCLUSIONS

The study shows that no repositioning of Mauritius is needed as both the functional and psychological brand image attributes show that Mauritius has been positioned as a distinctive destination. These attributes are highly important to Europeans and likely to determine their decision-making process and repeat purchase intentions. The strong relationship between perceptions and destination loyalty reveals that the destination has succeeded to match the tourists' actual experience with the promises made to the consumers prior to travel. Nevertheless, efforts are needed to address the weak image attributes and consolidate the overall brand image of Mauritius perceived by the European tourists.   Destination marketers should continue to focus on developing promotional campaigns that highlight both the functional and psychological attributes as they are ubiquitous in consumers' decision-making process. The study reveals that there is a relationship between the perceptions of brand image attributes and WOM in the context of tourism destinations. Since Mauritius has a high rate of loyal customers and repeaters have established expectations, it is important to identify the perceptions of tourists after the first visits and determine if efforts should be carried out to enhance the perceived attributes of the destination. Therefore, focusing on WOM and continuing to improve the features of the destination is imperative for the destination (Joppe, Martin and Waalen, 2001). Therefore, a careful appraisal of the weak attributes of the destination needs to be performed.

The limitations of the study must be noted when interpreting the results and developing future research. It must be acknowledged that the respondents' opinions may be somewhat influenced by the fact that they were already in Mauritius when completing the part questionnaire related to expectations. The sample may not fully reflect the perceptions of Europeans. The survey was conducted in March 2007 and thus the sample may not be representative of the European tourists who visited the destination during other periods of the year. Another study analysing cross-cultural perceptions and expectations would be

valuable in enhancing knowledge on how best to position the destination in different European countries based on brand image attributes.

Figure I: The Conceptual Framework
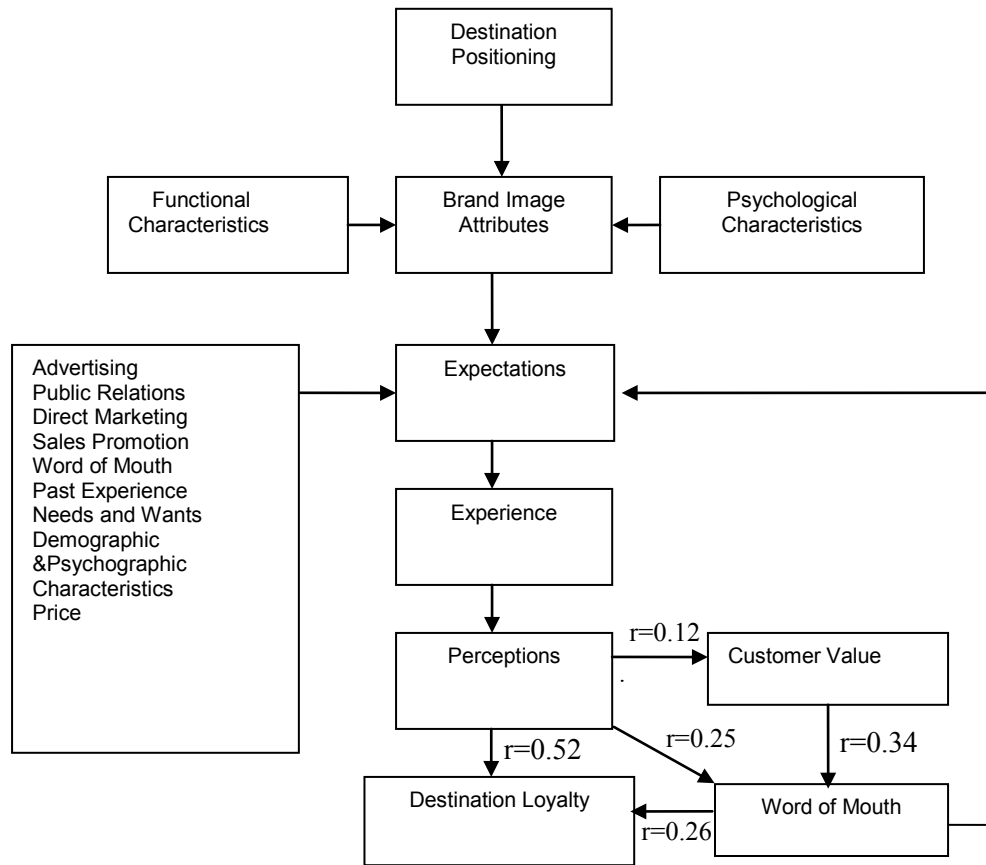
Figure II: List of Brand Image Attributes

Functional (tangible/measurable)

Reasonable Price
White Sandy Beaches
Sunny and Warm Climate
Standard of Hotels
Spa facilities
Shopping facilities
Family Activities
Cultural & Historic sites
Golf and Water Sports
Local Cuisine
Ecotourism and Nature-based Activities
Cultural Diversity
Medical Expertise
Festivals, Events & Handicrafts
Nightlife Entertainment
Safety and Security
Hospitality of Mauritians
Peaceful and Relaxing

Psychological (intangible/symbolic)

Table I: Gap Scores for Expectations and Perceptions

	Expectation Mean	Perception Mean	Gap	t-values
Functional Dimension				
White Sandy Beaches	4.4	4.5	+0.1	2.9*
Cultural and Historical Sites	3.3	3.6	+0.3	6.2*
Ecotourism and Nature-based Activities	3.2	3.5	+0.2	4.5*
Family Activities	3.0	3.2	+0.2	5.5*
Standard of Hotels	4.3	4.3	+0.0	-0.7
Local Cuisine	4.3	4.1	-0.2	-1.2
Festivals, Events and Handicrafts	3.1	3.3	+0.2	4.1*
Medical Expertise	3.6	3.4	-0.2	-2.5*
Cultural Diversity	3.7	4.0	+0.2	4.8*
Nightlife	3.2	3.4	+0.2	2.4*
Spa Facilities	3.0	3.4	+0.5	8.3*
Reasonable Price	4.2	3.9	-0.3	-5.9*
Golf and Water Sports	3.5	3.7	+0.3	5.3*
Shopping Facilities	3.6	3.5	-0.1	-1.9
Sunny and Warm Climate	4.6	4.5	-0.1	-2.8*
Dimensional Scores	3.7	3.4	-0.3	-9.2*
Psychological Dimension				
Safety and Security	4.2	3.9	-0.2	-5.4*
Hospitality of Mauritians	4.5	4.6	+0.1	0.6
Peaceful and Relaxing	4.6	4.5	-0.1	-1.4
Dimensional Scores	4.4	4.3	-0.1	-3.7*
Overall (combined scale of 18 attributes)				
	3.79	**3.84**	**0.05**	**2.50***

Gap mean is defined as perception mean – expectation mean
* Items significantly different between expectation and perception scores at probability < 0.05 (two-tailed tests)

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THE ELECTRONIC MARKETS IN THE NEW ECONOMY

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ABSTRACT

Along the years, any society so far, has had its own economy that illustrated the new economy in contrast with the economy of the old society. Developing a new economy was based on the use of information technology and communications, according to the principles outlined above that have several implications at both macro and micro level. To support the massive investment in modern technologies, at the macroeconomic level should create the appropriate legal and economic opening of financial markets. But not all products and services are financial and banking products and investment services, and not all consumers are investors in capital markets. In this paper we tried to purpose an approach to relations with consumers and the foundation of marketing strategies in the context of globalisation, specifically for financial institutions offering financial products and services globally integrated.

INTRODUCTION

The capital market, including venture capital market must have a development environment. In addition to creating the legal framework of the new realities of economic activity, the state should support both large enterprises and SMEs in introducing new practices based on information and communications technology to improve productivity and reduce costs.The position is currently a European Union financial market is mainly due to the London financial market, giving it the market leader in the capital markets, derivative products, foreign exchange transactions and the insurance market.

On the other hand, the European financial market is in the process of integration, but there are still plenty of areas for improvement, particularly in the provision of single financial market infrastructure. In terms of legislation and regulatory and supervisory institutions, the adoption and implementation of measures contained in the Financial Services Action Plan (FSAP) and the adoption of legislation by the Lamfalussy process, it can be said that the European single financial market will have an effective legislative framework, harmonized and easily to adapt to the pace of development of this market.

Corporate financial products and services market reached an advanced level of integration, but the retail market is quite fragmented in various causes such as inadequate infrastructure, cultural differences, high costs of financial institutions to adapt to market-specific retail from European countries.

Another important feature of the current European financial markets is the existence of three major financial centers - London, Frankfurt and Paris - which focuses most European financial activity. The development of these financial centers with unique infrastructure development and settlement of financial transactions adopting the single European currency by several EU countries will be the pillars of the European single financial market.

Study of investment behavior requires a multidisciplinary approach: financial, neurological and psychological. The need for this approach came from the fact that stock prices have a sound economic development, that is not influenced only by economic reality but also by other factors. During an investment two categories of events occur that affect decisions by investors and that investors react after a logic different from the economic. These events may be expected events and unexpected events.

Richard L. Peterson explained the results of this analysis in his "Buy on the Rumor: Anticipatory Affect and Investor Behavior" as: anticipating a high gain in a short period of time cause a predictable and positive emotional state investor. This state of well lead to changes in investor behavior in the degree of risk. A positive emotional state (euphoria) increase the level of risk and thus stimulated the buying decision. As the time approaches for achieving the expected event that positive emotional state (feeling euphoric) the investor is widening.

As a result, investment behavior is influenced mainly by emotional motivations, the satisfaction that you have investors when playing the stock exchange. Assuming a certain level of risk is not solely the result of the desire for material reward, but is also determined by factors related to the psychological profile of investors, such as: impulsiveness, the desire to live thrilling.

CHANGES AND TRENDS IN ELECTRONIC MARKETS IN THE KNOWLEDGE SOCIETY

Although the appearence of new categories of specific markets and specific global markets, particularly global electronic markets is new, and development and their maturity is still far, analysts have already made a classification of global electronic markets into four groups:
a) the intrinsic global electronic market;
b) local markets globally organized;
c) local markets with global infrastructure;
d) export associations in which the products are exported globally through collaboration producers.

Intrinsically global electronic market is those markets that have reached a degree of global integration, both suppliers and manufacturers with a global presence, and the products also have a global nature. The global nature of services in such markets does not mean that the products are identical. Examples of global markets are the automotive market, the market for personal computers, telecommunications market. In this type of market are included mainly Business-to-Business transactions. The most eloquent example for this market is the automotive market, the market is characterized by an offer that covers the whole world, major vehicle manufacturers working with suppliers of spare parts and subassemblies in the world. Also associated services vehicles, repairs during warranty and post warranty made in any part of the globe. Current trends are apparent in this market - the union through mergers and acquisitions among major producers, forming the true giants of the auto industry - are designed to confirm the global nature of the industry. Market electronics and telecommunications have the same characteristics. Overall local markets include those markets that have organized a similar mode of conduct of transactions that create such an interdependent relation between them, but they are limited geographically.

Local markets are built on a global infrastructure markets by their nature have scope for making local benefits: eg hotel services, facilities or services car rental, real estate services. Some components that are part of the ongoing process of transactions in certain markets may have a global character.

Export associations is a union of producers in a given field of activity and a specific geographical area, aimed at developing global business. Each of the members of these associations has power to expand their business globally, and in this recital shall constitute a joint entity to handle the export of their work from external marketing activity to international transport and settlement and external financing. This triggers a global scale electronic market, although it is characterized by a strong element of local character.

Wishing to respond as well to consumers, but also for reasons of risk mitigation market, access to new resources, the overall approach of the market there is a trend of increasing collaboration between companies close. Also, competition, technology, deregulation of markets and not least consumer behavior

are key factors determining the convergence of industries, a trend that manifests itself in increasingly powerful today.

This trend has resulted in changes in the structure of traditional industries, which will not have a single decision center, but will be decentralized and will form the global network.

Developing markets in the new economy is driven by processes of digitization (digitalization) and increased connectivity (connectivity). Digitization determined largely intangible nature of the markets that form the new economy. Connectivity refers first to the interconnection of producers and consumers in the same industry via Internet, intranet and extranet, as well as communication networks with global reach but also the interconnection between different industries.

Another feature of markets in the new economy is given by the process of disintermediation, which is based on using the Internet as a distribution channel is developing in such a direct relationship between producers and final consumers, excluding the intermediaries. Thus, some links of the physical value chain will disappear.

For producers, this process has the effect of direct access to information from direct contact with end customers and increase profitability. Consumers also benefit from the shortening of the value chain can benefit from global supply products and services they wish to purchase. At the same time the new realities brought new intermediaries will handle meeting between producers and consumers in the virtual environment, a process called reintermediere. These new intermediaries will manage data warehouse information, will ensure safe and unadulterated transfer of information in the electronic environment between producers and final consumers. The process of disintermediation and reintermediere will contribute to increasing personalization (customization) of services and better adaptation of products to consumer demands. This will ultimately help to increase consumer satisfaction by offering products and services that exceed their expectations. Increasing the level of customization is completed by the possibility for consumers to global communications networks and the Internet, to participate actively in the implementation of products and services since the design phase, a process called customerizare (customerization). The benefits of the participation of consumers to achieve finality products and services is increasing consumer satisfaction by reducing the gap between promised and the products and services actually delivered.

Participating companies in global electronic markets has other effects on their business: increasing sales and market penetration by facilitating direct access to a global market, obtain lower purchase prices due to increasing competition by increasing market transparency, reduced inventories due to a better understanding and influencing demand through free and low cost access to information about consumers and not least the efficiency of transactions by using electronic trading channels and integrated computer systems interconnected.

One thing is certain: the sense that humanity is heading, and thus the economy is that of globalization, a world characterized by strong interdependence of all activities, even if today we find a logical connection between these activities. Certainly this process has positive aspects and will lead the development of the world, but at the same time, be quantified and removed where possible, the negative aspects of globalization.

CONCLUSIONS

The new phase of economic development - "new economy" - will produce, in addition to the effects of stimulating economic activity, adverse effects (eg increasing gap between developed and less developed) to be quantified. It is also necessary to rethink the regulatory framework of this new economy, which

must reflect global economic realities. The new economy will cause specific market categories, namely global electronic markets, which will require new approaches at macro and micro.

Like all economic activity and financial market is currently in the process of integration under the influence of globalization. This phenomenon has various manifestations depending on the history of financial systems. In countries where the financial system is based on the market, disappear historical separations between commercial and investment banks, transforming them into universal banks.

A major feature of the new economy is that its main resource information and economic power is held by those who control information. The fact that information is the most important resource in the context of an economy based on information and communication technology is best highlighted by the analysis of investor behavior on stock exchanges.

Background of marketing strategies in the new economy must take account of changes and progress of all environmental factors which influence action activities of financial institutions.

The starting point in setting up a consumer strategies. It was shown that informed consumers in the financial markets are not only taken on a logical basis, the results of financial analysis and risk analysis, but often the psychological profile of investors, of their emotional reactions under the action of stress factors. Analysis of ordering emotional reactions of their psychological profile of investors is currently used in financial advisory work for investors.

The purpose of this review is to provide investment advice that will lead to achieving goals in terms of emotional stability to investors and thus avoid their irrational reactions.

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CASE STUDY: DEVELOPMENT OF BIO BIO FRANSHIZE ON CROATIAN MARKET

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ABSTRACT

Although the concept of franchise business is well known in the world long time ago, in Croatia, it is still in the beginning, especially the development of domestic franchise business. The study of franchising as a small business growth strategy is only weakly researched and understood, especially in the Croatia. In this Case study we describe the development of a small firm from its begging and translating their business concepts into a franchise format. The key role in this process has played management team consisted of the owners of the small firm .This case study provides an introduction to the establishment, development and managerial issues confronting the small enterprise becoming franchise. The findings suggest that franchising is a viable growth strategy for growth-oriented small businesses.

KEY WORDS: franchise development, Croatia, small firms, growth

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FAMILY FIRMS: EVOLUTION AND OWNERSHIP CONTROL TYPE IN LISTED SPANISH FIRMS

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ABSTRACT

Over the last few years, corporate governance literature is focused in ownership structure in public firms, identifying the last owner of the company. In this way, the Spanish Stock Exchange is rather similar to other countries and some estimates have suggested that 50 % of the firms have some significant family ownership blocks. However, there are still some questions to resolve: What has been the evolution of family presence in listed companies? Families are present in those companies considered non-family firms? What is the ownership control type exercised by families in listed firms? This study analyzes the presence, evolution and ownership control type in a collective of family listed firms during the period 1990-2005. The purpose is to show the importance of families as agents involved in stock markets and the study of differences with regard to companies classified as non-family firm, firstly comparing them according to ownership concentration, secondly in type of control exercised. Empirical analysis shows an increase of families firms in Spanish Stock Exchange, a higher level of ownership concentration for family firms, and a high presence of family agents in non-family firms.

MODELING PERSISTENCE, ASYMMETRY, AND DYNAMIC CORRELATIONS IN EXCHANGE RATES: NUMERAIRE CURRENCIES DO MATTER

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ABSTRACT

In this paper, we show that the choice of the numeraire currency does matter in analyzing currency volatility and implementing currency trading strategies, because numeraire choices other than the US dollar (USD) can yield significantly different outcomes. Several major international currencies that are actively traded in foreign exchange markets, such as the Australian dollar (AUD), New Zealand dollar (NZD), Euro (EUR), Canadian dollar (CND), Singapore dollar (SGD), and Malaysian ringgit (MYR), are selected and measured against different numeraire choices. There is little evidence of asymmetric effects when the currencies are measured against the USD or the British pound (GBP). However, we find strong support of volatility asymmetry when the Japanese yen (JPY) is the numeraire. In general, asymmetric effects are more significant in the non-USD cross rates. Furthermore, the evidence of time-varying correlations is very strong among the different non-USD cross rates. These estimation results are quite robust even after including the recent period of the highly volatile global financial crisis. We analyse the implications of our results for the trading of currency options and currency trading strategies. In particular, we show that the strong evidence of time-varying correlations among non-USD cross rates can be exploited to improve trading strategies even in times of high market volatility. Our findings therefore suggest that the stylized facts of exchange rate volatility in the literature could be incomplete if they were solely based on the USD bilateral rates.

BIOGRAPHY

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TEACHING IFRS: ENLIVEN YOUR CLASS WITH EXPERT GUEST SPEAKERS IN REAL-TIME OR VIA CYBER-SPACE

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ABSTRACT

In 2009, 117 nations have adopted or permit the use of IFRS. While several IFRS textbooks are beginning to appear on the worldwide market, and several innovative curriculum developments are occurring, the teaching materials are still considered sparse. An emerging and impressive resource for IFRS education includes IFRS guest experts that enliven and inspire the class. We explore the value of guest speakers to elevate the quality of IFRS education worldwide. We initially examine the use of live guest speakers whether physically present or via teleconference. Then we introduce the use of "Cyber-Guest" Lecturers that enable professors to bring IFRS experts into the classroom via webcasts and online videos. We report on our experiences at San Diego State University and Roosevelt University. Student reactions to these pedagogical innovations have been overwhelmingly positive. Our experience with cyber guest speakers has inspired an innovative IFRS student video competition amongst our universities.

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THE DEMOGRAPHIC TRANSITION AND THE HOUSEHOLD SAVING IN ITALY

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ABSTRACT

In recent years the savings propensity of Italian households is undergoing a series of changes. These changes are related not only to the dissemination of innovative financial instruments, but also to change of the population demographic structure. The aim of this research is to analyze the relationship between the population structure and the saving by Italian households. From the methodological point of view, the research is developed through the collection of data representative of the saving of Italian households published by the Bank of Italy and data related to some demographic and economic indicators. The study uses a multi-disciplinary approach. The paper finds that, in the current Italian population, saving behaviour is markedly different across generations, geographical area and qualification.

KEYWORDS: Saving, Demographic transition.

JEL: G20, G21, C40, C44

INTRODUCTION

The financial global current crisis determined deep economic and moral losses on investors. These events have revealed the importance of saving and especially its allocation in the nation economy. Indeed, the saving is very important by the industrial and financial system of a country. The aim of this research is to analyze the relationship between the population structure and the saving formation by Italian households.

From the methodological point of view, the research uses a multi-disciplinary approach and is developed through the collection and rework of data published by the Bank of Italy. Particularly, data regard a survey on the budgets of Italian families in 2006 and are related to some demographic, economic and financial indicators. The survey covered 7768 households, 19551 individuals, of which 13009 income earners.

The remainder of the paper is organized as follows. Section 2 discusses the household saving as is common in the literature, section 3 presents the demographic transition, section 4 analyzed the household structure and the saving, while section 5 concludes the paper.

THE HOUSEHOLDS SAVING

Recent financial crisis have led to serious repercussions on the global economy because of the deep economic and moral losses inflicted on investors. These events have revealed, more clearly today than yesterday, the importance of saving and especially its allocation in the nation economy. Indeed, the saving is very important by the industrial and financial system of a country.

For example, due to the absence of efficient credit and insurance markets, household savings are a crucial determinant of welfare in developing countries. On the one hand, without savings, households have few other mechanisms to smooth out unexpected variations in their income, and so, shocks may leave permanent scars such as interrupting the process of human capital accumulation at early ages. On the other, the capacity to save becomes one of the main vehicles of social mobility and of enhancing future

income-earning possibilities. Additionally, although there is controversy around the relation between savings and economic growth, it is generally agreed that once savings start to rise – perhaps due to increases in income – they enhance the potential to finance investment, and lead to the creation of more opportunities in the economy.

Domestic saving finances the bulk of any country's investment. The theoretical literature on the determinants of saving is rooted in consumption theory and, consequently, largely centers on factors affecting households. Loayza et al. (2000) provide an overview of empirical studies in this area in developed and developing countries. Their own cross country empirical work finds that private sector and national savings are affected by:

the level of development (per capita income), with the influence of per capita income larger in developing countries; economic growth, with much of the causation running from growth to saving; fiscal policy, with its impact on national savings typically only partly offset by responses in private saving; pension reform, with direct short-term effects depending on the financing of the transition deficits and long term effects likely dominated by labor market effects; financial liberalization, with the impact on saving of interest liberalization mixed, but a strong effect from expanding the supply of credit to people that had been credit-constrained; demographics, with an increase in the share of young or elderly dependents in the population tending to reduce private saving—by 1 percentage point (pp) for a 3.5 percentage point increase in the young age dependency ratio, and 2 pp for a similar increase in the old age dependency ratio; as well as by external borrowing and foreign aid, and uncertainty.

Then, it is very necessary consider the common meaning of the word saving. First, saving is represented by a general restriction of consumption aimed at reducing the extent strictly necessary to achieve a certain purpose (Dell'Amore, 1972). In general, the aim of saving is to provide resources to face unexpected expenses (this is called precautionary saving), to ensure a future income attached to the income offered by the pension system, leave a legacy or to make an investment.

Second, saving is defined as the balance of the income distribution, ie the positive difference between revenue and expenditure (Lisle, 1971). In this context, the savings is a variable flow, because it measures the size of a phenomenon over a given period of time, unlike the patrimony which is a variable of stock.

In recent years, the Italian legislature has realized the need to enact a law degree to complete the forms of protection of savings put by the Legislative Decree of 24 February 1998, n. 58 (TUF). This is the Law n. 262 of 28 December 2005, known as the "law for the protection of savings and discipline of financial markets", which replaced some articles of TUF and established: greater transparency of banking contracts, restrictions on ownership, regulation on corporate governante, greater information disclosure to public.

In Italy, the attention devoted to the saving from the doctrine is not new as can be found in the literature. But is necessary to clarify that the positions taken by leading scholars and theorists are so different as to render it necessary to distinguish between evaluations of economic science and that of science financial. While the economic literature uses mathematical models of their discipline and focuses on the difference between income and consumption, the financial literature emphasizes quantitative and qualitative analysis of savings by focusing on its evolution and on the techniques of allocation.

Recently, the literature has shown increasing attention on how households allocate the financial component of wealth (Guiso et al., 2002). Normally, the flow of savings into investment is facilitated by the banking system. This is even more evident in the Italian context in which the banks have always been primarily concerned with the transfer of resources between the macro-economy, channeling the flow of funds from surplus areas to deficit ones, and ensuring allocation of resources.

DEMOGRAPHIC TRANSITION

The demographic transition model: The changes of a population are the effects of some particular demographic phenomena: fertility, mortality, migrations. In demography, but also in the other sciences, it is possible to speak of the demographic transition. It deals with a theory which explains the trend or the transition of a population from high birth rates and high death rates to low birth rates and low death rates as part of the economic development of a country from a pre-industrial to an industrialized economy. It is based on an interpretation begun in 1929 by the American demographer Warren Thompson of prior observed changes, or transitions, in birth and death rates in industrialized societies over the past two hundred years. Normally this model is described by four phases.

At the beginning, in the pre-industrial society, everyone is characterized by a level of fertility and mortality very high and roughly in balance.

In the *second stage*, that of a developing country, the death rates drop rapidly due to improvements in food supply and sanitation, which increase life spans and reduce disease. These changes usually come about due to improvements in farming techniques, access to technology, basic healthcare, and education. Without a corresponding fall in birth rates this produces an imbalance, and the countries in this stage experience a large increase in population.

Figure 1 – The model of the Demographic transition
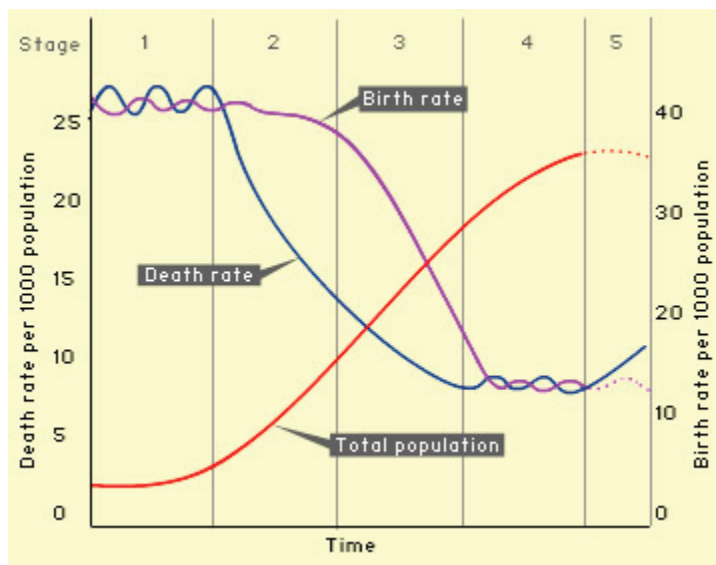
Stage three moves the population towards stability through a decline in the birth rate. There are several factors contributing to this eventual decline, although some of them remain speculative:

In rural areas continued decline in childhood death means that at some point parents realize they need not require so many children to be born to ensure a comfortable old age. As childhood death continues to fall and incomes increase parents can become increasingly confident that fewer children will suffice to help in family business and care for them in old age.

Increasing urbanization changes the traditional values placed upon fertility and the value of children in rural society. Urban living also raises the cost of dependent children to a family. A recent theory suggests that urbanization also contributes to reducing the birth rate because it disrupts optimal mating patterns.

In both rural and urban areas, the cost of children to parents is exacerbated by the introduction of compulsory education acts and the increased need to educate children so they can take up a respected position in society. Children are increasingly prohibited under law from working outside the household and make an increasingly limited contribution to the household, as school children are increasingly exempted from the expectation of making a significant contribution to domestic work. Even in equatorial Africa, children now need to be clothed, and may even require school uniforms. Parents begin to consider it a duty to buy children books and toys. Partly due to education and access to family planning, people begin to reassess their need for children and their ability to raise them.

Increasing female literacy and employment lower the uncritical acceptance of childbearing and motherhood as measures of the status of women. Working women have less time to raise children; this is particularly an issue where fathers traditionally make little or no contribution to child-raising, such as southern Europe or Japan. Valuation of women beyond childbearing and motherhood becomes important. Improvements in contraceptive technology are now a major factor. Fertility decline is caused as much by changes in values about children and sex as by the availability of contraceptives and knowledge of how to use them.

The resulting changes in the age structure of the population include a reduction in the youth dependency ratio and eventually population aging. The population structure becomes less triangular and more like an elongated balloon. During the period between the decline in youth dependency and rise in old age dependency there is a demographic window of opportunity that can potentially produce economic growth through an increase in the ratio of working age to dependent population; the demographic dividend.

This occurs where birth and death rates are both low. Therefore the total population is high and stable. Some theorists consider there are only 4 stages and that the population of a country will remain at this level. The demographic transition model is only a suggestion about the future population levels of a country, it is not a prediction (Beaver, S. E., 1975).

The effects of second transition: During the last two decades, European countries have been characterized by several changes in their demographic patterns: the drop in their fertility and mortality rates and a marked increase in their life expectancy. These demographic changes, which have been identified as the key elements of the Second Transition, especially affect in the social science. These aspects have contributed to the emergence of new and particular needs in the welfare.

Western European countries have adopted (with difference intensity since the 60's and 70's decades) some latest demographic patterns that have posed as well, new challenges for their society.

The principal demographic feature of the second demographic transition is the decline in fertility below the replacement level, which is set at 2,1 birth per woman. If the fertility decline below this level the population sustainability will not be able to be granted (Van de Kaa, 1993). The other feature of the second demographic transition is the increase of life expectancy from it carries out the population aging. So, the decline of fertility, the increase of life expectancy and aging population can determine the changes in the public society.

Aging population is studied both for its implications on the progress and sustainability of accounts, and for the consequences on the formation of savings and accumulation. The demographic phenomenon further studied and discussed by economists is the increase of the dependency ratio, defined as the ratio between the number of people aged over 65 years and that of individuals aged between 15 and 64 years. If the fertility rate remains at levels last decade and the average life expectancy continues to lengthen, this ratio is expected to rise continuously until 2040, with radical consequences for major financial institutions

of social protection. However, the demographic transition set in motion other changes in the relationships between the abundance of related generations. A significant aspect, but perhaps less examined for its implications macroeconomic, is the analysis of the passage of the baby-boom along the stages middle and end of life. Over the next two decades these generations, numerically more numerous than the others currently living in a period of life when level of disposable income and savings are higher. What effect might this phenomenon on macroeconomic variables and their relative prices? Specifically which could be the effects on the formation of private savings? (Baldini, Mazzaferro, 2000).

HOUSHOLDER STRUCTURE AND SAVING

Data collected shows that the householder is composed mainly by four components and an income earner, generally the breadwinner. In a lot of cases, they are Italian citizens, and some of them came to Italy in 2001. Furthermore, the majority of respondents are residents in Lombardy.

The percentage of couples without children continues to increase, while the percentage of householder with more than one child decreases. The average number of family members is greater in the South, especially in Campania. The breadwinner is man in 25.04% of cases, he has less than 30 years in 2.94% of cases and he has more than 65 years in 30.19% of cases. The most common qualification is the middle school. Particularly, they have graduated from a technical institute while the degree is prevalent in the liberal arts. In 8.9% of cases the breadwinner has a degree, while in 5.52% he has not a qualification.

The breadwinner is most frequently an employed dependent (the 34.45% against 10.23 of the employed independent). The majority of those in non-professional status (54.91%) consist of pensioners (45.4%). The components of the householders are women and in 29.57% of cases the age is under 30 years, while in 21.13% of cases is over 65 years. The share of components in occupational status is equal to 36.59% while pensioners represent 26.88% of components and other non-employed account for 36.52%. The 29.97% of Italian families live in towns with fewer than 20,000 inhabitants, in 19.69% of cases in municipalities with populations between 20,000 and 40,000 inhabitants, and the remaining 50.34% in the larger towns.

It increases the share of foreign-born individuals residing in Italy, amounting in 2006 to around 5%. Of these, 56% came from European countries and, in particular, the 13% from countries joining the EU. In 2006 the average annual householder income, net of income taxes and social security contributions, is 31,792 euros, equal to 2649 euros on month. The average householder income is higher for households with breadwinner graduate, working independently or as a manager, aged between 41 and 65 years. Also it grows with the increase in the number of components and it is lower for householders residing in the South.

In 2006, the 89 .2% of households owned a bank or check deposit. Among the forms of bank or check deposit, the current account is very diffuse. The most of the interviewed families have an account at one bank and use it for more than 10 years. This choice is linked to proximity to housing. Typically, through the account it is possible to pay bills and to credit the salary. The use of financial instruments increases with income and educational qualifications. Moreover, the financial instruments are generally more common in the North and Center of Italy, with the exception of postal deposits that are more common in the South.

Particularly, the 75% of families residing in the South has at least a deposit, against the 93% in the Center and the 97% in the North. The gap between North and South is more pronounced in relative terms in the case of shares, bonds and government securities, of which the spread is six times that of North and South Islands.

As regards the saving forms, in 2006, the 8 .5% of households owned bonds, the 12.1% bonds and shares of mutual funds, the 6.2% Italian equity, the 1 .6% invested their savings in the form of loans to cooperatives, the 1 .4% commit them into asset management and the 2.1% by buying certificates of deposit or repurchase agreements. Only the 0.7% invested in foreign securities.

Also, a wider distribution of government bonds is observed for households with householders manager (13.6%), retired (10.6%), contractors and freelancers (15.2%) and is particularly low when the breadwinner is a worker (3.6 %). For other forms of savings account workers are oriented more toward bonds and mutual funds, while a high percentage of managers also invested in the stock market.

The survey shows that there is a gradual replacement of traditional payment instruments such as cash and checks, with payment method most advanced and flexible, like a credit card and debit cards. The use of new technologies to make payments and manage relationships with intermediaries is spreading, but remained still limited to a small portion of the population. The 63% of households have a credit card: 60% are in possession of ATMs and the 31% of credit card and the 2.2% is in possession of a prepaid card.

The average monthly expenditure made in cash by households amounted to 943 euros, the 48% of the average monthly expenditure, the share of consumption is higher in the South and Islands, for families with householders with low educational qualifications or with less disposable income. The most common ways through which families receive their income is the direct payment on current account (74.5%). The number of payments made over the Internet by households is still low. The inquiry found that the majority of households surveyed in 2006 does not use computers at home while owning it. Among the reasons given by households that are non-recourse to forms of internet buying, are the prevailing view of the impossibility of goods and fears of payment fraud. Evolved form of communication with financial intermediaries such as remote banking uses 8 .5% of households. Of these, the majority uses the connection through the Internet (87%). The use of new technology features, particularly families living in the North or in the large towns, or with heads of households aged between 30 and 50 years, with highly educated, manager or entrepreneur.

The analysis on the Italian housholder structure and the saving put in evidence as the saving behaviour is markedly difficult. In fact, there are cases where saving is negative and the increased value frequency that assumes the savings is null (Table 1).

CONCLUSIONS

The devastating effects produced by the latest crisis of the markets have shown, clearly, the need analyze the relationship between the households saving formation and the population structure.

The data collected and processed confirm that spread of financial assets is linked to family characteristics and primarily to the economic characteristics (Guiso et al., 2002), the use of financial instruments increases with the income and the educational qualification. Furthermore, the ability of individuals to make appropriate decisions regarding the management of its finances varies in relation to their degree of financial literacy. The growth of the levels of financial knowledge is a topic of great interest to economic institutions and is an essential condition to conscious choices of savings. The degree of financial literacy is related to the level of schooling.

The housholders of the South have less financial knowledge than the rest of Italy, but there is no significant difference between the degree of education to householders of the North and the Center. With regard to occupational status, the householders with breadwinner executive, entrepreneur or self-

employed are more financial educated. The degree of financial literacy is higher for households with breadwinner aged between 41 and 50 years, the elderly appear less financial educated than younger.

Table 1 - Income, Consumption And Saving

		NQUEST	Y	C	S
N	Validi	7.768	7.768	7.768	7.768
	Mancanti	0	0	0	0
Media		615.652	62.909	271.100	432.448
Mediana		688.032	26.222	20.400	4.720
Moda		173[a]	13.000	16.800	0
Deviazione std.		204.016	2.258.566	12.756.158	15.395.149
Varianza		41.622.401.369	5.101.119.960.466	162.719.559.000.863	237.010.612.076.321
Minimo		173	-8.643	40	-93.919
Massimo		800.064	193.311.360	777.185.280	704.619.648
Somma		4.782.386.746	488.677.467	2.105.902.527	3.359.258.845
Percentili	25	650.048	17.185	14.520	850
	50	688.032	26.222	20.400	4.720
	75	718.831	39.791	28.800	12.260

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AVERAGE COST SINGLE-STAGE CAPACITY AND INVENTORY MODELS: AN ANALYSIS USING A VANISHING DISCOUNT APPROACH

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ABSTRACT

An important problem in the theory of dynamic programming is that of characterizing sufficient conditions under which the optimal policies for Markov Decision Processes (MDPs) under the infinite horizon discounted cost criterion converge to an optimal policy under the average cost criterion as the discount factor approaches 1. In this paper, we provide, for stochastic inventory and capacity allocation models, a set of such sufficient conditions. These conditions, unlike many others in the dynamic programming literature, hold when the action space is non-compact and the underlying transition law is weakly continuous. Moreover, we verify that these conditions hold for almost all conceivable single stage models with few assumptions on cost and demand parameters. As a consequence of our analysis, we partially characterize, for the first time, optimal policies for various systems that are of great interests to researchers in capacity management and finance. These include: (a) capacitated systems with set-up costs, (b) uncapacitated systems with convex ordering costs plus a set-up cost, and (c) systems with lost sales and lead times.

DEBT FINANCING AND CORPORATE GOVERNANCE: AN EMPIRICAL STUDY BASED ON LISTED COMPANIES IN CHINA

Wenqing Huang, Jinan University

ABSTRACT

This paper makes an empirical study on the governance effects of China's listed companies from three foundational dimensions, namely, debt financing level, debt maturity structure and source of debt. We find there is a significantly negative relationship between debt financing and market valuation of the firm. Creditor governance displays several features, such as soft constraints and weakening governance, failing to exert its appropriate role in governance effect. We also find long-term debt financing and enterprise bond financing have significant effect on corporate governance while commercial credit financing and bank loans fail to implement effective supervision and constraints on managers of listed companies. Their governance effect is weak or deteriorated, which not only fails to alleviate the problem of company agency but also aggravate the agency conflict of the listed companies to some extent. The results of this paper will present evidence for the difference between varies kinds of debt financing.
Key Words: debt financing, corporate governance, capital structure

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ACCOUNTING QUALITY, STOCK PRICE DELAY AND FUTURE STOCK RETURNS

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ABSTRACT

We test the hypotheses that (i) poor accounting quality is one source of market frictions that contribute to stock price delay, and (ii) the portion of price delay due to poor accounting quality is associated with a stock return premium. Price delay is the average delay with which information is impounded into stock prices (Hou and Moskowitz, 2005). Accounting quality measures are based on the quantitative information in financial statements, and results are robust to use of a qualitative characteristic of annual reports (the FOG readability index of Li, 2008) to measure accounting quality. The results are consistent with our hypotheses, suggesting poor accounting quality is economically costly in that it hinders timely price adjustment and increases the cost of equity.

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ACKNOWLEDGEMENT

THE INFLUENCE OF KNOWLEDGE SPILLOVER AND ABSORPTIVE CAPACITY ON INNOVATION OF HIGH-TECH INDUSTRY CLUSTER

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ABSTRACT

High-tech industry cluster has become the most successful model to develop the high-tech industry and promote technology advancement. So in the last decade, there has been a widespread resurgence of interest in high-tech industry clusters. Although some theoretical and practical studies on the innovation of high-tech industry cluster has been conducted, research on the relationship among knowledge spillovers, absorptive capacity, social capital and innovative performance in the high-tech industry cluster still needs further investigation. So this paper builds an conceptual model of knowledge spillover, absorptive capacity, social capital and innovative performance operating within the high-tech industry cluster.

Basing on the theoretical analysis, we put forward twenty hypotheses about the influence of knowledge spillover on innovative performance; the influence of absorptive capacity on innovative performance; the mediating role of absorptive capacity on the relationship between knowledge spillover and innovative performance; the influence of social capital on knowledge spillover and the influence of social capital on absorptive capacity. These hypotheses are tested on the data from questionnaire of 102 software enterprises within Changchun software industry cluster.

In this paper we find the following. Tacit knowledge spillover is positively correlated with innovative performance of firms within the high-tech industry cluster. Potential absorptive capacity is positively correlated with innovative performance of firms within the high-tech industry cluster; Realized absorptive capacity is positively correlated with innovative performance of firms within the high-tech industry cluster. Absorptive capacity has a moderate effect on the relationship between tacit knowledge spillover and innovative performance. Absorptive capacity has a moderate effect on the relationship between explicit knowledge spillover and innovative performance. External social capital of high-tech industry cluster is positively correlated with explicit knowledge spillover. Internal structural capital is positively correlated with tacit knowledge spillover. Internal structural capital is negatively correlated with explicit knowledge spillover. Internal relational capital is positively correlated with tacit knowledge spillover. Internal relational capital is positively correlated with explicit knowledge spillover. Structural capital is positively correlated with cognitive capital. Relational capital is positively correlated with cognitive capital. External social capital of high-tech industry cluster is positively correlated with potential absorptive capacity. Internal structural capital is positively correlated with potential absorptive capacity. Internal relational capital is positively correlated with potential absorptive capacity. Internal cognitive capital is positively correlated with realized absorptive capacity.

PATIENT SAFETY MANAGEMENT SYSTEMS BY ADMINISTRATIVE ARCHIVES

Pietro G. Lovaglio, University of Bicocca-Milan

ABSTRACT

The aim of the article is to present, within the Healthcare Safety Systems evaluation framework, feasible strategies to improve understanding of key factors in the assessment of prevalence rate of clinical errors and to help identify priority areas for interventions that could increase the patient safety. Specifically, the association between Hospital quality indicators and (incidence of) clinical errors causing the patient's death or lesions is investigated. Data, covering the period 2004-06, were drawn by merging two administrative archives of the Lombardy Region: the Regional Database collecting claims and demands of reimbursement declared by patients hospitalized in Regional healthcare structures and Hospital Discharge Records. Results, performed utilizing Counts Regression Models, evidenced that re-admissions rate for the same Major Diagnostic Category and Discharges against medical advice rate significantly affect the incidence of errors causing the patient's death, whereas unscheduled surgical readmission rate in operating room significantly affects the incidence of surgical error rate. This suggest that Health structures that present high incidences for quality outcomes having a significant impact on clinical error rates should be monitored in depth, investigating medical charts of involved patients for identifying quality problems and problematical areas.

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CLIENT ASSESSMENT OF PROFESSIONAL SERVICES QUALITY OF PUBLIC ACCOUNTING FIRMS

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ABSTRACT

The primary purpose of this study is to examine the relationship among determinants of service quality, using a modified SERVQUAL (Parasuraman et al., 1991) instrument, and auditing clients' overall satisfaction with their auditing firm. While auditing firms have conducted client satisfaction surveys (e.g., Grant Thornton, 2005), little independent academic research has been carried out to determine auditing firm satisfaction. This study aims at adding to this limited body of literature. Marketing literature suggests that one of the most important measures of how professional firms are perceived by clients is overall client satisfaction with services provided. Researchers agree that overall service quality is associated with client satisfaction (Dabholkar, Shepherd, & Thorpe, 2000) and some assert that client satisfaction then leads to customer loyalty (Ismail, Haron, Ibrahim, & Isa, 2006). Our survey was sent to the chief accounting officer (CFO, Controller, etc) at 774 publicly traded companies. Data analysis on 173 survey responses indicate that certain measures of service quality do, in fact, have a significant relationship with overall client satisfaction. Preliminary findings further indicate that clients are, for the most part, satisfied with their audit firm. Eighty-five percent of the respondents indicated that they would recommend their audit firm to others.

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STRATEGIC IMPLICATIONS OF THE FINANCIAL STATEMENTS ANALYSIS FOR A BETTER MARKET COMPETITIVENESS OF THE ENTERPRISE

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ABSTRACT

The enterprises operate under very tough market conditions. In order to achieve and sustain the competitive position of a profit oriented enterprise, it is necessary to continually perform analysis and make well supported decisions. The process of developing a successful competitive strategy requires permanent supply of high quality information, both financial and non-financial. Thus, such information is being prepared by the financial statements analysis. This analysis enables to measure the success of the entity in the competitive battle within the modern market. Significant attention and emphasis in this process should be put on the benchmarking with other entities or with the average of the group or the industry. Useful information can be obtained based on comparative analysis of the available assets, liquidity and solvency, all in order to assess the financial position and performance of the entity and its competitors on the market. The results of the analysis can then be used to determine the existing variances and deviations from the "normal" practice, clarify the reasons for these disconnects, and suggest correction measures to reduce and/or eliminate the negative consequences or maintain and/or improve the positive aspects of the work. This is all in the spirit of a solid management for making high quality business decisions which will lead towards establishment of a new or modification of the existing strategy for improving the competitiveness and strengthen the current market position of the entity.
This paper will focus on the analysis of the financial statements and its role in improving the entity's operations and results, as well as improving the competitiveness strategy on the market.

KEY WORDS: financial statements analysis, quality information, financial and non-financial information, benchmarking, strategic goals, competitiveness.

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CONTEMPORARY MONETARY POLICY REGIMES AND THE DEVELOPMENTAL STATE MODEL IN SOUTHERN AFRICA.

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ABSTRACT

Monetary policy is a critical cocktail of interventions, by central banks aimed at achieving financial stability of a country. This is sacrosanct and is at the core of the mandate of monetary authorities. In the main such prescriptions and proscriptions direct the allocation of scarce resources in the economy at large. The main policy interventions are in the main, rooted in controlling money supplyand the operation of the interest rate lever. The impetus behind this study has been to evaluate the practical efficacy of the monetary policy regimes in Southern Africa, in mediating the global financial crisis that has transcended into the real sectors. It is trite to highlight that the mediation of this crisis has been anchored on the complimentary role between fiscal and monetary policy. Therefore it is imperative that monetary policy and fiscal policy are in synch and not at variance with one another in order for them to fight the financial crisis. Macroeconomic stability is at the epicentre of economic well being of any country. This can be achieved in various ways, depending on the guiding philosophy that is propelling monetary policy in a country. Thus the monetary policy stunt derives from the broader economic objectives of the country. This can take the form of an expansionary policy, aimed at achieving economic growth and uneasing unemployment, contractionary policy aimed at reigning in inflation and a neutral policy which aims at maintaining the status quo. This in the main is achieved by utilising the interest rate lever as well as the money supply lever.

It is instructive to note that Southern African countries other than South Africa are in the main in the nascent stages of economic growth, and have on paper adopted the Developmental State model. Thus this research effort seeks to entangle what policy interventions inform the monetary policy direction of developmental states. The contestation in the monetary policy realm is between Keynesian and Monetarist economics. It would seem there is no one philosophy that can be applied all season, and all weather consistently.

This research effort would try to propose a raft of policy measures that are in synch with the developmental state model, in trying to weather the financial storm that has caused untold suffering in many countries. In the final analysis the relationship between the fiscus and the monetary side of things shall be established with view to enhancing financial stability of developing countries. Suffice to say that the integration of Southern Africa, or the broader picture, that of the creation of the United States of Africa, will largely be underpinned by congruency of not only economic policies but monetary polices as well.

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DERIVATIVES AND POVERTY ERADICATION IN INDIA: THE BRIGHTER SIDE OF FINANCIAL PRODUCTS

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ABSTRACT

India stands at a point of inflection in its story of economic growth. In order to switch growth trajectories, it is imperative to take advantage of the demographic profile of the country with its rising young population and convert the demographic dividend into a development dividend. But sadly, a major chunk of this young population is trapped in poverty, thus making poverty eradication a vital component for development. Around 30 billion Indians live below the poverty line. The government has started a multitude of successful programmes like the National Rural Employment Guarantee Act to address the issue, but with the extremely high fiscal deficit at 6.8% of GDP, for the year ending in March (highest in 16 years), funding such programmes will get difficult in the future.

This paper uses shadow domestic support notifications, based on those sent by India to the WTO, to show how the government can use derivative products to free up capital to the tune of about 4-6% of its fiscal deficit. This capital is currently tied up in the product specific agricultural price support programmes and could be used for poverty eradication and thus economic development, without creating pressure on the already high fiscal deficit.

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DOES OPENNESS MATTER? MARKET REACTIONS AND INFORMATION CONTENT IN PROFIT WARNINGS

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ABSTRACT

We study manager's decision to disclose how much information in profit warnings, and the immediate and long term market reactions to such warning statement in Hong Kong. Specifically, we examine whether different richness of information content in profit warnings leads to different market reactions both in short term and long term horizon. We find that firms with more negative future earnings surprise tend to make a profit warning with less information content. As for the market reactions, unusual stock price movements are documented during the days around profit warning dates, and market does react less negatively to warnings with rich information content. For longer term window, the abnormal market return is also positively associated with the richness of information disclosed in profit warnings, indicating that firms which disclose more information in previous profit warnings have less underreaction drift.

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DYNAMIC OF FINANCIAL INNOVATION AND PERFORMANCE OF BANKING FIRMS: TUNISIAN BANKING INDUSTRY

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Chokri Mamoghli, Higher Institute of Management

ABSTRACT

We examine the adoption of product and process innovations in the Tunisian banking industry in the period 1986 to 2006. We analyze the effect of the adoption of financial innovation on the performance of banks. To do this, we are interested in the environmental and organizational determinants of financial innovation in order to include them in our analysis of the relationship between financial innovation and banking performance. We also intend to take into account the simultaneous nature of the innovation-performance relationship. The analysis includes the two adoption behaviours, first mover and imitator. We find evidence that the first mover initiative in product innovation improves profitability while process initiative has a positive effect on profitability and efficiency. Banks that imitate are less profitable and less efficient than first movers. Being a first mover gives the bank a competitive advantage and a larger market share than imitators. We find that the emerging Tunisian market is more receptive to first mover adoption of new technologies.

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ONLINE LEARNING COMMUNITIES TO RECRUIT AND RETAIN STUDENTS IN BUSINESS INFORMATION SYSTEMS

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ABSTRACT

Prevailing labor projections regarding the shortage of information technology professionals provide impetus for increasing business information systems (BIS) majors. Unfortunately, many highly talented female and minority students never investigate BIS as an academic option. This project, funded by the National Science Foundation (NSF), targets first- and second-year college students who have proven mathematical ability but who have not declared a computing major or minor and are not enrolled in any computing course. Seminars with professionals and online learning communities comprise a major part of intervention strategies to influence students to take at least one course in BIS. The Net Generation has embraced the concept of publishing on the Web, which bodes well for the project's use of tools like blogs for recruitment purposes, and better prepare the target population (women and minority students) to succeed in a computing major. The author is a Principal Investigator on this project, and will present the methodology and findings of the study, especially the effectiveness of online learning communities which is a relatively new strategy that has been studied by this project. There will be opportunity for discussion of measures sought by other institutions to recruit and retain students in BIS or computing-related majors.

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REGULATORY AGENCY LEVERS TO REDUCE MANUFACTURING EMISSION

Change requested

Dr. Steve Dunn, Associate Professor College of Business & Environmental Studies Program at University of Wisconsin Oshkosh has requested the removal of his name from the authorship of the paper title "*Regulatory Agency Levers to Reduce Manufacturing Emissions.*" Published in the Global Conference on Business and Finance Research Vol. 4 (2), pp. 141-151 ISSN: 194109589 Online and ISSN 1931-0285 CD. Any inquiries should be directly to Dr. Dunn at dunns@uwosh.edu

SPANISH PROCEEDINGS

ANÁLISIS DEL PROCESO DE APERTURA COMERCIAL DE MÉXICO 1994-2008.

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Lourdes A. González T., Universidad Autónoma de Baja California.
Raúl González N., Universidad Autónoma de Baja California.

RESUMEN

El cambio de modelo económico que experimentó México a mediados de los años ochenta ha traído como consecuencia un espectacular crecimiento de las IED y el intercambio de bienes. La firma de 11 tratados de libre comercio ha permitido incrementar el comercio internacional y, al menos en teoría, diversificar la oferta de productos mexicanos hacia el mundo. La economía mexicana que una vez fue dependiente de la exportación de petróleo se ha transformado en una economía donde el 35% del PIB depende del sector exportador, lo que trae consigo una serie de beneficios tanto a nivel macroeconómico como en el micro; sin embargo, la apertura comercial del país lo ha vuelto más dependiente de las distorsiones que se suscitan a nivel internacional, ocasionando que el país sea vulnerable y su margen de maniobra ante dichas distorsiones sea reducido.

En la presente ponencia se realiza un análisis del proceso de apertura comercial de México durante el periodo 1994-2008, analizando las variables: IED, balanza comercial, y nivel de aprovechamiento de los tratados comerciales de México. Esto permitirá corroborar la hipótesis de que la apertura comercial lejos de diversificar nuestro comercio, lo que ha logrado es concentrarlo prácticamente hacia un solo mercado.

PALABRAS CLAVE*: apertura comercial, exportaciones, tratados, comercio, modelo económico.*

INTRODUCCIÓN.

El proceso de apertura económica a escala global tiene su origen a mediados del siglo XIX de igual forma en que comenzó a gestarse el proceso de globalización económica y financiera tal y como lo conocemos (jalife rahme, 2007). Es decir, el proceso de apertura económica va ligado al fenómeno de la globalización económica la cual surge en su primera etapa en 1870 y que finaliza en 1913 con los inicios de la primera guerra mundial. En esta etapa, los flujos de mercancías y capitales empiezan a hacerse importantes gracias a la mejora en las comunicaciones e infraestructura; además, los procesos de colonización permitieron exportar los excedentes a diversos imperios y naciones lo cual trajo consigo la migración de la mano de obra a lugares que experimentaban un notable crecimiento económico.

La segunda etapa inicia a finales de la segunda guerra mundial y se prolonga hasta mediados de los años setenta, en esta etapa, surgen los organismos internacionales como el FMI, Banco Mundial, la OTAN, entre otros. El surgimiento de Estados Unidos como potencia económica mundial y el patrón dólar como moneda central a escala mundial, la apertura comercial inicia en los países desarrollados y en el este de Asia, mientras que en algunos países de América Latina el modelo de sustitución de importaciones se encontraba en su fase de declive.

La tercera y actual etapa inicia a principios de los años ochenta cuando las políticas económicas neoliberales impulsadas por Gran Bretaña y Estados Unidos se propagan por el resto del mundo, dicho modelo caracterizado por la no intervención del estado en la economía, la eliminación de las barreras al comercio internacional, el flujo de inversiones extranjeras y la firma de acuerdos de libre comercio han marcado la pauta del actual modelo de desarrollo económico.

ANTECEDENTES DEL PROCESO DE APERTURA COMERCIAL DE MÉXICO.

Para el caso de México, la política de apertura económica tiene sus orígenes más recientes cuando el país decide abandonar el *modelo de industrialización por medio de sustitución de importaciones* (debido en parte a los fuertes problemas económicos del país) y encarar el nuevo proceso económico mundial basado en el libre movimiento de mercancías, capitales, personas y tecnología. Es en ese momento, cuando México decide ingresar al Acuerdo General de Aranceles y Comercio (GATT) que después derivó en la hoy conocida Organización Mundial del comercio (OMC).

El objetivo por parte del gobierno mexicano en materia de apertura comercial consistió en la diversificación y ampliación de los mercados de exportación. A finales de la década de los años ochenta, el nivel exportador del país era incipiente y ante el nuevo escenario mundial, se hizo imperativo que el país contará con mercados extranjeros seguros para exportar los productos no petroleros que poseía el país, ya que en la década de los años ochenta las exportaciones petroleras representaban alrededor del 70% (por lo que el país era considerado una economía petrolizada).

Adicionalmente, la apertura comercial significó la atracción de fuertes inversiones extranjeras que derivaron en la creación de mayor número de empleos, transferencia de tecnología y, en teoría, la industrialización del país basada en los beneficios que las ventajas comparativas y la especialización brindan.

De acuerdo con la Secretaría de Economía (2009), los diferentes acuerdos y tratados de libre comercio que ha suscrito México con otros países tienen por objeto diversificar la capacidad exportadora del país y no depender solo del mercado estadounidense, ya que si bien, este país es el principal socio comercial, desafortunadamente el comercio básicamente se ha canalizado a este; consecuentemente, no se aprovecha el mercado mundial y los múltiples beneficios que este otorga. De ahí que México haya firmado diversos tratados y acuerdos de cooperación económica.

Por lo tanto, en 1996 se formula el *Programa de Política Industrial y Comercio Exterior* que tenía por objetivo el acceso a mercados extranjeros y la atracción de inversiones extranjeras directas. Por su parte en el sexenio del presidente Vicente Fox Quesada, se elaboró el *Programa de Comercio Exterior y Promoción de Inversión*, el cual buscaba aprovechar los beneficios de la globalización al asegurar el acceso preferencial de los productos mexicanos a los principales mercados del mundo. En el actual sexenio (13 de junio de 2007) se realizó una reestructuración entre las instancias encargadas de promover el comercio exterior y se creó ProMéxico, que es el organismo del Gobierno Federal mexicano encargado de fortalecer la participación de México en la economía internacional. Para ello, apoya la actividad exportadora de empresas establecidas en el país y coordina las acciones para atraer inversión extranjera directa a territorio nacional (ProMéxico, 2009).

La actual política de negociaciones comerciales internacionales se ha plasmado en cinco agendas estratégicas (Secretaría de Economía, 2009): 1) optimización de la red existente de acuerdos comerciales, 2) convergencia de tratados, 3) fortalecimiento del sistema multilateral de comercio, 4) negociación de nuevos acuerdos, y 5) defensa legal de los intereses comerciales de México.

Con estas estrategias, lo que busca el gobierno mexicano es continuar con el proceso de apertura económica con el propósito de abrirse paso a nuevos mercados y buscar la atracción de más inversiones extranjeras; sin embargo, los beneficios que se pueden obtener tienden a disminuir a medida que los mercados con los que se desean pactar son relativamente pequeños y con poca relación en materia política y social. Asimismo, la firma de diversos tratados de libre comercio permite que los países socios de

México lo utilicen como trampolín para que éstos puedan exportar de manera más fácil sus productos a los Estados Unidos, esto con el consentimiento del gobierno mexicano a cambio de la creación de numerosos empleos.

PROCESO DE APERTURA COMERCIAL

En México se encuentran en vigor mil doscientos setenta tratados, de los cuales 653 son bilaterales y 617 multilaterales y de ellos 11 son tratados comerciales (Cámara de Diputados, 2008).

El proceso de apertura comercial se ha dado cronológicamente de la siguiente manera:
1986 se ingresa al GATT,
1992 se firma el ALADI con Chile,
1993 se ingresa a la APEC,
1994 se firma el TLCAN y se ingresa a la OCDE,
1995 se firman los TLC con Bolivia, Costa Rica, y con el llamado G3 con Colombia y Venezuela (que posteriormente Venezuela lo abandona el 19 de noviembre de 2006),
1998 se firman los acuerdos mediante el ALADI con Panamá, Ecuador, Cuba, Uruguay y se firma el TLC con Nicaragua,
1999 entra en vigor el TLC con Chile y el ALADI con Argentina.
2000 México firma el TLCUEM (27 países de la unión Europea), el TLC con Israel y el ALADI con Perú y Paraguay,
2001 se firma el TLC AELC (Islandia, Suiza, Noruega y Liechtenstein) y el TLC con el triangulo del norte (Guatemala, Honduras y El Salvador),
2002 se firma el ALADI con Brasil y con el Mercosur (acuerdo marco y en automotor),
2004 entra en vigor el TLC con Uruguay y,
2005 se firma el Acuerdo de Asociación Económica con Japón.

Con ello, México es el segundo país del mundo con mayor número de tratados y acuerdos de libre comercio sólo detrás de Chile. También se firmaron 27 APPRIS (Acuerdos para la promoción y protección reciproca de las inversiones). Para llevar a cabo todos estos tratados y acuerdos fue necesario la intervención de la Secretaría de Relaciones Exteriores, la Secretaría de Economía, Bancomext y la propia presidencia de la República a través de la Secretaría de Gobernación.

Beneficios y Deseventajas del Proceso de Apertura Comercial

México ha experimentado una serie de beneficios gracias a la apertura comercial desde la década de los años ochenta, uno de los principales beneficios se relaciona con la oportunidad de tener acceso preferencial a 1,057 millones de consumidores potenciales, debido a que se tienen tratados con regiones muy importantes del mundo como son Norteamérica, la Unión Europea y Japón. Además, los acuerdos comerciales representan 2/3 del valor de las importaciones mundiales y 3/4 del PIB mundial. Para México, las exportaciones representan el 38% del PIB cuando décadas atrás el comercio internacional prácticamente era inexistente y la economía se encontraba petrolizada.

Sin embargo, casi el 90% de las importaciones mexicanas corresponden a bienes intermedios y de capital que no se producen en México y que contribuyen a la producción y exportación de mercancías. Por lo que tal dependencia a ese tipo de bienes sólo ocasiona que el país no posea un aparato industrial propio que pueda ser autosuficiente y pueda generar productos netamente mexicanos.

Adicionalmente, la tasa de crecimiento de las exportaciones mexicanas a partir de la firma de los TLCs varía desde un 23.6% en caso de Japón hasta un 490.3% en caso de Colombia, esto permite que algunas

empresas mexicanas ingresen a nuevos mercados y el país reciba a su vez inversiones generadoras de empleo.

Desde 1993 la evolución de las exportaciones ha tenido un crecimiento constante con todos sus socios comerciales, en la Figura 1, se puede apreciar como las exportaciones hacia los países de la Unión Europea han presentado el mayor crecimiento a excepción de los socios del TLCAN. Las exportaciones a la Unión Europea en 1993 tenían un valor 1,678 millones de dólares, mientras que en 2008 éstas alcanzaron una cifra de 11,048 millones de dólares, de los cuales Reino Unido, Alemania, Holanda y España son los país a donde se dirigen la mayor parte de las exportaciones mexicanas. Después de la Unión Europea se encuentran los países Latinoamericanos miembros del ALADI, pasando de 995 millones de dólares en 1993 a 8,085 millones en 2008, entre los principales países del ALADI se encuentran Colombia, Argentina, Chile y Brasil.

Figura 1. Evolución de las Exportaciones de México 1993 a 2008.
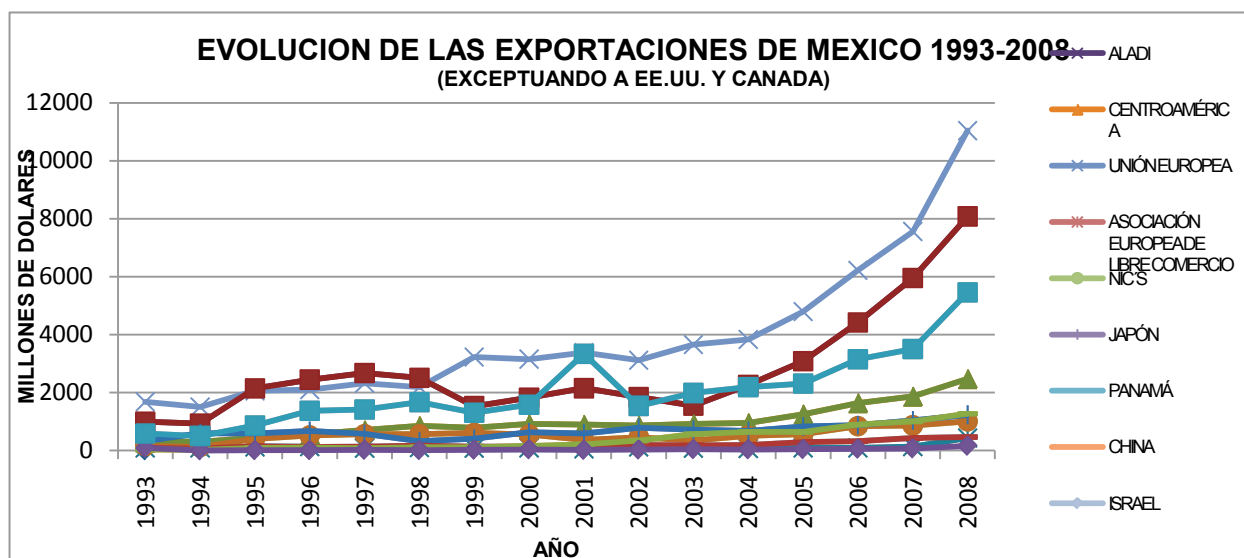
En la figura 1 se muestra la evolución de las exportaciones de México a distintas regiones del mundo durante el periodo de 1993-2008, donde se puede apreciar como los principales socios comerciales son la Unión Europea y los países miembros del ALADI.

En cuanto a la evolución de las importaciones durante el mismo periodo el socio comercial más importante después de Estados Unidos y Canadá es la Unión Europea, seguida muy de cerca por China. En el caso del primero, en 1993 se importaban cerca de 8,000 millones de dólares y para 2008 el monto de las importaciones alcanza los 39,000 millones de dólares, con lo cual se posiciona dicha región económica como un socio estratégico para México. Por otra parte, las importaciones provenientes de China pasaron de 386 millones de dólares en 1993 a 34,754 millones para 2008, lo que demuestra como el costo de los productos chinos son lo suficientemente atractivos para México lo que provoca que el incremento que se está dando año con año de las importaciones de ese país lograrán desplazar a la Unión Europea en los próximos 5 o 6 años a pesar de no existir ningún tipo de acuerdo o tratado comercial a diferencia del existente con la Unión Europea (ver figura 2).

Figura 2. Evolución de las Exportaciones de México 1993 a 2008.

En la figura 2 se aprecia la evolución de las importaciones de México en el periodo comprendido entre 1993 y 2008, donde la 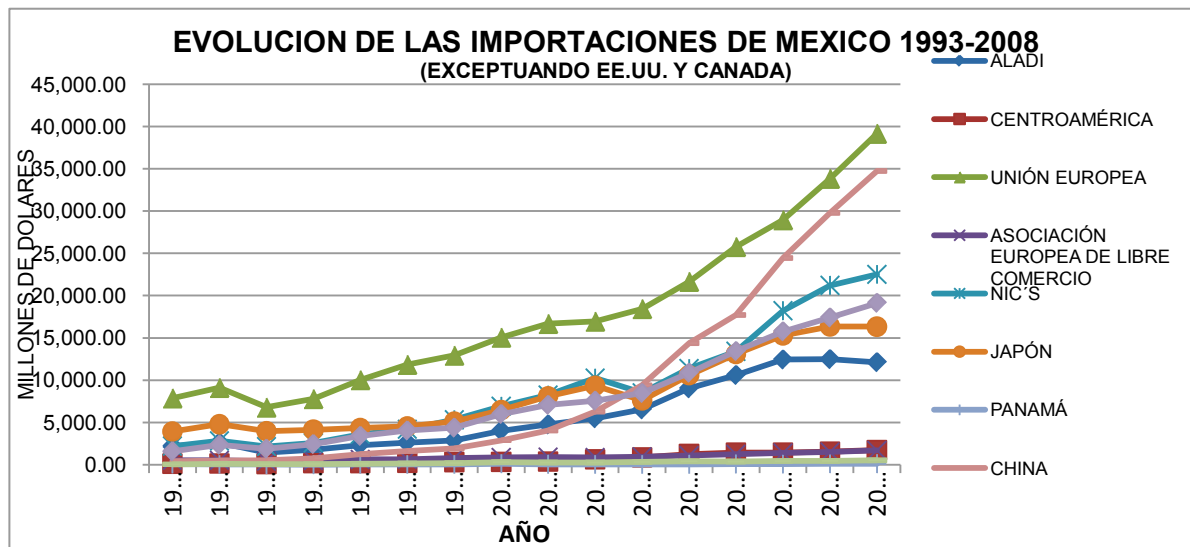Unión Europea y China han sido los que más han incrementado su volumen de comercio con México (exceptuando a Estados Unidos y Canadá).

Otro de los beneficios para México en materia comercial y económica radica en la menor dependencia que se tiene sobre la producción y exportación del petróleo, ya que este ha caído de un 70% a poco más del 10%. También se debe hacer hincapié que el 52% del Producto Interno Bruto del país se relaciona con la apertura económica, por lo que el grado de apertura permite una dependencia mayor del PIB hacia el sector exportador del país. Otro dato importante es el de la Inversión Extranjera Directa acumulada, ya que en 1994 se contaba con una captación de 10,700 millones de dólares y para el 2006 fue de 182,200 millones. En la figura 3 se observa como en 2001 se tuvo la mayor captación de IED en la historia del país al recibir IED por la cantidad de 29,817 millones de dólares; por su parte, el segundo año más importante fue en 2007 con una captación de 27,528 millones de dólares. Por otra parte, se aprecia como durante la década de los años noventa el crecimiento de la IED se mantuvo por debajo de los 15,000 millones de dólares, mientras que durante lo que va del presente siglo siempre se ha mantenido por encima de la cantidad antes mencionada.

Adicionalmente, otro de los beneficios se relaciona con que el 17% del empleo total está relacionado con actividad exportadora y otro 17% se relaciona con la IED. También, cerca del 80% de las exportaciones van dirigidas hacia los Estados Unidos y después le sigue la Unión Europea en su conjunto (Reino Unido, España, Francia, Alemania, Italia y Holanda son los países más importantes para México en Europa).

Un dato preocupante consiste en que la balanza comercial que se tiene en términos generales y por región económica ha sido tradicionalmente deficitaria a excepción de 1995 y 1996 donde se logró tener superávit; además, en 2008 México experimentó su peor déficit comercial desde 1994 al sobrepasar los 15,000 millones dólares, debido principalmente a un fuerte crecimiento de las importaciones durante los últimos 4 años y un menor crecimiento de las exportaciones, lo que indica la enorme dependencia de productos extranjeros y un sector exportador que no ha logrado incrementar la diversidad de productos que puede ofrecer al resto del mundo (ver figura 4).

Figura 3. Evolución del Flujo de la IED (1994-2008).
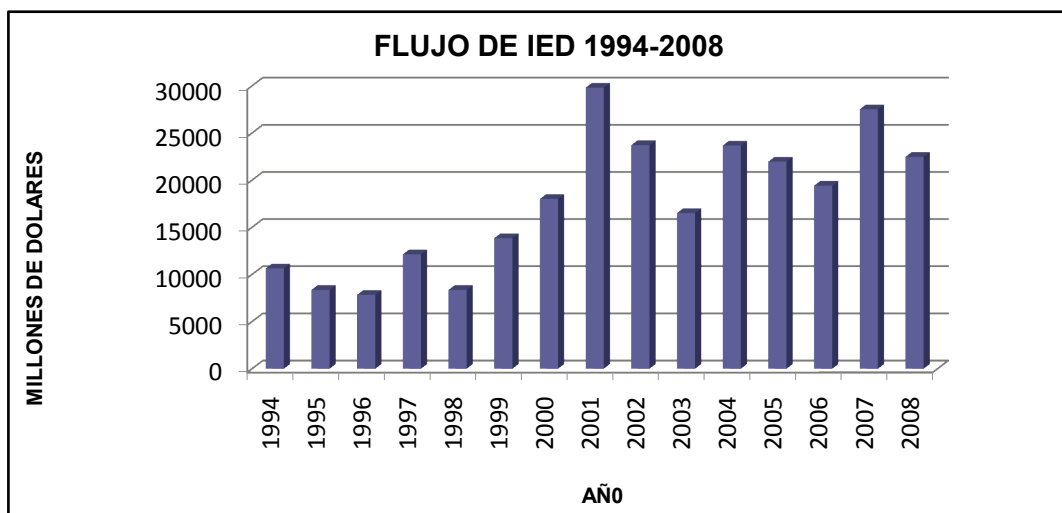
En la figura 3 se muestra la evolución de los flujos de IED durante el periodo 1994 a 2008, donde a partir del 2000 la captación su significativa y se ha mantenido en elevados niveles.

Figura 4. Evolución de la Balanza Comercial Periodo 1994-2008
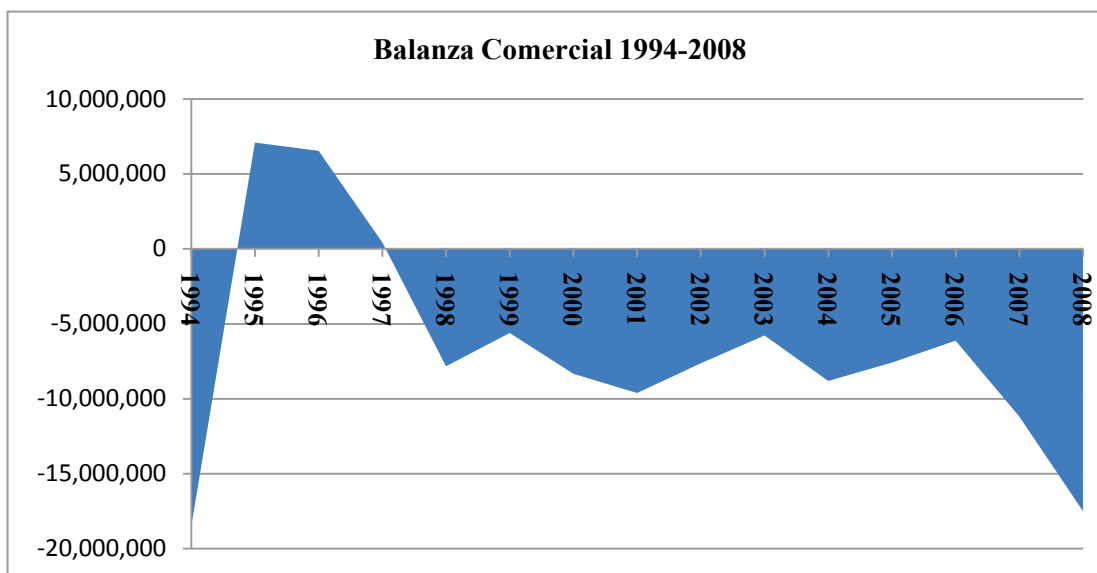
En la figura 4 se muestra la evolución de la balanza comercial durante el periodo 1994 a 2008, la cual ha sido predominantemente deficitaria agudizándose en los años 1994 y 2008.

Otros datos señalan que los salarios dentro de los sectores exportadores suelen ser ligeramente superiores a los sectores no exportadores, pasando de un índice de 100 para 2004, las empresas no exportadoras adquieren un índice de 96.4; mientras que las empresas exportadoras alcanzan en algunos casos el 135.7. Las exportaciones manufactureras pasaron de una cuarta parte de las exportaciones totales a un 87% por lo que el país ha cambiado so estructura económica dejando de ser un país exportador de materias primas.

Como se comentó anteriormente, el impacto de la apertura comercial para México ha sido muy importante desde mediados de la década de los años ochenta; sin embargo, tal impacto se concentra

principalmente, desde la entrada en vigor del tratado de libre comercio de América del Norte (TLCAN o NAFTA por sus siglas en inglés).

De todos los acuerdos y tratados comerciales que ha firmado el país, el TLCAN se ha convertido sin lugar a dudas, en el principal tratado que tiene México al cual se destinan más del 80% de nuestras exportaciones y es el mecanismo por medio del cual se atraen más inversiones extranjeras directas.
Algunos datos que muestran los beneficios del TLCAN tanto para México como para sus socios comerciales son los siguientes de acuerdo a lo señalado por (Organización del TLCAN, 2009):

➢ Desde que el TLCAN entró en vigor, el comercio de mercancías entre los socios del TLCAN se ha más que triplicado, alcanzando 946.1 mil millones de dólares en 2008. Durante ese período, el comercio entre Canadá y Estados Unidos se ha casi triplicado, mientras que el comercio entre México y Estados Unidos se ha más que cuadriplicado.

➢ Los países socios del TLCAN intercambian bienes con un valor aproximado a 2,600 millones de dólares diarios, lo que equivale a 108 millones de dólares por hora.

➢ El tamaño de la economía de América del Norte se ha más que duplicado: El producto interno bruto (PIB) combinado de Canadá, Estados Unidos y México superó los 17 trillones de dólares en 2007, comparado con los 7.6 trillones registrados en 1993.

➢ En 2008, la inversión extranjera directa que Canadá y Estados Unidos recibieron de la región del TLCAN alcanzó los 469.8 mil millones de dólares. Por otro lado, México se ha convertido en uno de los mayores receptores de inversión extranjera directa entre las economías emergentes, al recibir más de 156 mil millones de dólares procedentes de los países socios del TLCAN de 1993 a 2008.

➢ Por último, los niveles de empleo de América del Norte han aumentado casi 23% desde 1993, lo cual representa la creación de 39.7 millones de puestos de trabajo.

Las relaciones comerciales entre México y Japón se suscriben a través del Acuerdo de Asociación Económica, tales relaciones han sido más positivas para Japón que para México, ya que las exportaciones mexicanas han crecido un 46% entre 2004 y 2007 (de 2,170 a 3,163 millones de dólares en el mismo periodo); mientras que las importaciones han crecido un 55% (de 10,583 a 16,360 millones de dólares). El 81% de las exportaciones mexicanas se concentra en productos industriales y el resto en alimenticios, por su parte el 77% de las importaciones se componen de bienes intermedios y 13% en bienes de capital.

Por su parte, las relaciones comerciales con los países miembros del Acuerdo Europeo de Libre Comercio aunque pequeñas en relación con otros acuerdos y tratados de libre comercio, han tenido un impulso creciente, ya que en el periodo 2000-2007 el comercio ha crecido 74% llegando a los 1,800 millones de dólares, siendo Suiza el principal socio comercial con el 81.2%.

El comercio con Israel en términos reales no ha presentado un crecimiento relevante, ya que las exportaciones han crecido de 2.7 USMD en 1994 a 159.6 USMD; en contraste, las importaciones han pasado de 85.1 USMD a 523.9 USMD. Estas cifras muestran como a pesar de q ue el crecimiento en términos relativos ha crecido de manera significativa, en los hechos el mercado de Israel no ha sido explotado de manera adecuada y no se han diseñado en la práctica estrategias de diversificación de las exportaciones mexicanas.

La única región con la que México tiene un superávit comercial es con Centroamérica, ya que durante el periodo mencionado las exportaciones han crecido de 294.4 USMD a 2,472.8 USMD y las importaciones han crecido de 119.2 USMD a 1,732.1 USMD. Estos resultados indican de manera clara como México mantiene positivas relaciones con la región y es un inversor importante de IED al consolidarse empresas mexicanas como Grupo CARSO, Elektra, Famsa, Grupo Modelo, Cemex, Grupo Bimbo, entre otras empresas, no así las empresas centroamericanas, las cuales no han tenido la capacidad de ingresar al mercado mexicano y obtener una parte del mercado.

La evolución del comercio exterior en México y su grado de apertura presenta un crecimiento en los últimos años, ya que según el índice de libertad económica que la fundación Heritage publica cada año y el cual mide una serie de variables relacionadas con el desempeño económico de los países, menciona que la economía del país en el aspecto comercial ha presentado un crecimiento en relación a principios de la década de los años noventa, aunque en 2008 se tuvo un nivel menor que al experimentado entre 2001 y 2004.

CONCLUSIÓN:

Las cifras mostradas en el presente artículo muestran como a pesar de que los niveles de exportación del país han aumentado de forma relevante, este se concentra en su gran mayoría en el mercado estadounidense, lo que impide que se cumpla con los objetivos del gobierno desde la década de los años noventa en el sentido de fomentar la diversificación del aparato productivo mexicano.

La hipótesis aquí planteada puede ser corroborada al analizar las diversas estadísticas en materia de comercio exterior, ya que sin importar si se tiene un déficit comercial este se canaliza a un solo mercado y en su mayoría se basa en bienes de consumo ante la imposibilidad de generar bienes de capital; además, la estrategia competitiva del país se basa en la atracción de inversiones generadoras de empleo no cualificado en lugar de aplicar una estrategia de agresividad e impulsor de la exportación de capitales nacionales a diferente partes del mundo que permitan consolidar la producción mexicana en diversos países de mejor manera.

A simple vista parecen indicar los datos anteriores que el país ha obtenido grandes avances en materia de apertura económica; sin embargo, desde una visión más crítica sostenida por (Vela, 2004), señala que las exportaciones de la franja fronteriza entre México y Estados Unidos, dependen crucialmente del nivel de actividad industrial del país vecino, por lo que México pasó de ser el tan criticado proteccionista de la industria mexicana al alabado proteccionista de la industria maquiladora extranjera, y todo gracias al TLCAN, que consolidó un flujo importante de inversiones extranjeras.

Por otra parte, y a pesar de las ventajas comparativas que tenemos con otros países, desafortunadamente el país sólo se ha concentrado en ser proveedor de mano de obra barata la cual no puede ni debe competir con la mano de obra china, situación que ha ocasionado que el mercado chino haya desplazado al mexicano como el segundo socio comercial de los Estados Unidos. Algunos subsectores como el juguetero, muebles, calzado y textil, agrícola (ciertos productos) han sido desplazados e incluso desaparecido debido a la falta de una política industrial antes de la apertura que sostuvo el país. Las ventajas arancelarias están desapareciendo, el factor situación geográfica ya no es predominante, la cultura política y empresarial no permiten realizar reformas estructurales, existen elevados costos de transacción y altos problemas de seguridad y corrupción, a esto es importante añadir que la transferencia de tecnología no ha tenido el éxito esperado.

Se avecinan tiempos difíciles para el país, esto debido a que los Estados Unidos ante el fracaso de la ronda de Doha y del ALCA, esta prefiriendo realizar múltiples TLCs con otros países como Costa Rica, CAFTA-RD y más recientemente con Perú, lo que debe obligar a México a poner en práctica los objetivos planteados en los diferentes tratados; es decir, buscar la diversificación del mercado de exportación y no seguir con el sesgo que hasta el momento se ha tenido. Es necesario que México implemente medidas que permitan la exportación hacia otros países del mundo. La actual crisis económica está afectando a México más que a cualquier otro país de Latinoamérica y eso se debe a la enorme dependencia que se tiene hacia el vecino del norte. La caída de las exportaciones petroleras a EE.UU., la caída de la actividad industrial en dicho país, la caída de las remesas y la falta de un plan

turístico nacional son solo algunas de las causas de por qué el país tendrá el peor crecimiento económico de América Latina.

Por último, el balance en algunos casos se puede considerar como positivo si lo vemos desde el punto de vista de que el mercado mexicano es de los más importantes del mundo y de que la IED ha facilitado la creación de numerosas fuentes de empleo (a costa del mercado interno); pero desde una perspectiva más amplia la actual estrategia solo provoca mayor dependencia y se hace eco de las ideas sobre el tercer mundo inspiradas por Imannuel Wallerstein.

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FUNCIONAMIENTO DE EMPRESAS DE BASE TECNOLÓGICA: OBTENCIÓN DE RECURSOS ESTRATÉGICOS EN LAS JUNTURAS CRÍTICAS

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RESUMEN

El presente proyecto analiza las alianzas entre empresas como estrategia de obtención de recursos estratégicos en EBT. Se toma como referencia el modelo de Vohora et al (2004), en donde se plantea que las EBT, para conseguir su desarrollo óptimo deben superar diferentes junturas o transiciones criticas, que existen entre las diversas etapas de su funcionamiento. Las interacciones estratégicas constituyen uno de los mecanismos que permiten atravesar dichas transiciones críticas, ya que posibilitan el acceso a los recursos que son valiosos para las empresas. Pero este mecanismo de obtención de recursos supone un riesgo de imitación competitiva importante ya que está asociado a la base de recursos estratégicos en que se sustenta la ventaja competitiva de la empresa, o que inclusive justifica la creación y existencia de la EBT en cuestión. En este sentido, desde la perspectiva teórica, tanto de la ventaja competitiva (teoría de recursos y capacidades) como desde los modelos de creación de EBT, compartir recursos estratégicos en podría ser considerado una anomalía, el presente trabajo aborda el análisis de dicha anomalía.

JEL: M13; M21

Palabras clave: EBT, Junturas críticas, interacciones estratégicas, obtención de recursos.

INTRODUCCIÓN

Los estudios Empresas de Base Tecnológica (EBT) se dividen en tres aspectos generales (Storey y Tether, 1998; Pirnay *et al*, 2003; Vohora *et al*, 2004; Clarysse *et al*, 2005; Gübeli y Doloreux, 2005), los cuales son estudios sobre la creación de empresas de base tecnológica, estudios sobre la política publica para el fomento de la creación de clusters de empresas de base tecnológica, y por ultimo estudios sobre el funcionamiento de las empresas de base tecnológica.

La presente investigación corresponde al último aspecto mencionado y centra su atención en comprender cómo las EBT logran obtener una ventaja competitiva ex-ante (Barney 1991). Para entender el proceso mediante el cual la EBT construye su ventaja competitiva, se ha considerado éste como una serie de fases que debe atravesar la empresa para llegar a su total desarrollo (Nlenvo et al, 2002; Vohora et al, 2004; Gübeli y Doloreux, 2005), donde, en cada una de ellas se deben obtener y desarrollar diferentes recursos y capacidades (Teece et al, 1997; Bocardelly y Magnusson, 2006) hasta llegar a la sostenibilidad financier (Vohora et al, 2004). Aquí se operacionaliza o se aproxima a dicho éxito empresarial mediante la sostenibilidad financiera, ya que en el largo plazo resulta difícil imaginar que la EBT se pueda sostener solo de apoyos gubernamentales o subsidios universitarios, si es el caso de una Spin-Off, por lo tanto surge como un objetivo y una necesidad el llegar a la autonomía y sostenimiento financiero.

Tomando de referencia la clasificación de Vohora et al (2004) sobre Spin-offs (En el presente articulo se tomara indistintamente el concepto de Spin-Off y EBT, dado que nos referimos solo a las Spin-Off de base tecnologia.), la cual engloba a la mayoría si no es que todas las fases en las que se ha clasificado a la creación y funcionamiento de una EBT, por otro lado dicha clasificación es importante para la presente

investigación dado que en ella podemos observar el proceso en el cual los recursos adquieren su valor para fundamentar una estrategia que lleve a la ventaja competitiva.

Figura 1: Fases del Funcionamiento de las EBT

Elaboración propia a partir de Vohora et al (2004).

En la figura 1 podemos observar cinco fases en el funcionamiento de una EBT según la clasificación de Vohora et al (2004). Aquí se observa que la transición de una etapa a otra no es simple, ni necesariamente va a conducir a la EBT a la obtención de una ventaja competitiva basada en recursos superiores. El análisis de la obtención de recursos estratégicos, como mecanismo para superar las junturas criticas(Vohora et al (2004) usa el termino critical junctures para referirse a las etapas intermedias o de transición entre una fase y otra del proceso de creación de empresas de base tecnológica spin-off.) constituye un aspecto clave para encontrar los determinantes de la ventaja competitiva basada en los recursos de la empresa. Además de abordar cómo la EBT puede alcanzar una ventaja competitiva basada en los recursos, que el análisis sea desde una perspectiva ex – ante y no ex – post (Barney, 1991), lo cual permite superar uno de los aspectos más criticados de la teoría de recursos y capacidades (Newbert, 2007).

Estas junturas toman especial relevancia, ya que la correcta transición entre estas junturas llevará a la empresa a obtener los recursos necesarios para llegar al éxito empresarial, mediante la obtención de una ventaja competitiva basada en recursos (Lokett *et al*, 2005).

Las EBT requieren tener conocimiento sobre cuáles son los recursos y capacidades necesarios para desarrollar una ventaja competitiva en la industria y en términos más generales, para transitar de una etapa a otra en su desarrollo. Dentro de estas junturas la empresa debe conseguir recursos tanto tangibles como intangibles. Cabe aclarar que algunos de estos recursos contienen atributos que permiten al mismo tiempo soportar una ventaja competitiva y ser compartidos, lo cual constituye una anomalía dentro de la teoría de recursos y capacidades que es la explicación de la ventaja competitiva que se utiliza en este trabajo.

Las preguntas que se plantean son ¿Cuáles son las alternativas de que dispone la EBT para obtener recursos estratégicos y en particular? ¿Cómo puede una EBT obtener recursos estratégicos a través de alianzas estratégicas para obtener una ventaja competitiva y simultáneamente preservar dicha ventaja?

La hipótesis general que se pretende contrastar en esta investigación es que, Las alianzas o interacciones que establece una empresa de base tecnológica, sirven de acceso a recursos valiosos que la empresa necesita para transitar entre las diferentes fases de su desarrollo.

Por otro lado, y en un ámbito más particular, las hipótesis especificas que se plantean, son las siguientes:

H1: Dentro de las alianzas estratégicas que establece la empresa, se puede acceder a recursos intangibles mediante el contacto entre personas de diferentes empresas.

H2: La empresa pueda encontrar en el ámbito de las alianzas estratégicas una fuente de ventaja competitiva.

H3: Se plantea la existencia de recursos que tienen características de ser valiosos y escasos, pero que pueden compartirse entre empresas.

LAS ALIANZAS ESTRATEGICAS Y EL ACCESO A RECURSOS ESTRATEGICOS

Las EBT establecen interacciones que pueden generar una ventaja competitiva, ya que al no tener los conocimientos adecuados para generar productos o servicios superiores intentan generar estos conocimientos mediante dos opciones, una que consiste en que la empresa misma los genere y otra opción es que la empresa puede adquirir estos conocimientos de otras empresas mediante dichas interacciones o alianzas (Grant y Baden-Fuller, 2004). Sin embargo, como los mercados en los que compiten las EBT son dinámicos o altamente cambiantes no pueden interiorizar todos los conocimientos que se necesitan para competir.

En este sentido, las interacciones estratégicas servirán a la empresa como vehículos de aprendizaje. Es por esta razón que podemos observa r como las empresas a través de las alianzas pueden acceder a un segmento de recursos de otras empresas, a este tipo de recursos se le llama capital relacionado Kale *et al* (2000).

Para que una EBT logre obtener una ventaja competitiva en los mercados, es posible analizar esta ventaja competitiva mediante la teoría de recursos y capacidades, y esta ventaja competitiva se puede ver de manera ex – ante y ex – post, sin embargo, el interés se centra en como obtener una ventaja competitiva de manera ex – ante, es decir, que nuestra intención se concentra en dar señales de en que dirección o en que ámbito se debe mover la empresa para encontrar los recursos que son valiosos. Es por ello que surge la necesidad de abordar la ventaja competitiva de de la empresa de base tecnológica de manera ex – ante, y para ello se propone ver los siguientes modelos teóricos, que involucran tanto la teoría de recursos y capacidades, como el modelo de funcionamiento de empresas de base tecnológica de Vohora *et al* (2004), así como las teorías de las alianzas estratégicas para acceder a recursos valiosos.

RECURSOS ESTRATEGICOS EN ALIANZAS ESTRATEGICAS

La EBT en las diferentes etapas de funcionamiento necesitan de recursos estratégicos de diferentes características, y la forma de acceder a estos recursos se encuentra en las alianzas estratégicas, sin embargo, lo que aun no sabemos es ¿Por qué una empresa llamada empresa B accedería a establecer una alianza estratégica con la empresa A?, dado que la empresa A tendrá acceso a recursos de la empresa B por medio de un vehiculo de aprendizaje llamado interacción estratégica visto mediante las alianzas.

Para explicar esto, primero se tienen que describir 2 puntos importantes dentro de la teoría de recursos y capacidades, el primero estriba en que el valor de un recurso estratégico se erosiona o desgasta mediante el desuso o la falta de inversión durante el tiempo (Dierikx y Cool, 1989), y el segundo estriba en el hecho de que un mecanismo de aislamiento o de prevención de imitación es el proceso de acumulación de activos intangibles (Dierikx y Cool, 1989).

Esta colaboración se podría ver como un modelo de competencia de Stackelberg de líder y seguidor, donde existe una empresa que es la empresa que se cree es la innovadora que ejerce un liderazgo, y existen otras empresas que tratan de imitar la estrategia de la empresa líder.

Siguiendo la ecuación de Knott *et al* (2003) sobre acumulación de activos intangibles del modelo de recursos intangibles de Dierickx y Cool (1989), tenemos una ecuación de acumulación de activos como la siguiente:

$$Kt - 1 = (1 - \delta)Kt + It \tag{1}$$

Donde K representa los activos intangibles en el tiempo t, δ es la tasa de erosión de activos intangibles, y por último I que es la inversión en activos intangibles en el tiempo t, nos muestran como es que las empresas siguen una estrategia de acumulación de activos intangibles que depende de la inversión en periodos pasados y como es que esos activos se erosionan con el paso del tiempo.

Para observar el stock de recursos, solo tenemos que mostrar una función de producción de tipo Cobb-Douglas para la empresa i (Knott *et al*, 2003):

$$Yit = Kit^{\varphi} Cit^{\alpha} Lit^{\beta} St^{\theta} \tag{2}$$

Donde Yit es la producción de la empresa i en el periodo t, Cit es el capital de la empresa i en el periodo t, Lit es el trabajo de la empresa i en el periodo t, y S representa el capital al cual accedió la empresa en la interacción estratégica en el periodo t. Suponiendo por simplicidad que los costos marginales son cero y aplicando el modelo de Stackelberg, tenemos que:

$$Y1 = \frac{a}{2b} \tag{3}$$

$$Y2 = \frac{\left[a - b\left(\left((1 - \delta)K_{t-1} + I_{t-1}\right)^{\varphi} Cit^{\alpha} Lit^{\beta} St^{\theta}\right)\right]}{2b} \tag{4}$$

La ecuación 4, muestra de manera mas clara que los beneficios de la empresa seguidora serán menores debido a dos razones, primero porque a (a / 2b) se le tiene que restar lo que produjo la empresa líder, y segundo porque la empresa seguidora tiene una función de producción, que refleja la acumulación de activos intangibles del periodo pasado de la empresa líder, mismos que erosionaron ya parte de su valor y que a la vez no tienen el nivel de acumulación de la empresa líder que es   (1- δ)Kt + It.

CONCLUSIONES

El propósito de este trabajo se centro en explicar como las EBT atraviesan por diferentes junturas criticas, en las cuales las empresas necesitan buscar en el exterior algunos de los recursos estratégicos que les permitan lograr el éxito empresarial, sobre todo en las ultimas 2 junturas donde la necesidad de recursos estratégicos se centra en los activos intangibles.

Desde el punto de vista de la teoría de recursos y capacidades, se estableció que las EBT pueden encontrar esos mismos recursos estratégicos a través del establecimiento de alianzas estratégicas, y se demostró mediante un modelo de Stackelberg que mediante las alianzas se puede acceder a recursos estratégicos que forman parte del capital relacionado de ambas empresas, ya que los recursos distintivos están protegidos mediante el proceso de acumulación de activos fijos y la erosión de los mismos a través del tiempo.

Por lo tanto, se podría decir, que un hallazgo importante de esta investigación estriba en la anomalía que se da dentro de la teoría de recursos y capacidades, al poder encontrar recursos que tienen el carácter de estratégico en otras empresas, dado que la teoría de recursos y capacidades establece que es la empresa individualmente la que debería desarrollar sus propios recursos estratégicos.

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ANÁLISIS COMPARATIVO DEL GRADO DE RIGIDEZ LABORAL EN LATINOAMÉRICA Y ESPAÑA

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ABSTRACT

La mayoría de los estudios en materia de flexibilidad laboral muestran una imagen parcial sobre la situación de los mercados de trabajo latinoamericanos. Se limitan a confirmar, la existencia de elevados grados de rigidez y la necesidad de emprender reformas laborales al margen de las circunstancias nacionales específicas. El diseño de un indicador sintético de rigidez laboral, utilizando la metodología considerada por la OCDE, mediante el uso del análisis factorial, pero aplicada a países de Iberoamérica, permite obtener ciertos avances en relación a este debate. Los resultados establecen la elevada importancia de la rigidez en los procedimientos de despido colectivo, por encima de aspectos normativos relacionados con contratos por tiempo determinado. Por último, se constata la escasa relación entre niveles de flexibilidad y resultados en términos de desarrollo económico, poniendo en cuestión afirmaciones que intentan extrapolar estrategias flexibilizadoras como medida aislada para facilitar el progreso económico de un país.

Palabras clave: Flexibilidad laboral, Rigidez, Análisis factorial, indicador sintético, reformas laborales.

INTRODUCCION

Numerosos estudios han señalado que la rigidez del mercado de trabajo es uno de los factores que inciden sobre el grado de competitividad de las empresas y sobre el dinamismo de las economías. Una parte importante de la rigidez del mercado de trabajo lo constituye la normativa laboral, la cual puede ser en ocasiones excesivamente protectora hacia el trabajador, dejando de lado los intereses de los empresarios y del propio funcionamiento de la economía; es decir, las diferentes clausulas contenidas en la normativa laboral impiden que el trabajador ineficiente pueda ser removido de su puesto de trabajo, o bien, se impide la polivalencia de actividades laborales y el ascenso a la persona más apta y no a la más antigua. Además, el coste del despido y contratación algunas veces suele ser relativamente elevado, lo cual desinhibe la creación de empleo en una economía que desea crecer a mayores tasas; por su parte, la rigidez laboral se asocia con un menor grado de respuesta por parte de la economía ante las oscilaciones de la misma, así, en época de crisis económica el ajuste tanto en cuantía como en coste del factor trabajo se ralentiza, consecuentemente, la economía tarda más tiempo en salir de la crisis y transitar hacia la fase de recuperación.

La amplia literatura sobre esta cuestión ha consolidado el principio de que los factores institucionales del funcionamiento del mercado de trabajo y las relaciones laborales constituyen un aspecto esencial en los mecanismos de generación de empleo, competitividad y, por extensión, de desarrollo económico. Sin embargo, se mantiene una creciente controversia, tanto en cuanto a la importancia real del grado de rigidez de la normativa laboral, como en cuanto a los métodos empíricos utilizados para su medición.

Existen diversos métodos para intentar determinar el grado de rigidez de una economía, en ocasiones se toman como base una serie de variables macroeconómicas, o con mayor frecuencia, se aplican cuestionarios a distintos agentes económicos públicos y privados, a partir de los cuales se recopila información que posteriormente es analizada y ponderada por país para dar paso a un resultado final, identificando sus similitudes y diferencias, así como al establecimiento de un orden jerárquico (ranking)

internacional en función del objetivo del estudio. También, se llevan a cabo análisis de las diferentes normativas laborales y con ello se construye un indicador cualitativo de carácter numérico que posibilita la medición y comparación entre países.

Entre los análisis más recientes se puede destacar el análisis de Nicoletti, G., Scarpetta, S. y Boylaud (2000), sobre el grado de regulación tanto de los mercados de productos como de los mercados de trabajo de países de la OCDE. En cuanto a los mercados de trabajo, el estudio planteaba como objetivo perfeccionar el diseño de un indicador sintético para medir el nivel de protección (rigidez) de las normativas laborales en distintos países en diferentes periodos de tiempo. Con ello se buscaba incrementar el conocimiento sobre las similitudes y diferencias que se presentan entre los mercados laborales de los países y, cómo dichas diferencias son uno de los factores que limitan las posibilidades de reducción del desempleo a escala nacional y de aumento de la competitividad frente al exterior.

Un segundo análisis es el elaborado por la OCDE en 2004. En su informe anual sobre Perspectivas del Empleo, dedicaba un capítulo a la "Regulación de Protección del Empleo y resultados del mercado de trabajo" realizando una revisión y actualización detallada de su metodología de análisis de la rigidez laboral. Una vez revisadas las diversas metodologías usadas en estudios anteriores, entre las que destacan autores como Blanchard y Wolfers (2000); Elmeskov y Al (1998); Heckman y Pagés (2000); Nickell (1997) y OCDE (2000), se opta por considerar de nuevo una metodología muy similar a la usada en estudios anteriores de la OCDE, con ligeros añadidos. Se establece así un indicador sintético que evalúa un número más amplio de medidas normativas que afectan desde un punto de vista económico al fomento del empleo.

A partir de estos análisis mencionados es posible contar con una determinada caracterización sobre importantes aspectos de economías nacionales muy diferentes. No obstante, entre unos y otros estudios, se aprecian diferencias y contradicciones de criterio que dificultan tener en la actualidad una visión única sobre tales cuestiones. Por otra parte, más allá de las implicaciones que puedan derivarse de sus resultados como fuente de la cual extraer recomendaciones en materia de posibles reformas para mejorar la competitividad, resulta importante destacar que no ofrecen resultados causa-efecto suficientemente concluyentes sobre la vinculación existente entre un mayor o menor grado de rigidez en el mercado laboral y una peor o mejor situación económica o social asociada a su funcionamiento económico e institucional.

El presente trabajo pretende aportar una visión más homogénea y sintética del análisis de los aspectos de rigidez laboral en diversos países de Latinoamérica y una perspectiva más amplia de las implicaciones que pueden derivarse de sus resultados, esto mediante el diseño de un indicador sintético de rigidez laboral en el que se seleccionan y combinan diversos criterios de valoración generalmente reconocidos y utilizados por los principales estudios con una ponderación de su importancia relativa basada en un análisis factorial. En el análisis se incluyen 16 países de Latinoamérica más los casos de México y España.

Con la elaboración de este indicador de rigidez laboral se trata de aportar mayor información y posibilidades de comparación más precisa sobre diversos países fuera del ámbito de la OCDE, utilizando criterios en parte similares pero también con una mayor amplitud que los considerados en estudios de referencia citados. En todo caso, su utilización se plantea tan sólo como un instrumento más de análisis para conocer mejor la situación de determinadas economías y, no necesariamente, como un criterio orientado casi de forma exclusiva a deducir la aplicación de reformas laborales como única vía de prosperidad de economías en desarrollo.

METODOLOGÍA

El indicador de rigidez laboral diseñado se basa en la información sintética obtenida a partir de un total de 10 variables sobre las que se dispone de información para todos los países considerados y que cumplen con los requerimientos estadísticos necesarios para ser incluidos en el análisis. Para ello se ha procedido a una selección de criterios de valoración suficientemente contrastados en diversos estudios de la OCDE, Banco Mundial y Organización Internacional del Trabajo (OIT), no considerados hasta ahora de forma conjunta o para este objetivo preciso en tales análisis. Las variables o criterios finalmente seleccionados se refieren a: (i) Normativa sobre la necesidad de notificación antes de ejercer el despido colectivo, (ii) Normativa sobre la necesidad de aprobación antes de ejercer el despido colectivo, (iii) Despido con preaviso, (iv) Contrato de formación o aprendizaje, (v) Posibilidad de usar Empresas de Trabajo Temporal, (vi) Posibilidad de utilización o no de contratos temporales, (vii) Normativa sobre horas extraordinarias, (viii) Número de modalidades de contrato a plazo, (ix) Duración máxima de contratos a plazo fijo y, (x) Duración del periodo de prueba.

En función del tipo de información cualitativa de cada variable se estableció una escala numérica determinada. Así, por ejemplo, las variables cuyas respuestas son SI o NO se transformaron en dicotómicas y fueron insertadas de manera apropiada en la escala diseñada. En otros casos se estableció un intervalo indicativo del grado de intervención normativa comprendido entre los valores 0 y 4. A medida que el valor de la variable se incrementa dentro de la escala, el grado de rigidez o restricción del instrumento se considera más elevado. Por consiguiente, 4 representa el nivel máximo de rigidez; mientras que 0 representa el nivel mínimo.

La medición de los criterios antes mencionados se ha realizado para un total de 18 países (Argentina, Bolivia, Brasil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, España, Guatemala, Honduras, México, Nicaragua, Panamá, Paraguay, Perú, República Dominicana y Uruguay). La elaboración de estos indicadores ha requerido de una minuciosa selección y evaluación de las normativas nacionales vigentes en la actualidad en países de Latinoamérica.

En el caso de México, se consideran dos situaciones. Por un lado, la posición relativa de México a partir de la actual regulación de su mercado de trabajo. Por otro, se incorpora el caso potencial de México en función de la propuesta más reciente de reforma laboral conocida como "Ley Abascal". Así, se trata de determinar el comportamiento del mercado de trabajo mexicano como resultado de cambios en la Ley Federal del Trabajo según el indicador de rigidez laboral diseñado, para contrastar potenciales cambios de posición del grado de rigidez-flexibilidad de este país tras la aplicación de la reforma laboral diseñada hasta el momento. La inclusión de diversas medidas de flexibilidad laboral a través de contratos temporales, contratos de formación y aprendizaje, régimen de pasantías y contratos a prueba, entre otros instrumentos, pretende conseguir una reducción del grado de rigidez del mercado laboral mexicano, y modificar su posición relativa, considerada actualmente entre los países con menor flexibilidad en el contexto latinoamericano.

Adicionalmente, se añade el caso de España como referencia de los países europeos, frecuentemente mencionado en los últimos años como modelo de referencia a considerar en el diseño de reformas laborales en el área latinoamericana pese a que según los criterios de la OCDE, las reformas laborales aplicadas en España, aunque numerosas, han sido consideradas como insuficientes, con escaso grado de profundidad o incluso contraproducentes para reducir la segmentación en su mercado de trabajo.

Siguiendo criterios metodológicos muy similares a los considerados en los análisis de la OCDE, tras la selección, interpretación y evaluación cualitativa en función de los valores escalares considerados, se procedió a elaborar una matriz que permitiera trabajar con la información obtenida aplicando el método

multivariante de análisis factorial, el cual tiene como objetivo encontrar un número reducido de variables latentes que permitan explicar en forma clara y sencilla, a qué se debe la variedad de los comportamientos de un conjunto de individuos sobre los que se ha observado un conjunto de p variables, consecuentemente, se trata de encontrar un menor número de m nuevas variables que se denominan factores comunes (m<p) que expliquen conjuntamente la variabilidad de los datos observados con las variables originales. El modelo del análisis factorial se define de la siguiente manera:

$$X1 = l11 \ F1 + ... + l1m \ Fm + e1$$

$$...... \qquad ..... \qquad ...... \qquad ......$$
$$X2 = lp1 \ F1 + ... + lpm \ Fm + ep \tag{1}$$

O simplificadamente se puede expresar de la siguiente manera

$$X = Lf + e \tag{2}$$

donde:
X es el vector de las variables originales; por L, la matriz de coeficientes del sistema lineal; por f, el vector de factores comunes; y por e, el vector de factores únicos o específicos.
Al aplicar este método estadístico al conjunto de *p* variables, el resultado obtenido consistió en la extracción de tres nuevos factores mediante el análisis de componentes principales, en donde el primer componente principal –que es la combinación que considera la cantidad más grande de varianza explicada en la muestra- fue de 39.80%. El segundo componente presentó un valor explicativo de 19.93%, mientras que el tercero sólo logró explicar el 12.38% de la varianza dando un valor explicativo total entre los tres componentes de 72.12%.
La ventaja de utilizar el análisis factorial sobre otras técnicas multivariantes, radica en la posibilidad de medir normativas laborales de países con distinto nivel económico y desarrollo social, lo cual permite evitar que se realicen juicios a priori sobre el peso que deberían tener cada una de las variables y factores para cada país, de tal manera que no se "discrimina" a ningún país. Por su parte, la desventaja de este método consiste en la alta sensibilidad de los resultados de los factores ante ligeros cambios en los datos, la actualización de éstos o la inclusión de más o nuevos países puede cambiar el peso de las variables y por consiguiente de los factores, con lo que la estructura del indicador puede verse modificada sustancialmente. Por otro lado, un bajo número de países tratados en el análisis puede impedir una adecuada confiabilidad de la información final.
Para corroborar la pertinencia de la aplicación del análisis factorial, se llevó a cabo la prueba de esfericidad de Bartlett, la cual determina la presencia de correlaciones entre variables, los resultados de tal prueba fueron positivos al arrojar una chi-cuadrado de 84.962 con un nivel de significación de .000 y una medida de suficiencia de muestreo cercana al .700, dada la cantidad de países analizados es de esperar no alcanzar medidas consideradas como sobresalientes; sin embargo, se demuestra la pertinencia de utilizar esta metodología estadística.

La información correspondiente a todas estas variables queda resumida en un indicador sintético, resultado de la suma ponderada de los pesos relativos de cada uno de los tres factores básicos obtenidos como se puede observar en la Tabla 1.

Tabla 1. Taxonomía del Indicador de Rigidez Laboral y sus Pesos.

	COMPONENTES BÁSICOS (*)	COMPOSICIÓN DE VARIABLES RELEVANTES	
ÍNDICE DE RIGIDEZ LABORAL	**COMPONENTE-1** **Restricciones en los procedimientos de despido colectivo** Escala 0-4 Peso relativo*: 55.18%	Notificación antes de ejercer el despido colectivo Aprobación antes de ejercer el despido colectivo Duración máxima de contratos a plazo fijo Despido con preaviso	(1/4) (1/4) (1/4) (1/4)
	COMPONENTE-2 **Medidas de flexibilidad externa y flexibilidad interna** Escala 0-4 Peso relativo*: 27.64%	Contrato de formación o aprendizaje Posibilidad de usar Empresas de Trabajo Temporal Posibilidad de utilizar o no contratos temporales Horas extraordinarias	(1/4) (1/4) (1/4) (1/4)
	COMPONENTE-3 **Modalidades y duración de formas de empleo a plazo** Escala 0-4 Peso relativo*: 17.18%	Número de modalidades de contrato a plazo Duración del periodo de prueba	(1/2) (1/2)

La Tabla 1 muestra el resultado de la aplicación del análisis factorial, el cual arrojó la estructuración de tres componentes y a su vez, cada componente está compuesto por una serie de variables analizadas y el peso relativo de cada una de ellas.

Los tres componentes obtenidos mediante esta metodología, cada uno de ellos con una importancia relativa diferente en función de los resultados del análisis factorial realizado, fueron los siguientes:

- El primer factor o componente, denominado "*Restricciones en los procedimientos de despido colectivo*", con una capacidad explicativa del 39,80 % de la varianza (55,18 % en la suma ponderada del indicador sintético final).
- El segundo componente se denomina *"Medidas de flexibilidad externa y flexibilidad interna",* con una capacidad explicativa del 19,93 % de la varianza (27,64 % en la suma ponderada del indicador sintético final).
- Por último, el tercer componente es "*Modalidades y Duración de formas de empleo a plazo*", con una capacidad explicativa del 12,38 % de la varianza (17,18 % en la suma ponderada del indicador sintético final).

RESULTADOS

Los resultados del componente llamado "*Restricciones en los procedimientos de despido colectivo*", presentaron una polarización muy significativa entre los valores mínimos y máximos (ver figura 1). La puntuación más alta en este componente fue de 2.50 para el caso de Ecuador, España y Panamá, seguido por Colombia con un valor de 2.25. La interpretación de estos valores hace referencia a que en estos países es necesario la notificación y/o la aprobación de parte de organismos laborales para ejercer el despido colectivo; además de la existencia del despido con preaviso, lo que parece constituir según los resultados obtenidos del análisis de componentes, el factor más importante de rigidez laboral.

En el lado opuesto, los países de El Salvador, México, Uruguay y el caso hipotético de que México llevara a cabo una reforma laboral en los términos ya establecidos, presentaron un índice de 0, indicando la ausencia de cualquier tipo de autorización por parte de la autoridad laboral para que la empresa ejerza el despido.

Figura 1: Restricciones en los Procedimientos de Despido Colectivo
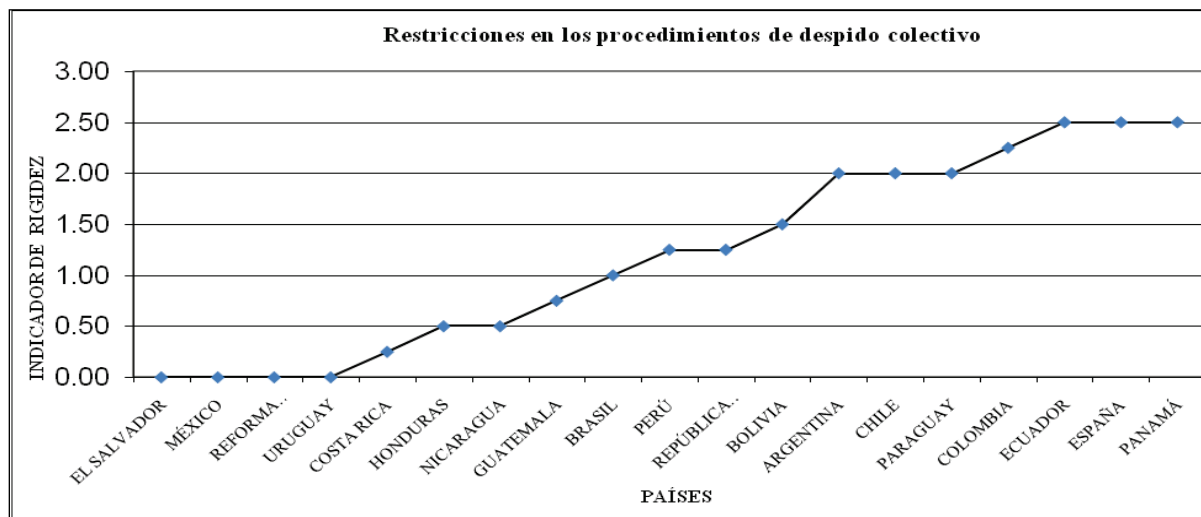
Por su parte, para el componente, *"Medidas de flexibilidad externa y flexibilidad interna"* Nicaragua y Guatemala son las economías que experimentan una mayor rigidez en la instrumentación de medidas que ayuden a crear empleo y que permitan intensificar el uso de la fuerza de trabajo dentro de una organización (ver figura 2). Mientras que economías importantes como Argentina, México, Costa Rica y Chile están ligeramente por debajo. Caso contrario es Panamá que, además de presentar el índice más bajo refleja una diferencia muy significativa con respecto al resto de países. Tal situación está marcada principalmente por la amplia facilidad para la utilización de diferentes instrumentos de promoción del empleo y el uso eficiente del mismo. Si México modificara su legislación laboral en este componente, pasaría a tener un nivel de rigidez laboral significativamente inferior al actual y similar al de las economías latinoamericanas como El Salvador y Uruguay.

Figura 2: Disponibilidad de Medidas de Flexibilidad Externa y Flexibilidad Interna
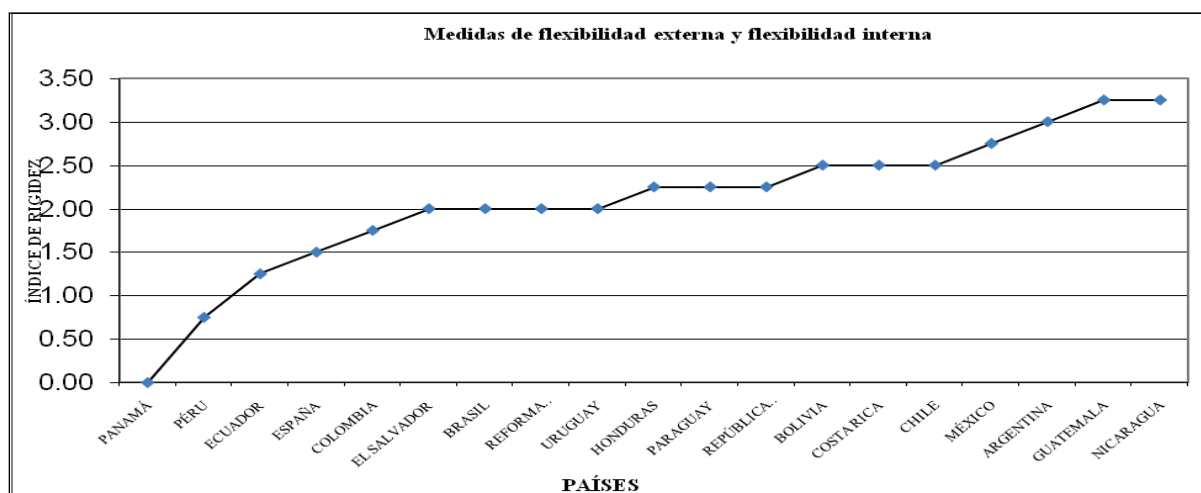
Los resultados del componente llamado *"Modalidades y duración de formas de empleo a plazo"* (ver figura 3) Indican que Panamá presenta el mayor grado de rigidez relativa seguido de Guatemala, México, Nicaragua y Paraguay. Por su parte, Argentina y España son los países con la menor rigidez, lo que

muestra que el número de modalidades de contrato a plazo fijo es elevada, así como la duración del periodo de prueba. Por tanto, dichas economías son las que brindan mayores ventajas en este aspecto.

Figura 3: Modalidades y Duración de Formas de Empleo a Plazo
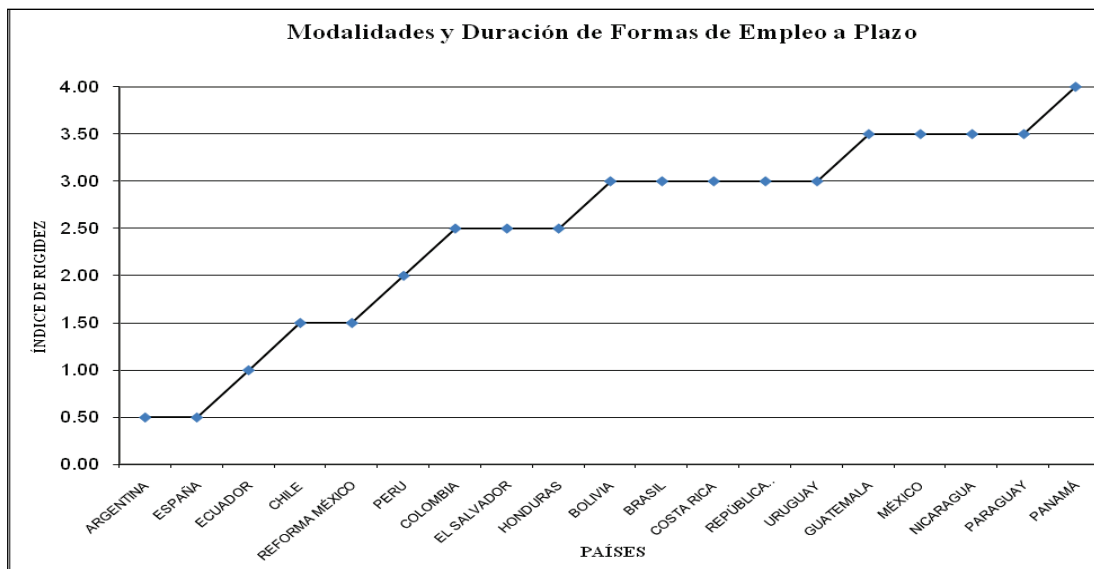
Los resultados del indicador sintético correspondiente a la suma ponderada del conjunto de 10 variables incluidas en los tres componentes indican que el nivel de rigidez laboral más bajo corresponde a El Salvador con una puntuación de 0,98, seguido por Uruguay y Perú. En una posición intermedia-baja aparecen México (sin reforma), Brasil y Costa Rica, con una puntuación de 1,36, 1.62 y 1,34, respectivamente. El valor medio para las 19 legislaciones consideradas, se sitúa en 1,68. En el otro extremo, el grupo de países con mayor grado de rigidez laboral está formado por Paraguay, seguido de Colombia, Panamá y Chile (ver figura 4). Para el caso de España, este presenta un nivel de rigidez laboral media-alta pero sin presentar niveles elevados como afirmarían algunos estudios de la OCDE y la OIT.

 Figura 4: Índice de Rigidez Laboral
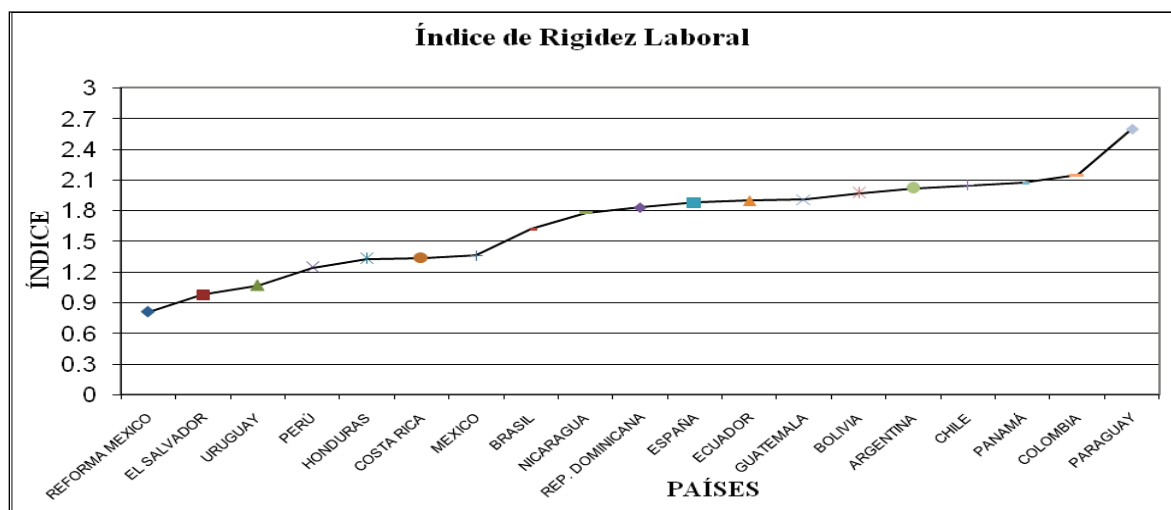
En términos generales, los resultados mostraron que las legislaciones laborales latinoamericanas presentan características bastante distintas, es decir, un mayor grado de divergencia entre países en materia de protección laboral a través de procedimientos de despido colectivo (componente 1). En cambio, las diferencias son relativamente menores en materia de disponibilidad de modalidades de flexibilidad externa, regulación de tales modalidades y otros aspectos de flexibilidad interna, es decir, los componentes 2 y 3 que han sido objeto de un mayor número de reformas en los últimos años en muchos de estos países presentan un mayor grado de convergencia.

De entre los diversos resultados por países, cabe realizar algunas observaciones. En el caso del mercado laboral de Argentina se obtiene un considerable nivel de rigidez laboral pese a ser uno de los países que mayor número de reformas laborales ha implementado durante la década de los años noventa. Al respecto, numerosos organismos internacionales han criticado el proceso de flexibilización laboral argentino en el sentido de que la cuantía de las reformas laborales no ha estado correlacionada con la profundidad de las mismas (Bronstein,1997).

Por su parte, Brasil que no ha llevado a cabo modificaciones al "Código de los Trabajadores" desde hace décadas, mantiene un nivel de rigidez laboral de intermedio a bajo, similar al de México. Un rasgo común a ambos mercados laborales, quizá más acusado que en otros países, es que, junto a un marco regulatorio oficial con un importante grado de protección del empleo, coexisten formas de flexibilidad laboral "*informal o subterránea*" instrumentadas a través de acuerdos entre, empleadores y sindicatos, con la anuencia de las autoridades laborales para mejorar el grado de flexibilidad real dentro de la organización a cambio de cierta clase de beneficios económicos (Camargo, 1997).

Chile presentó un grado de rigidez muy diferente con respecto a Brasil o México. En el caso de Chile, con un grado elevado de rigidez laboral, las autoridades parecen haber optado por fomentar la productividad del aparato productivo mediante algunas medidas de flexibilidad pero sin menoscabar de forma significativa ni los derechos ni las condiciones laborales de los trabajadores. Por consiguiente, tanto el número de reformas laborales como su profundidad, han sido limitados, esto con la finalidad de dotar al mercado laboral de una mejor regulación.

Por su parte, Perú ocupó dentro del indicador de rigidez laboral una de las posiciones de mayor flexibilidad laboral, al ser el tercer país más flexible sólo detrás de El Salvador y Uruguay. Entre 1991 y 1995 se dieron una serie de cambios legislativos tendentes a flexibilizar el mercado de trabajo (Saavedra, 1999). El cambio de orientación ideológica fue radical, se pasó de un sistema fuertemente regulado y protector del trabajador a otro en el que prima la libertad de contratar y proliferan las modalidades de empleo diferentes del contrato de trabajo clásico (Bronstein, 1997).

Caso de España, el cual se encuentra ante un contexto económico y social radicalmente distinto al resto de países analizados. Un país que dentro del contexto internacional ha realizado numerosas reformas de manera similar al caso de Argentina, mantiene una posición intermedia dentro del indicador sintético de rigidez laboral diseñado. Un país con baja rigidez en materia de flexibilización de las modalidades de contratación por tiempo determinado, que le sitúan entre los mercados laborales más flexibles en los componentes 2 y 3. Sin embargo, mantiene una elevada rigidez con respecto a la regulación de protección del empleo en materia de procedimientos de despido colectivo que mantiene para este país la imagen de economía con un mercado de trabajo excesivamente rígido, pero que no ha impedido que sea una de las economías de la zona euro con mayor crecimiento en términos de PIB y de empleo, de manera ininterrumpida desde 1995. Al ponderar los tres componentes, el resultado permite establecer al mercado de trabajo español en la mitad del ranking diseñado.

En cuanto a la situación actual de México, los resultados indican que su nivel de rigidez es intermedio. Sin embargo, si México hubiera llevado a cabo modificaciones a la Ley Federal del Trabajo bajo los

términos de la iniciativa *Abascal*, su posición cambiaría drásticamente. De un nivel intermedio que tiene el país actualmente, éste se convertiría en la economía con el menor grado de rigidez (más flexible) de la región latinoamericana.

CONCLUSIONES

La elaboración de un indicador sintético formado por tres componentes básicos e integrados a su vez por un total de 10 variables para evaluar normativas laborales nacionales ha permitido establecer una comparación homogénea y precisa de 18 países de Latinoamérica, incluyendo el caso de México (con o sin reforma laboral) y de España.

Existen algunos resultados de especial interés. Una ordenación del grado de importancia relativa de los criterios que inciden más directamente en el grado rigidez laboral de los países analizados. Las normas relativas a los procedimientos de despido colectivo constituyen el factor más relevante, seguido de la disponibilidad de medidas de flexibilidad laboral externa e interna y, por último, de las modalidades y duración de los contratos por tiempo determinado.

Los resultados suponen una puesta en cuestión de planteamientos que afirman, de forma genérica, que las economías de Latinoamérica son extremadamente rígidas. Por el contrario, el indicador sintético de rigidez laboral que resulta de la combinación de los tres componentes ofrece una ordenación de países con amplias diferencias entre aquellos con un mayor grado de flexibilidad laboral de la zona. Entre las economías más importantes de Latinoamérica, México y Brasil ocupan una posición intermedia, lo que supone valores por debajo de la media de los 18 países considerados (1,68). En cambio, Argentina y Chile presentan uno de los valores más elevados pese a algunas reformas realizadas en los últimos años.

Adicionalmente, el análisis comparado de cada uno de los tres componentes indica una mayor divergencia entre los países de la zona en aspectos normativos relativos a los procedimientos por despido colectivo (componente 1) y una cierta convergencia en elementos normativos relativos a modalidades de flexibilidad laboral externa y de flexibilidad interna, probablemente como consecuencia de las reformas laborales llevadas a cabo sobre estos aspectos en un amplio número de los países considerados. Por otra parte, el hecho de que el único país no americano, España, haya registrado el nivel intermedio de rigidez laboral muestra las contradicciones y dificultades que se derivan de los intentos de comparación entre países latinoamericanos y europeos.

En cuanto al análisis específico de México, considerando su actual normativa y comparándola con la situación resultante de una reforma laboral en los términos planteados en los últimos años, los resultados obtenidos indican que, a consecuencia de la denominada *"Ley Abascal"*, el mercado de trabajo mexicano pasaría del actual nivel intermedio de rigidez (menos elevado de lo habitualmente considerado) a situarse como el país con el mayor grado de flexibilidad de la región.

Por último, cabe plantear algunas reflexiones finales en un sentido más amplio que el circunscrito exclusivamente al ámbito de la regulación de los mercados de trabajo. La utilización del criterio de rigidez laboral como instrumento de análisis de una parte relevante de cualquier economía resulta incuestionable y puede servir de base para plantear determinados ajustes orientados a mejorar su funcionamiento. Ahora bien, la utilización del ranking obtenido como criterio para extrapolar conclusiones en materia de competitividad o capacidad de desarrollo económico, o como indicador indirecto para concluir la necesidad de reformas laborales más o menos intensas, resulta claramente insatisfactoria.

Tanto a un lado como al otro del espectro de niveles de flexibilidad obtenidos, aparecen países con serios problemas económicos. Ni el grado relativamente elevado de flexibilidad en países como El Salvador,

Uruguay, Perú, Honduras o Costa Rica ni la elevada rigidez de países como Argentina, Chile, Panamá, Colombia o Paraguay, permite establecer un claro perfil de relaciones entre economías con mayor o menor grado de éxito, pudiéndose encontrar en ambos grupos ejemplos de países con resultados económicos positivos (Costa Rica, Chile) y otros con resultados muy negativos (El Salvador, Honduras, Paraguay y Bolivia).

El impacto que pudieran tener reformas laborales de cierta intensidad, como casi única medida de fomento de empleo podría ser escaso o incluso contraproducente en el contexto de países con elevados niveles de economía sumergida, deficiencias en capacidad productiva, baja cualificación de la mano de obra y escaso o casi nulo nivel de protección social, sin el reforzamiento de las inversiones y la modernización de sectores productivos o el aumento del capital humano. Además, la introducción de flexibilidad laboral para dinamizar cualquier economía tampoco debería significar la eliminación de derechos ni el deterioro de las condiciones laborales de los trabajadores, especialmente en países que no pueden compensar los posibles efectos negativos de reducciones en protección laboral con aumentos del nivel de protección social.

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MODELO DE GESTIÓN FINANCIERA EN LA INDUSTRIA DE LA PESCA DE PELÁGICOS MENORES EN ENSENADA, B.C. 2008-2009

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RESUMEN

El desarrollo económico y el aumento de la población en Ensenada B.C., han creado la necesidad de mejorar la infraestructura de las PYMES; lamentablemente el sector pesquero no ha notado oportunamente las señales de alarma, lo que le ha provocado un estancamiento, ya que los pequeños propietarios se han encontrado con las siguientes barreras: la existencia de leyes restrictivas, el nivel de inversión, los requerimientos tecnológicos y la necesidad de personal especializado,   Estas empresas tienen efectos negativos dentro de la economía del sector, y no han sabido resolver esta problemática.
El efecto negativo que presenta la desaparición de las empresas pequeñas del sector en la economía local, es la perdida de fuentes de empleo pero sobre todo, el desperdicio de los recursos naturales, ya que al desaparecer del mercado; las grandes transnacionales explotan los productos marinos de aguas nacionales. La mejor forma sin duda de frenar este problema y las consecuencias que en un futuro tendrá no solo a nivel local depende de los apoyos y la orientación que se le de al sector, mediante una adecuada gestión financiera que le permita resurgir. Este trabajo consiste en una investigación que propone el diseño de un modelo de gestión financiera como elemento competitivo en las empresas estudiadas. El propósito de esta investigación es el estudio documental y la propuesta metodológica que permita identificar las variables que impactan en la eficiencia de la gestión financiera a través de la inversión, la liquidez, la rentabilidad, el financiamiento y la toma de decisiones en la obtención de recursos en la industria de la pesca de pelágicos menores.

PALABRAS CLAVE: Gestión Financiera, PYMES, Fuentes de Financiamiento, Obtención de Recursos, Toma de Decisiones, Liquidez, Rentabilidad y Inversión.

INTRODUCCIÓN

La principal meta de este trabajo de investigación es el estudio de la eficiencia en la gestión financiera empresarial para la obtención de recursos en la industria de la pesca de pelágicos menores en Ensenada, B.C. durante el período 2008-2009 a partir del conocimiento de los empresarios que participan en este proceso, con el fin de encontrar los factores que debe manejar la gestión financiera para hacerla mas eficiente.

La industria de la pesca de pelágicos menores está siendo afectada negativamente por el desconocimiento en el buen manejo de la gestión financiera. Pueden existir oportunidades para la obtención de recursos propios y ajenos, además se puede observar de manera positiva cuando las empresas se encuentran bien informadas, esto puede dar como resultado.
1. Un mejor rendimiento resultado por una excelente localización de los recursos
2. Disminución de los costos por resultado de los beneficio de la obtención de recursos
3. Obtención de recursos para mejorar la transferencia de tecnología
4. Mejoría en Investigación y desarrollo con la obtención de recursos

De esto surge la siguiente pregunta:
¿Como nos afectaría negativamente la falta de información para la obtención de recursos financieros? En los empresarios, existe

Temor a la presencia recurrente a crisis cambiarias, bancarias y financieras
Falta de una gran visión empresarial de crecimiento
Falta de apoyo para generar condiciones de empleo
El incremento de las desigualdades en la distribución del ingreso y la riqueza.

Es importante que el empresario   comprenda esta situación, puesto que si no se actualiza y no analiza su entorno se verá afectado, ya que por la falta de capacidad de obtención de recursos financieros no puede invertir se ve restringido.   Su personal tiene muy poca capacitación y la problemática de las empresas familiares es otra de las debilidades que se deben de observar y se encuentran con la gran amenaza de las grandes empresas porque estas están en superioridad de infraestructura.

Sin dejar de insistir en la importancia que tiene la obtención de fondos para que la pequeña o mediana empresa en función del volumen de sus ventas, la escala en las compras sea un factor determinante para su crecimiento. Al obtener estos recursos es el momento de mejorar los precios para competir con las grandes empresas.   Actualmente las empresas   dependen de la operación de una sola persona que es el accionista principal o dueño.

Estos propietarios,   empapados por la operación diaria y con una falta   de querer   delegar la administración del negocio por tener desconfianza en su personal y por desconocer la administración, no aplican técnicas, métodos ni el proceso administrativo para crecer como empresa; le incluimos? además el desconocimiento sobre la utilidad de la contabilidad y el tener fuertes desviaciones fiscales porque no desea pagar más y por falta de planeación fiscal, además de   escasez de la planeación estratégica.
Inclusive aparecen en la lista de buró de crédito generalmente por no pagar alguna deuda, por una mala administración del negocio siendo su crecimiento solo por impulso.

Es importante que los empresarios se den cuenta que pueden hacerse más competitivos. Y observar que las empresas más exitosas y creativas están mejorando sus productos, creando otros, ofreciendo servicios y tecnologías. Están cambiando sus modelos empresariales para hacer frente a los retos sociales y ambientales y, de esta forma, cambiar esto en una oportunidad de promover la innovación y   creación de valor.

REVISIÓN LITERARIA

Antecedentes

Se llaman pelágicos menores (del latín pelágicos que significa "mar abierto") a los pequeños peces marinos migratorios que forman cardúmenes y se distribuyen libremente en la columna de agua (http:pt.wikipedia.org.) se encuentran distribuidos en todos los océanos del mundo y constituyen principal soporte trófico de los peces mayores son considerados como lo mas abundantes recursos pesqueros

Este termino engloba a un variado numero de especies marinas de las familias de anchovetas, sardinas y arenques, macarelas y caballas,. Entre las mas importantes mundialmente por sus volúmenes de extracción podemos mencionar la anchoveta peruana; colín de Alaska, jurel chileno, sardina japonesa, sardina sudamericana, sardina española y el arenque.

México se ubica como el noveno exportador de pelágicos menores a nivel mundial. Por su parte Baja California, es el segundo estado con mayor volumen de captura de estos organismos.

Los armadores son la parte de la red de mayor valor, con una antigüedad en sus equipos que oscila entre los 20 y 43 años. Esta industria abastece a las procesadoras, las cuales a su vez tienen una antigüedad entre 10 y 20 años, a las reductoras (harineras de pescado) entre 10 y 30 años y las granjas atuneras con 6

años de antigüedad. Siendo el principal mercado o internacional para dichas industriales los países de Asia y Estados Unidos de América.

Los costos mas elevados de estas industrias son los energéticos, electricidad y combustibles; mantenimiento; prestaciones sociales y los sueldos. La capacidad instalada de las granjas atuneras es 4500 TM por ciclo de producción (uno o dos ciclos por año), mientas que la capacidad diaria de los otros eslabones es de: Armadores 2,156 TM de las procesadoras 795 TM de reductoras 430 Tm y de comercializadoras 60TM.

Los productos y tecnologías necesarios para detonar la industria son el supercongelado, el empacado porcionado individual, la clasificadora en tierra y mejora en los sistemas de refrigeración de los barcos. Como productos potenciales se sugiere la obtención de sardina con calidad AAA, el porcionado en charola plástica al vacío, elaboración de carnada y un aceite purificado.

Los diferentes eslabones de la cadena productiva de pelágicos menores cuentan con varias organizaciones como: La red nacional de pelágicos menores; la Asociación de Armadores de pelágicos Menores del Puerto del Sauzal; un Centro de articulación productiva (Pesca industria, A.C, en formación; la Asociación de industriales del puerto del Sauzal; La Cámara Nacional de la Industria Pesquera, Sección de "Pelágicos Menores"; La Cámara Nacional de la Industrial y la Transformación y el Comité Estatal del Sistema Productivo de Pelágicos Menores de Baja California. (Plan Rector SPPMBC, 2006).

Gestión Financiera: Definición, Modelos y Modelo Propuesto

Existen diversas definiciones del término de Gestión financiera, las cuales han sido presentadas por los principales expertos en la materia de Finanzas. Muchas de estas definiciones pueden ser consideradas complementarias entre si y aparecen recogidas en la tabla 1.

Tabla 1: Definiciones detalladas sobre el concepto Gestión Financiera

AUTOR	DEFINICION
(Eugene, Scot,2000).	Se encarga de la eficiente administración del capital de trabajo dentro de un equilibrio de los criterios de riesgo y Rentabilidad; además de orientar la estrategia financiera para garantizar la disponibilidad de fuentes de financiación y proporcionar el debido registro de las operaciones como herramientas de control de la gestión de la Empresa
Gitman, 2000).	Está relacionada con la toma de decisiones relativas al tamaño y composición de los activos, al nivel y estructura de la financiación y a la política de los dividendos.
Block, Hirt 2008)	Asignar los fondos a los activos circulantes y los activos fijos, obtener la mejor combinación de la opciones de financiamiento, y determinar una política apropiada de dividendos dentro del contextos de los objetivos de la empresa
Weston,Copeland, 1992)	Es el termino que cubre toda las decisiones de una organización que impliquen flujo de efectivo y hace hincapié sobre la administración de inversiones en los activos circulantes , fijos y su financiamiento

El objetivo de la Gestión Financiera es el manejo óptimo de los recursos financieros que son parte de las organizaciones a través de las áreas de Contabilidad, Presupuesto y Tesorería. Las decisiones tomadas por los responsables del área financiera deben estar basadas en políticas relacionadas con la inversión, la financiación y una política de dividendos consecuente. A fin de tomar las decisiones adecuadas es necesaria una clara comprensión del objetivo que se pretenden alcanzar, debido a que facilita un marco

para una óptima toma de decisiones financieras que seria mantener un equilibrio entre liquidez y rentabilidad.

Modelos de Gestión Financiera

Existen básicamente cinco tipos de modelos de gestión financiera. Estos son: manipuladores, perspectivos, predicción, la complejidad y la incertidumbre, a continuación, se presenta un modelo propuesto para esta investigación que es tropicalizado de varios modelos de Guitman (2000) (Figura 1)

Modelo Propuesto

La gestión financiera está dirigida hacia la utilización eficiente de un importante recurso económico que son:
Los recursos propios estos pueden ser aportaciones propias de los accionistas, así como el capital
Los recursos ajenos son los financiamientos por los acreedores externos
Todo esto va dirigido a inversión de activos para la maximización de la rentabilidad y obtención de liquidez que deberá de servir como criterio básico para la toma de decisiones de la gestión financiera.
Es por ello que en este modelo propuesto se muestran 5 variables independientes que a continuación se enuncian

¿Que es Liquidez?

La liquidez se define como la capacidad de una empresa de hacer frente a sus obligaciones a corto plazo conforme se vence (Gitman, 2000). Significa la propiedad de ser fácilmente convertibles en efectivo. (Diccionario de la lengua española, 2005). Se define como la disposición inmediata de fondos financieros y monetarios para hacer frente a todo tipo de compromisos.

Todas las empresas tiene un origen de sus fondos y utilización de los mismos y necesitan contar con suficiente efectivo para pagar su deuda, pero también si tiene dinero en exceso que no pierda su valor en el tiempo. Es por ello que existe varias formas de invertir en el sistema financiero mexicano en forma inmediata sin pérdida significativa de su valor. Si la empresa es eficiente en su gestión financiera va estar al pendiente para invertir sus sobrantes en los valores negociables existente en el mercado y estar al pendiente de sus faltantes en sus flujos de caja. Esta variable de liquidez tiene a su vez sus principales Dimensiones, que son:

Capital de trabajo, nivel de solvencia, nivel de efectivo adecuado y estado de cuenta bancaria

¿Que es Rentabilidad?

La Rentabilidad se define: como la utilidad después de costos y Gastos (Gitman 2000). Se define Cuando la empresa tiene la posibilidad de generar utilidades o la capacidad de tener activos fijos.

Toda empresa después de haber calculado el costo venta de su producto, los gastos de administración los gastos de venta, los gastos financiero y los impuestos, le queda una utilidad neta. Dentro de una eficiente gestión financiera nos encontramos con una buena planeación financiera cuando proyectamos ampliar los márgenes de utilidad y con este propósito de maximizar los resultados, se tiene que hacer una buena investigación de mercados para incrementar las ventas, renovar y optimizar nuestro producto, escogiendo adecuadamente a nuestro personal y dándole capacitación. Desarrollando nuevos métodos de producción, acelerando los procedimientos administrativos, estimulando la promoción y publicidad con el menor costo posible. Esta variable de Rentabilidad tiene a su vez sus principales Dimensiones, que

son: Nivel de utilidad bruta, nivel de utilidad operativa, nivel de utilidad neta y nivel de utilidades repartida.

Figura 1: Modelo Propuesto
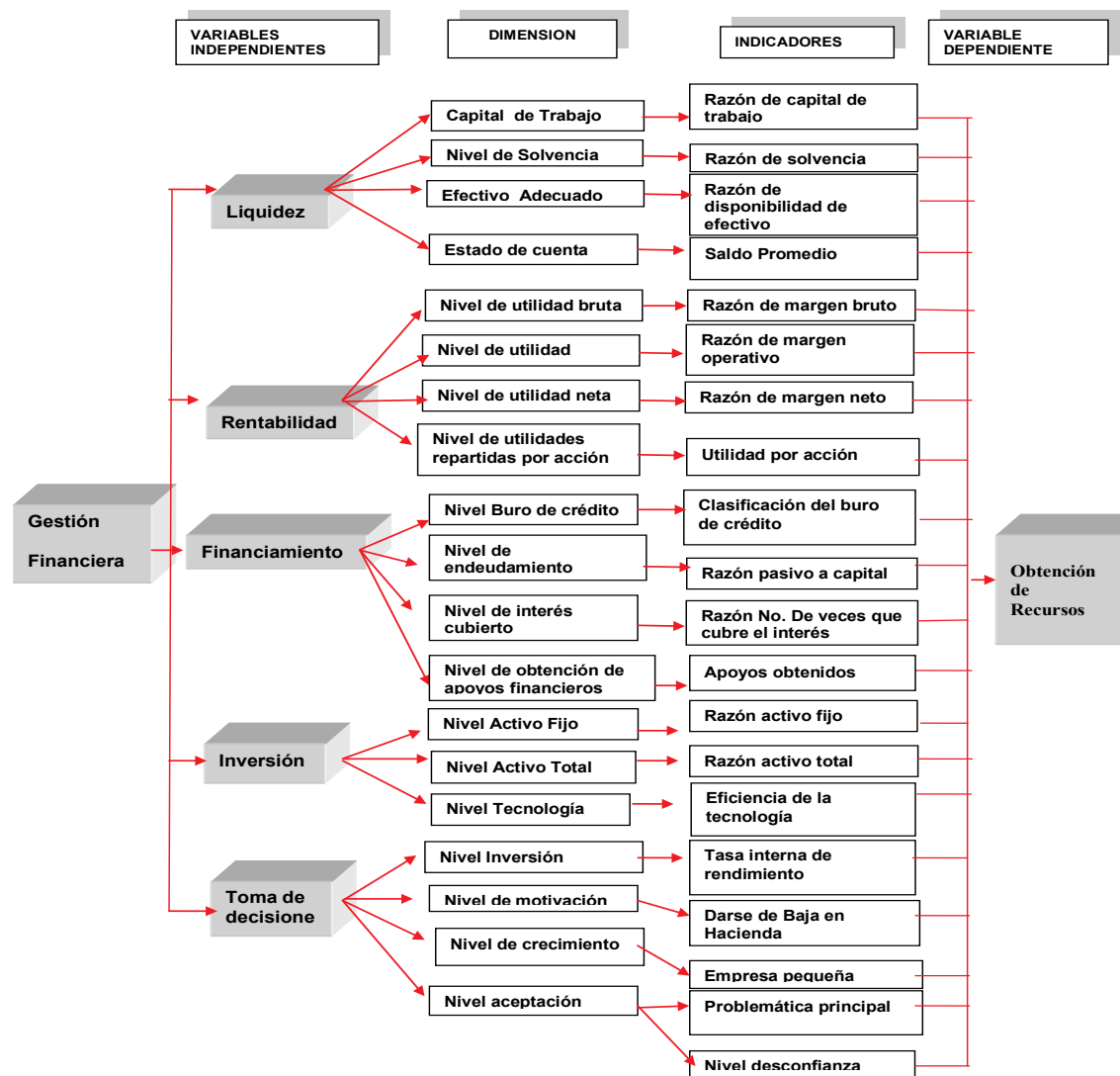
Fuente: Elaboración propia en base a (Gitman,2000).

:

¿Que es Financiamiento?

Financiamiento se define: como aquellas deudas originalmente programadas a corto y largo plazo que puede obtenerse de diferentes fondos (Weston, Copeland 1990). Se define como la obtención de fondos de capital, o a préstamo donde constituye la capacidad de pago del deudor.

Toda empresa debe cuidar su rendimiento, ya que para obtener fondos de financiamiento internos y externo se interesa en sus márgenes para que se les entreguen adecuados beneficios; Dentro de una eficiente gestión financiera es responsabilidad de la gerencia alcanzar eficazmente los recursos que apoyen a minimizar el costo de las diferentes fuentes de financiamiento con las cuales se van contar ya que debe procurar por la alternativa combinación apropiada de las fuentes de financiamiento internas y externas que nos permitan la maximización de las utilidades de la empresa, las principales fuentes financiamiento a las que se puede recurrir son a los créditos comerciales, prestamos bancarios a corto y

largo plazo, fondos de financiamiento de banco de segundo piso, bonos, acciones comunes, acciones preferentes y utilidades retenidas. Siempre las empresas enfrentan el problema de conseguir los recursos que requieren para su labor diaria de la empresa o crecimiento de la mimas para sus proyectos de inversión. La necesidad de seleccionar apropiadamente las fuentes de financiamiento surge de reconocer que los recursos son limitados y costosos es por ello la importancia de una eficiente gestión financiera.

Esta variable de Financiamiento tiene a su vez sus principales Dimensiones, que son:
Nivel de buro de crédito, nivel de endeudamiento, nivel de interés cubierto y nivel de apoyos financieros.

Que es Inversión?

Inversión se define: Se define como el desembolso de recursos financieros para adquirir bienes concretos o durables o instrumentos de producción denominados bienes de equipo y que la empresa utilizara. (Peumans 1967) Es decisivo que la capacidad de endeudamiento se relaciona con la capacidad de inversión, admitiendo que cuando las empresas manifiestan deuda a largo plazo , se compromete los financiamientos externos para apoyar la inversión en activos fijos, así como la capacidad de producción para que esta tenga una meta de crecimiento, en el sentido de fomentar la realización de proyectos de inversión con los cuales certificar niveles superiores de producción y por consecuencia impulsar estrategias de mercadotecnia relacionándola con la transformación o innovación de productos resultado de una apropiada gestión financiera
.
Esta variable de Inversión tiene a su vez sus principales Dimensiones, que son:
Nivel de activo fijo, nivel de activo total, nivel de tecnología y nivel de inversión

¿Que es decisiones de los empresarios?

Decisiones de empresarios se define: Se define como las combinaciones de situaciones y conductas que pueden ser descritas en términos de tres componentes esenciales: alternativas, consecuencias y sucesos inciertos. (Zurilla 2000). Es el proceso mediante el cual se realiza una elección entre las alternativas o formas de resolver diferentes situaciones, básicamente, es elegir una alternativa entre las disponibles a efecto de resolver un problema actual o potencial Eliminación en la toma de decisiones. Al acapararse el poder de decisión en el dueño de la empresa y los trabajadores aislados de la toma de decisiones se les limita la capacidad de inventar ideas, de aportar al crecimiento de la empresa y de aportar algo mas que el trabajo ordinario y frecuente. Muchos dueños y directores aun no entienden que cuantas mas personas se incorporen al proceso de toma de decisiones, ellas serán responsables de alcanzar los objetivos en que sean comprometidos, estimulándose así la dedicación de todo su trabajo. Esta variable de la toma de decisiones, tiene a su vez sus principales Dimensiones, que son: Nivel de motivación, nivel de crecimiento, nivel de aceptación de asesorías y nivel de desconfianza
METODOLOGÍA

El propósito de esta investigación es el estudio documental y la propuesta metodológica que permita identificar las variables que impactan en la eficiencia de la gestión financiera a través de la inversión, la liquidez, la rentabilidad, el financiamiento y la toma de decisiones en la obtención de recursos en la industria de la pesca de pelágicos menores los objetivos que se plantearon en esta investigación son los siguientes:

Objetivo General

Determinar un modelo que permita describir las variables que impactan en la eficiencia de la gestión financiera a través de la liquidez, rentabilidad, financiamiento, inversión y toma de decisiones en la industria de la pesca pelágicos menores de Ensenada, B.C

Objetivo 1: Describir cual es la relación de los niveles de capital de trabajo, solvencia, efectivo y estados de cuenta bancaria en la obtención de recursos para la industria de la pesca pelágicos menores de Ensenada, B.C

Objetivo 2**:** Describir cual es la relación de los niveles de utilidad bruta, operativa, neta, dividendos preferentes y utilidades repartidas por acción en la obtención de recursos para la industria de la pesca pelágicos menores de Ensenada, B.C.

Objetivo 3: Describir cual es la relación de el nivel de endeudamiento, los intereses cubiertos, el riesgo, y su calificación en el Buró de Crédito en la obtención de recursos para la industria de la pesca pelágicos menores de Ensenada, B.C

Objetivo 4: Describir cual es la relación de los niveles de activo circulante, activo fijo, si se esta contando con patentes y marcas y el nivel de los activos totales en la obtención de recursos para la industria de la pesca pelágicos menores de Ensenada, B.C

Objetivo 5: Describir en que grado afecta la falta de motivación, nivel de crecimiento y la desconfianza en la Gestión financiera empresarial en la obtención de recursos para la industria de la pesca pelágicos menores de Ensenada, B.C.

Pregunta Investigación General

¿Cuáles son los factores que debe manejar la Gestión financiera para hacerla más eficiente en la industria de la pesca pelágicos menores en Ensenada, B.C. ?

Pregunta de investigación 1: ¿Son los factores del capital de trabajo, la mejora del flujo de efectivo, el nivel de solvencia adecuado para tener una buena liquidez y los saldos promedio del estado de cuenta bancaria que hacen más eficiente la gestión financiera?

Pregunta de investigación 2 :¿Son los factores de utilidad bruta, la utilidad operativa, la utilidad neta, los dividendos y las utilidades repartidas por acción a la rentabilidad que hacen más eficiente la gestión financiera?

Pregunta Investigación 3: ¿Son los factores el buro de crédito, su nivel de endeudamiento, su nivel de interés cubierto y el nivel de riesgo para obtener financiamientos lo que hacen más eficiente la gestión financiera?

Pregunta Investigación 4: ¿Son los factores de niveles de inversión en activo circulante, fijo, total y nivel tecnología, los que impactan en la eficiencia de la gestión financiera?

Pregunta Investigación 5 : ¿Son los Factores del nivel de motivación, su nivel de crecimiento y el nivel de desconfianza que se desarrolla en la Gestión financiera de los empresarios lo que hacen más eficiente la gestión financiera?

Hipótesis Principal

Alta liquidez y rentabilidad, teniendo una buena administración del endeudamiento, y una adecuada gestión financiera de los propietarios de la industria de la pesca pelágicos menores de Ensenada, B.C y su planeación de sus inversiones impacta positivamente en su obtención de recursos

Hipótesis particular 1: A mayor liquidez, mejor obtención de recursos siendo directamente proporcional y trascenderá positivamente para industria de la pesca pelágicos menores de Ensenada, B.C

Hipótesis particular 2: A mayor rentabilidad, mejor obtención de recursos siendo directamente proporcional Trascenderá positivamente para la industria de la pesca pelágicos menores de Ensenada, B.C

Figure 2: Diagrama Sagital
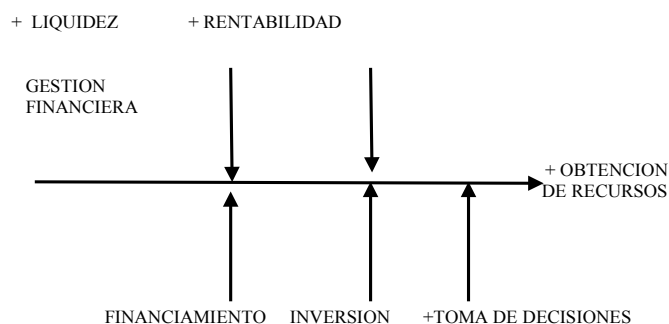
Hipótesis particular 3: Una buena administración de su endeudamiento es directamente proporcional a la obtención de recursos y   resultara positivamente en la industria de la pesca pelágicos menores de Ensenada, B.C

Hipótesis particular 4: Una buena Toma de decisiones de los propietarios es directamente proporcional teniendo una mejor obtención de recursos y transcenderá positivamente en industria de la pesca pelágicos menores de Ensenada, B.C

Hipótesis particular 5: Una buena   administración de sus inversiones es directamente proporcional teniendo una mejor obtención de recursos y una influencia positiva en industria de la pesca pelágicos menores de Ensenada, B.C

Cobertura de la Muestra

El sistema de productos de pelágicos menores de Baja California esta integrado por 39 empresas locales, divido en 5 eslabones principales: 14 Productores, 9 procesadoras, 3 Reductoras, 3 Comercializadoras y 10 Ranchos atuneros. Cada eslabón cuenta con una representación en el comité
Tabla 2. No de empresas del SPPMBC, 2006

Eslabones Principales	No. De Empresas
Productores	14
Procesadores	9
Reductoras	3
Comercializadora	3
Rancho atuneros	10
Total	39

Elaboracion propia en base al plan rector SPPMBC,2006

Operacionalizacion de Variables

Indicadores del cuestionario: El instrumento de medición se desarrollo con una escala likert de 5 opciones con el fin de medir la percepción de los empresarios sobre la situación financiera. El instrumento cuenta con 41 reactivos que miden las variables que se proponen en el modelo arriba descrito.   A continuación se presenta la operacionalización de la variable liquidez como un ejemplo de lo realizado para la obtención del cuestionario.

Figura No. 3: Operacionalización de la Variable Liquidez

VARIABLE LIQUIDEZ			
DEFINICION: LA LIQUIDEZ SE DEFINE COMO LA CAPACIDAD DE UNA EMPRESA DE HACER FRENTE A SUS OBLIGACIONES A CORTO PLAZO CONFORME SE VENCE (GITMAN, 2000) SIGNIFICA LA PROPIEDAD DE SER FÁCILMENTE CONVERTIBLES EN EFECTIVO. (DICCIONARIO DE LA LENGUA ESPAÑOLA, 2005) DEFINICIÓN OPERATIVA: COMO LA DISPOSICIÓN INMEDIATA DE FONDOS FINANCIEROS Y MONETARIOS PARA HACER FRENTE A TODO TIPO DE COMPROMISOS			
DIMENSION	INDICADOR	ESCALA	REACTIVO
CAPITAL DE TRABAJO Definición capital de trabajo: Es la diferencia entre los activos circulantes y los pasivos, a corto plazo (Gitman, 2000)	RAZON DE CAPITAL DE TRABAJO	ORDINAL	1.- En mi empresa los activos circulantes son mayores que mis pasivos circulantes _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____e. No se 2.- Mi empresa ha sido incapaz de pagar sus deudas a medida que van venciendo _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____e. No se
NIVEL DE SOLVENCIA Definición de Solvencia: la empresa puede cubrir las deudas a medida que van venciendo (Gitman 2000).	RAZON SOLVENCIA	ORDINAL	1. En mi empresa mi índice de solvencia es mayor que 2 _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____e. No se 2. El índice de solvencia de mi empresa ha sido 1 y su capital de trabajo 0 _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____e. No se

Fuente: investigación propia en base al modelo propuesto

Figura No. 4: Operacionalización de la Variable liquidez

DIMENSION	INDICADOR	ESCALA	REACTIVO
EFECTIVO ADECUADO Definición de efectivo: vocablo de sentido amplio asociado con cualquier transacción comercial que implique la utilización de dinero **(**Diccionario de administración y finanzas, 2000).	RAZON DE DISPONIBILIDAD DE EFECTIVO	ORDINAL	1. Mantiene saldo de efectivo (Dinero suficiente) para efectuar sus pagos planeados de: a) Materia prima _____Si _____No b) Sueldos _____Si _____No c) Servicios _____Si _____No d) Impuestos _____Si _____No e) Prestamos _____Si _____No f) Otros gastos _____Si _____No 2. Mi empresa invierte dinero en Instituciones Financieras en inversiones que pueden convertirse inmediatamente en efectivo a). Menos 10% de sus excedentes de efectivo b). Alrededor del 10% de sus excedentes de efectivo c). Alrededor del 20% de sus excedentes de efectivo d). Alrededor del 30% de sus excedentes de efectivo e). Alrededor del 40% de sus excedentes de efectivo f). 50% o mas
ESTADO DE CUENTA BANCARIA Definición de estado de cuentas bancaria: El resumido de una cuenta de deposito a la vista (Diccionario de administración y finanzas, 2005).	SALDO PROMEDIO	ORDINAL	1. Mi empresa mantiene un saldo promedio en el estado de cuenta bancaria _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____e. No se 2. Su empresa mantiene dinero suficiente en el banco para aprovechar oportunidades inesperadas _____a). Menos 10% de sus excedentes de efectivo _____b). Alrededor del 10% de sus excedentes de efectivo _____c). Alrededor del 20% de sus excedentes de efectivo _____d). Alrededor del 30% de sus excedentes de efectivo ____e). Alrededor del 40% de sus excedentes de efectivo ____f). 50% o mas

Fuente: investigación propia en base al modelo propuesto

Figura No. 5: Operacionalización de la variable rentabilidad

VARIABLE RENTABILIDAD
DEFINICION: COMO LA UTILIDAD DESPUÉS DE COSTOS Y GASTOS (GITMAN 2000).

DEFINICION OPERATIVA: CUANDO LA EMPRESA TIENE LA POSIBILIDAD DE GENERAR UTILIDADES O LA CAPACIDAD DE TENER ACTIVOS FIJOS.

DIMENSION	INDICADOR	ESCALA	REACTIVO
NIVEL DE UTILIDAD BRUTO Es la utilidad que queda sobre las ventas después que la empresa a pagado su costo de venta (Diccionario de Administración y Finanzas, 2000)	RAZON DEL MARGEN BRUTO	ORDINAL	1. Considero que el margen bruto actual de mi empresa es muy bueno. ____ a. Totalmente de acuerdo ____ b. De acuerdo ____ c. Desacuerdo ____ d. Totalmente desacuerdo ____ e. No se 2. El margen de porcentaje que queda sobre las ventas después que la empre ha pagado sus existencias es de: ____a). Menos 10% ____b). Alrededor del 10% ____c). Alrededor del 20% ____d). Alrededor del 30% ____e). Alrededor del 40% ____f). 50% o mas
NIVEL DE UTILIDAD OPERATIVO Es la utilidad después de ventas, menos costo de ventas y gastos de operación (Diccionario de Administración y Finanzas, 2000)	RAZON DEL MARGEN OPERATIVO	ORDINAL	1. Considero que el margen operativo actual de mi empresa es muy bueno. ____ a. Totalmente de acuerdo ____ b. De acuerdo ____ c. Desacuerdo ____ d. Totalmente desacuerdo ____ e. No se 2. El margen operativo que queda sobre las cuentas después que las empresas ha pagado sus existencias y sus gastos de venta y administración, es de: ____a). Menos 10% ____b). Alrededor del 10% ____c). Alrededor del 20% ____d). Alrededor del 30% ____e). Alrededor del 40% ____f). 50% o mas

Fuente: investigación propia en base al modelo propuesto

Figura No. 6: Operacionalización de la Variable Rentabilidad

DIMENSION	INDICADOR	ESCALA	REACTIVO
NIVEL DE UTILIDAD NETA Definición Utilidad Neta: Es la utilidad después de los costos y gastos, intereses y después de impuesto. (Diccionario de Administración y Finanzas 2000).	RAZON DE MARGEN NETO	ORDINAL	1. Considero que el margen neto de mi empresa es muy satisfactorio. ____ a. Totalmente de acuerdo ____ b. De acuerdo ____ c. Desacuerdo ____ d. Totalmente desacuerdo ____ e. No se 2. El margen neto que queda de deducir todo los gastos incluyendo intereses e impuestos. Es: ____a). Menos 10% ____b). Alrededor del 10% ____c). Alrededor del 20% ____d). Alrededor del 30% ____e). Alrededor del 40% ____f). 50% o mas
NIVEL DE UTILIDADES Definición utilidad repartida por acción: son las utilidades disponibles para los accionistas comunes entre el numero de acciones de capital común en circulación (Block, Hirt, 2008).	UTILIDAD POR ACCION	ORDINAL	1. Considero que las utilidades por acción que entrego a mis socios son satisfactorios. ____ a. Totalmente de acuerdo ____ b. De acuerdo ____ c. Desacuerdo ____ d. Totalmente desacuerdo ____ e. No se 2. La cantidad en pesos percibidos por cada acción de mis socios es ____a). Menos $ 1.00 peso de utilidad por acción ____b). Alrededor del $ 10 pesos de utilidad por acción ____c). Alrededor del $ 20 pesos de utilidad por acción ____d). Alrededor del $ 30 pesos de utilidad por acción ____e). Alrededor de $ 40 pesos de utilidad por acción ____f). $ 50 pesos o mas de utilidad por acción

Fuente: investigación propia en base al modelo propuesto

Figura No. 6: Operacionalización de la Variable Financiamiento

VARIABLE DE FINANCIAMIENTO*:*			
DEFINICION: COMO AQUELLAS DEUDAS ORIGINALMENTE PROGRAMADAS A CORTO Y LARGO PLAZO QUE PUEDE OBTENERSE DE DIFERENTES FONDOS (WESTON, COPELAND 1990).			
DEFINICION OPERATIVA: COMO LA OBTENCIÓN DE FONDOS DE CAPITAL, O A PRÉSTAMO DONDE CONSTITUYE LA CAPACIDAD DE PAGO DEL DEUDOR.			
DIMENSION	INDICADOR	ESCALA	REACTIVO
NIVEL DEL BURO DE CREDITO Definición buró de crédito: Son componentes fundamentales al cumplimiento de las obligaciones de las personas que colectan de entidades financieras y otras empresas, es comúnmente utilizada por los oferentes de crédito al evaluar las solicitudes de crédito a sus clientes (Sistema financiero mexicano, 2009)	CLASIFICACI ON DEL BURO DE CREDITO	ORDINAL	1. Actualmente mi empresa se encuentra en el buro de crédito _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____ e. No se 2. Actualmente el comportamiento de la cuentas de la empresa en el buro de crédito es: _____ a. Cuenta al corriente _____ b. Atraso de 1 a 89 días _____ c. Atraso mayor de 90 días _____ d. Deuda sin recuperar _____ e. No se
NIVEL ENDEUDAMIENTO Definición endeudamiento: La dimensión del Nivel de Endeudamiento: Cantidad máxima de dinero que una empresa puede pedir prestada a instituciones financieras. (Diccionario de administración y Finanzas, 2000)	RAZON PASIVO CAPITAL	ORDINAL	1. Considero que mi empresa tiene mas fondos a largo plazo que suministra los acreedores que los que aportan los socios : _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____ e. No se 2. Actualmente mi empresa cuenta con prestamos de plazo a _____a). menor de 1 año _____b). mayor de 1 año pero menor 3 años _____c). mayor de 3 años pero menor 9 años _____d). mayor de 9 años pero mas 10 años

Fuente: investigación propia en base al modelo propuesto

Figura No. 7: Operacionalización de la variable financiamiento

DIMENSION	INDICADOR	ESCALA	REACTIVO
NIVEL DE INTERES CUBIERTO Definición La dimensión del Nivel de interés cubierto: Mide la capacidad de la empresa para efectuar pago de interés contractuales (Gitman, 1998	RAZON NO. DE VECES QUE CUBRE EL INTERES	ORDINAL	1. Considero que mi empresa ha cubierto su pago de intereses contratados _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____ e. No se 2. El numero de veces que mis utilidades pueden cubrir los intereses es de _____a). menor de 1 vez _____b). mayor de 1 vez pero menor 3 veces _____c). mayor de 3 años pero menor 9 veces _____d). mayor de 9 veces pero mas 10 veces _____e). No se
NIVEL DE RECURSOS OBTENIDOS	RECURSOS OBTENIDOS	ORDINAL	1. Considero que actualmente estoy siendo apoyada por el gobierno para la obtención de recursos para mi empresa _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____ e. No se 2. Considero que los tramites para obtención de recursos pero mi empresa son muy complejos _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____ e. No se

Fuente: investigación propia en base al modelo propuesto

Figura No. 8: Operacionalización de la Variable Inversión

DIMENSION	INDICADOR	ESCALA	REACTIVO
VARIABLE DE INVERSION DEFINICION: COMO EL DESEMBOLSO DE RECURSOS FINANCIEROS PARA ADQUIRIR BIENES CONCRETOS O DURABLES O INSTRUMENTOS DE PRODUCCIÓN DENOMINADOS BIENES DE EQUIPO Y QUE LA EMPRESA UTILIZARA. (PEUMANS 1967).			
NIVEL DE ACTIVO FIJO Definición Nivel de Activo Fijo Es el ciclo largo destinado a la actividad productiva mas que a la reventa, incluye la planta, el equipo y el activo intangible (Diccionario de administración y Finanzas, 2000)	RAZON ACTIVO FIJO	ORDINAL	1. Considero que la inversión mas que grande que mantiene mi empresa es en activos fijos _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____ e. No se 2. Entre el 2005 y 2009 mi empresa ha invertido en: Especifique el tipo de inversión ha comprado actualmente para Barcos: _____ a. Sistemas _____ c. Maquinaria _____ d. Herramientas _____ e. Otro Especificar_____ 1) Empresa: _____ a. Sistemas _____ c. Maquinaria _____ d. Equipo y Mobiliario de Oficina _____ e. Otro Especificar
NIVEL DE ACTIVO TOTAL Definición. Nivel de Activo Total es el total de los activos circulantes y los activos fijos (Diccionario de administración y Finanzas, 2000)	RAZON ACTIVO TOTAL	ORDINAL	1. Considero que los activos circulantes y fijo que conforman el activo total de mi empresa han sido cambiado mas de 1 vez al año _____ a. Totalmente de acuerdo b. De acuerdo _____ c. Desacuerdo d. Totalmente desacuerdo _____ e. No se 2. Considero que la eficiencia con la que puede emplear mis activos para generar ventas ha sido buena _____ a. Totalmente de acuerdo _____ b. De acuerdo

Fuente: investigación propia en base al modelo propuesto

Figura No. 9: Operacionalización de la Variable Inversión

DIMENSION	INDICADOR	ESCALA	REACTIVO
NIVEL DE TECNOLOGIA Definición Nivel Tecnología como la ciencia industrial, especialmente cuando se refiere a la sustitución del trabajo por un equipo avanzado (Diccionario de administración y Finanzas, 2000)	EFICIENCIA DE LA TECNOLOGIA		1. Considero que la tecnología con la que actualmente cuenta mi empresa es una ventaja sobre las demás empresa del mismo ramo : _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____ e. No se 2. La tecnología con la que cuenta mi empresa ha incrementado mis ventas en un porcentaje _____ a. Menos del 10% _____ b. Alrededor del 10% _____ c. Alrededor del 20% _____ d. Alrededor del 30% _____ e. Alrededor del 40% _____ f.50% o mas
NIVEL DE INVERSION Definición La inversión consiste en la aplicación de los recursos financieros a la creación, renovación, ampliación o mejora de la capacidad operativa de la empresa. (Diccionario de administración y Finanzas, 2000)	TASA INTERNA DE RENDIMIENTO	ORDINAL	1. Considero en mi empresa para evaluar mi gastos de capital la determinación de la tasa interna de rendimiento _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____ e. No se 2. Analizo varias alternativas de proyectos de inversión para la toma de decisión de aceptación-rechazo _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____ e. No se

Fuente: investigación propia en base al modelo propuesto

Figura No. 10: Operacionalización de la Variable Toma de Decisiones

VARIABLE DE TOMA DE DECISIONES			
DEFINICION: SE DEFINE COMO LAS COMBINACIONES DE SITUACIONES Y CONDUCTAS QUE PUEDEN SER DESCRITAS EN TÉRMINOS DE TRES COMPONENTES ESENCIALES: ALTERNATIVAS, CONSECUENCIAS Y SUCESOS INCIERTOS. (ZURILLA 2000).			
DIMENSION	INDICADOR	ESCALA	REACTIVO
NIVEL DE MOTIVACION Definición de Nivel de motivación: Estimulo que activa ciertas respuestas en una persona (Diccionario de administración y Finanzas, 2000)	DARSE DE BAJA	ORDINAL	1. Considera que mi motivación principal para continuar conservando mi empresa es _____ a. Realización personal _____ b. Incrementar ingreso _____ c. Obtener utilidades _____ d. Otro _____ e. Especifique_____ 2. Considero que mi empresa no puede sostenerse por si misma de manera indefinido _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____ e. No se
NIVEL DE CRECIMIENTO Definición de crecimiento: Expansión de las actividades de una empresa a través de la adquisición de los activos de sus proveedores, clientes o competidores (Diccionario de administración y Finanzas, 2000).	EMPRESA PEQUEÑA	ORDINAL	1. Considero que mi empresa no ha crecido en los últimos años _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____ e. No se 2. El numero de empleados con los cuenta mi empresa es _____ a). Menos de 5 empleados _____ b). Alrededor de 10 empleados _____ c). Alrededor de 20 empleados _____ d). Alrededor de 30 empleados _____ e). Alrededor de 40 empleados _____ f). 50 empleados o mas

Fuente: investigación propia en base al modelo propuesto

Figura No. 11: Operacionalización de la variable toma de decisiones

DIMENSION	INDICADOR	ESCALA	REACTIVO
NIVEL DE CRECIMIENTO Definición de crecimiento: Expansión de las actividades de una empresa a través de la adquisición de los activos de sus proveedores, clientes o competidores (Diccionario de administración y Finanzas, 2000).	PROBLEMÁTICA PRINCIPAL	ORDINAL	1. Enumere por orden de importancia del 1 al 6 los siguientes problemas para su empresa, en siendo 1 = poco problema 6= mucho problema _____ a. Falta de de clientes _____ b. Falta de tecnología para producir _____ c. Falta de crédito _____ d. Capacitación del personal _____ e. Problemas regulatorios _____ f. Competencia 2. Considero que mi empresa ha pagado sus impuestos a tiempo _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____ e. No se
NIVEL ACEPTACION ASESORIAS Definición de aceptación de asesorías de empresas: Servicio a cambio de una retribución, llevado a cabo por profesionales independientes e imparciales, con el objeto de ayudar al empresario en el análisis de los problemas de dirección, asesórale y en su caso, ayudarle en la puesta en practica de las decisiones adoptadas. (Diccionario de administración y Finanzas, 2000).	NIVEL DE DESCONFIANZA	ORDINAL	1. Considero que tengo plena confianza en los asesores financieros que nos ofrecen obtener recursos públicos y privados. _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____ e. No se 2. El nivel de asesoría de los asesores externos ha sido el adecuado y con responsabilidad _____ a. Totalmente de acuerdo _____ b. De acuerdo _____ c. Desacuerdo _____ d. Totalmente desacuerdo _____ e. No se

Fuente: investigación propia en base al modelo propuesto

CONCLUSIONES

Esta investigación esta en etapa de aplicación del instrumento de medición y el instrumento ha sido entregado para su llenado y devolución a los empresarios que participan en la muestra de este estudio. Se pretende realizar pruebas estadísticas y correlaciones para la validación del modelo propuesto inicialmente y con esto, poder identificar las variables que inciden en la eficiencia de la gestión financiera para que los empresarios mejoren los factores que inhiben su crecimiento y su permanencia en este sector.

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COMERCIALIZACION DE PRODUCTOS DE CENTROS DE INVESTIGACION

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RESUMEN

La importancia que en la actualidad tiene el satisfacer las necesidades de los mercados de bienes y servicios ha llevado a centros y laboratorios de investigación a comercializar los productos y servicios que en ellos se desarrollan, sin embargo, no se ha logrado llevar al mercado muchos de estos desarrollos por diferentes causas, lo que ha llevado a perder la oportunidad de que consumidores en distintas partes no solo del estado sino del país e incluso de otras partes del mundo puedan aprovecharlos para satisfacer necesidades de los consumidores. Algunas de las razones detectadas en el presente estudio tienen que ver con la actitud emprendedora para los negocios por parte de quienes llevan a cabo esas investigaciones, la falta de inversión para los proyectos, así como otros factores que son importantes y que podrían ser contrarrestados si se desarrollaran modelos de comercialización que faciliten la inversión y la administración de dichos proyectos.

INTRODUCCIÓN

Cuando se habla acerca del sistema de innovación con que cuenta un país, se refiere en términos generales a los elementos o factores que van a permitir que una idea pueda transformarse en productos o servicios que serán los satisfactores en una sociedad; es importante mencionar que desde la historia que nos marca le creación de la máquina de vapor, así como otras máquinas desarrolladas e impulsadas por otros tipos de energía como la humana, eléctrica, química o nuclear, todas ellas han sido producto de la investigación del hombre y que han culminado en satisfactores al igual que lo han sido los desarrollos en la electrónica, las comunicaciones y la medicina, sin olvidar que la gran alianza hecha entre la ciencia y tecnología ha llevado además al hombre a seguir en la búsqueda constante, aún y cuando no cuestione a la sociedad lo que esta desea, sin embargo es un hecho que lo que ha sido desarrollado por este sea demandado una vez que ha sido identificada la necesidad por los futuros consumidores, llevando esto a seguir constantemente con la investigación dentro de laboratorio y buscando nuevas formas de transformar los recursos disponibles en productos que podrían ser comercializados para la satisfacción de esas necesidades.

Muchos de los proyectos que se desarrollan en los laboratorios tecnológicos y de investigación en el estado de Guanajuato no se pueden llevar al mercado para poder satisfacer necesidades específicas de consumidores; es por esto que se plantea la necesidad de desarrollar un Modelo de Comercialización como una herramienta que facilite los procesos necesarios para que los productos lleguen al mercado que los demanda. El contexto de la investigación está delimitado a los laboratorios tecnológicos y de investigación de Guanajuato, la muestra inicial para llevar a cabo el estudio fue con investigadores que han estado involucrados de alguna forma en la Incubadora de Empresas de la Universidad de Guanajuato, así como de algunos de los que trabajan en los principales laboratorios tecnológicos y de investigación del estado.

REVISION LITERARIA

Una estrategia de nuevos productos liga el proceso de desarrollo de nuevos productos con los objetivos del departamento de marketing, de la unidad de negocios y de la empresa. La estrategia de nuevos productos debe ser compatible con dichos objetivos y, a la vez, éstos deberán ser coherentes entre ellos.

La estrategia de nuevos productos es parte de la estrategia global de marketing de la compañía. Esto afina el enfoque y brinda directrices generales para la generación, filtrado y evaluación de las ideas sobre nuevos productos. La estrategia de nuevos productos especifica las funciones que éstos jugarán en el plan global de la empresa; igualmente, describe las características de los productos que la organización quiere ofrecer y los mercados a los que desea servir.

Las ideas de nuevos productos que sobreviven al filtrado inicial pasan a la etapa de análisis de negocios, donde se calculan cifras preliminares de demanda, costos, ventas y rentabilidad. Por primera vez se estiman y comparan costos e ingresos. De acuerdo con la naturaleza del producto y la compañía, este proceso puede ser simple o complejo.

La existencia de los laboratorios tecnológicos y su importancia dentro del sistema educativo superior en muchos países ha sido reconocida, sin embargo en nuestro medio poco se sabe acerca de estos laboratorios tecnológicos. Para entrar en materia, podríamos describir *¿Qué es un laboratorio tecnológico?* laboratorios tecnológicos son centros que integran las mejores tecnologías disponibles a las profesiones y disciplinas que las universidades mismas prestan o los centros de investigación. Pero más que laboratorios que ofrecen esa tecnología de punta en esas disciplinas, son centros que desarrollan conocimiento, que empiezan por incentivar en el estudiante y en el docente curiosidad en las diferentes disciplinas para poder investigar más a fondo, teniendo como consecuencia inmediata la creación o el brote de nuevas soluciones, diseños a las problemáticas que hoy como humanidad tenemos y el desarrollo de productos que el mercado está demandando donde se tiene oportunidad de venta.

La función de los laboratorios tecnológicos va más allá, ya que los laboratorios tecnológicos no solo transfieren tecnología, forman tecnología de punta con equipo de punta por medio de investigación, sino sobre todo después del diseño logran construir soluciones. Lo importante para que sea un laboratorio tecnológico es que tiene que generar nuevos espacios de conocimiento aplicado y transferencia de tecnología.

RESULTADOS

Se presentan los resultados que se obtuvieron de la investigación cualitativa, en los centro de investigación tecnológica del estado de Guanajuato, considerando las ciudades de Celaya y Salamanca, que se tomaron como muestra, es necesario llevar a cabo las restantes para poder elaborar el siguiente instrumento para el enfoque cuantitativo .

- *Falta de una actitud emprendedora*. El investigador carece de la emprendeduría lo que hace más difícil la comercialización.

- *Falta de inversión*. Para los proyectos que se generan en este departamento hacen falta los fondos suficientes para poder comercializar o vender el producto. Los proyectos llegan a quedarse en papel gracias a la falta de fondos para poder ponerlos en marcha.

- *Apoyo de los empresarios.* En ocasiones los investigadores desarrollan soluciones para las satisfacer las necesidades pero los empresarios por no invertir en estos proyectos ni confiar en los mismos, deciden traer investigadores del extranjero.

- *Fallas en el plan de negocios.* Los investigadores tienen fallos a la hora de sustentarlos por escrito y tienen una vaga idea de cómo se elabora un plan de negocios, por lo tanto, no concluyen con el trabajo de investigación y lo dejan solo como un proyecto más.

- *Falta de detección de necesidades*. Los investigadores no buscan lo que el mercado necesita y desarrollan lo que les nace.

- *Asesoría externa.* Falta de contactos que tengan la experiencia en los diferentes ramos de una investigación, para que esta se lleve a la comercialización o pueda venderse.

- *No se sabe costos*. Los investigadores son expertos en su área pero a la hora de hablar de en cuanto va poder beneficiar el producto en cantidades monetarias no lo sabe.

- *Las investigaciones solo se hacen para cubrir requisitos y así poder tener una beca del gobierno*, por lo cual no se tiene un perfil del investigador que se pueda llevar a cualquier institución gubernamental, y así estandarizar los proceso de apoyo a los investigadores.

CONCLUSIONES

La comercialización de los productos desarrollados en los centros de investigación tecnológica, además de ser una fuente para obtener satisfactores de la sociedad, es sin duda un área en la cuál podrán generarse grandes inversiones por aquellos empresarios que buscan negocios que verdaderamente les reditúen las utilidades que buscan, ya que con un modelo de comercialización bien diseñados, se puede tener la certeza de éxito en el mercado, a partir de la identificación de necesidades en los consumidores. Además, el país puede a través de estos centros de investigación buscar muevas oportunidades para la generación de fuentes de empleo en el escalamiento y producción de los productos desarrollados.

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TECNOLOGÍAS DE INFORMACIÓN Y COMUNICACIÓN (TIC´S) Y LA GESTIÓN DE DESASTRES

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RESUMEN

El objetivo de la investigación es establecer cual es la importancia que tienen las Tecnologías de Información y Comunicación (TIC´s) y la Gestión de Desastres (GD), tomando como caso concreto el sistema de abastecimiento de agua potable del Sistema Cutzamala (SC). El sistema hidráulico del Distrito Federal, es el medio por la que a través la ciudad se relaciona con el sistema hidrológico para satisfacer sus demandas de agua, defenderse de las inundaciones y disponer de las aguas residuales. El objetivo básico del Sistema Hidráulico del Distrito Federal (SHDF) es satisfacer las necesidades de la ciudad. Estas necesidades son de diferente naturaleza, si bien todas ellas están relacionadas con el manejo del agua dentro del D.F. Para ello, el SHDF dispone de diferentes obras de infraestructura con las que proporciona tres diferentes servicios: abastecimiento de agua, desalojo de aguas residuales, y control de desalojo de aguas pluviales. Toda esta infraestructura se expande casi al mismo ritmo que la ciudad a la que sirve. El modelo que aquí se presenta se basa en las TIC´s y su importancia en los desastres, para los cuales se permite analizar el tipo de información que se debe tomar en consideración para la GD y que se detalla desde la parte operativa hasta la parte estratégica de la organización, identificando cuáles son sus procesos y cómo funcionan; además, de lograr conceptualizar cuáles son las necesidades de información de los niveles operativos, tácticos y estratégicos de la organización para la toma de decisiones y, de esta manera, poderla involucrar e integrarla en su conjunto. Asimismo, se hace ver la aplicación del modelo en el caso particular del Sistema Cutzamala (SC), principal proveedor de agua potable a los alrededores del Estado de México, del Distrito Federal y del Área Metropolitana.

INTRODUCCIÓN

Planteamiento del Problema

Hay zonas de alto riesgo para la ocurrencia de desastres, en donde el hombre ha hecho caso omiso a los señalamientos dados por las autoridades responsables, debido a la falta de cultura y de información detallada sobre las consecuencias de los riesgos que pueden ocasionar dichas catástrofes; por ejemplo, es a partir del temblor ocurrido en el año de 1985 cuando las autoridades empiezan a tomar conciencia y a elaborar estrategias para poder prevenir las catástrofes. A partir de entonces se empieza a proporcionar información a la sociedad, a fin de saber qué hacer en casos de una calamidad. Sin embargo, las estrategias elaboradas por las autoridades, en cuestión de la GD, no han cumplido con los requerimientos necesarios y adecuados para actuar en su totalidad.

REVISIÓN LITERARIA

El término GD, es relativamente nuevo, por lo que la elaboración de planes y programas de prevención no han sido suficientes para prevenir y mitigar las calamidades cuando ocurren. Por ello se hace necesario que la GD tenga como base un modelo de toma de decisiones que permita a las autoridades competentes y a la sociedad en

general intervenir y saber cuál es la responsabilidad de cada uno con la información necesaria para evaluar y dar apoyo antes, durante y después de su ocurrencia. En este marco de referencia de los sistemas, se encuentran los términos de *Teoría General de Sistemas (TGS)* y *Enfoque de Sistemas (ES),* que son la base del inicio del movimiento sistémico, en la década de los cuarenta, con Ludwig Von Bertalanffy -biólogo alemán- con la cual ofrece una nueva forma de apreciar el universo. Esta teoría se basa en las doctrinas del expansionismo y del pensamiento sintético: Doctrina del expansionismo: Esta doctrina afirma que todos los objetos, sucesos y experiencias son parte de enteros más grandes. Pensamiento sintético: Es el procedimiento por medio del cual se conjuntan las cosas en vez de dividirlas. En donde la TGS estudia al todo de manera global, en tanto el ES realiza el estudio de las partes sin perder de vista al todo integrado. Con ambos términos se fundamenta la base teórica para la construcción de los *Sistemas de Soporte Informáticos (SSI),* que son parte de las tecnologías de Información (TIC´s). Las TIC's son herramientas tecnológicas basadas en los conceptos de la TGS y del ES que permiten una visualización de las necesidades de información en las organizaciones, presentando las debilidades y fortalezas de los procesos administrativos de información, tanto internas como externas y su relación con el suprasistema y su medio ambiente.

Para poder darle un sustento teórico a la importancia de las TIC´s en situaciones normales y de emergencia, y basados en la TGS y el ES, que tienen sus fundamentos en los principios del conocimiento y basado en varios autores entre ellos Ludwig Von Bertalanffy, que han contribuido al conocimiento de la teoría de la administración mediante dos reflexiones metodológicas: la teoría del conocimiento y el proceso cognoscitivo, en donde la primera se enfoca a describir las escuelas idealistas, que sostienen a la intuición como la fuente del conocimiento, entendida como una "visión intelectual" de los objetos. Por otro lado, el proceso cognoscitivo se presenta como dentro del proceso del conocimiento, manifestándose por una serie de etapas como la observación, la construcción y la modelación, dando como resultado la organización del proceso integral de la visualización del conocimiento organizado. De acuerdo con Gelman y García (1989), el proceso cognoscitivo está dentro del proceso del conocimiento, el cual se manifiesta por una serie de etapas: observación, construcción y modelación (ver figura 3), dando éstas como resultado la organización del proceso integral de la visualización del conocimiento organizado. Existen muchas formas de adquirir el conocimiento de las cosas y así tener mayores oportunidades para el desarrollo de las tareas con mayor eficiencia y menor esfuerzo; asimismo, para dar una explicación de las cosas de manera natural.

Figura nro. 3.- Fases del Proceso de Conocimiento

FE =Formas epistemologicas
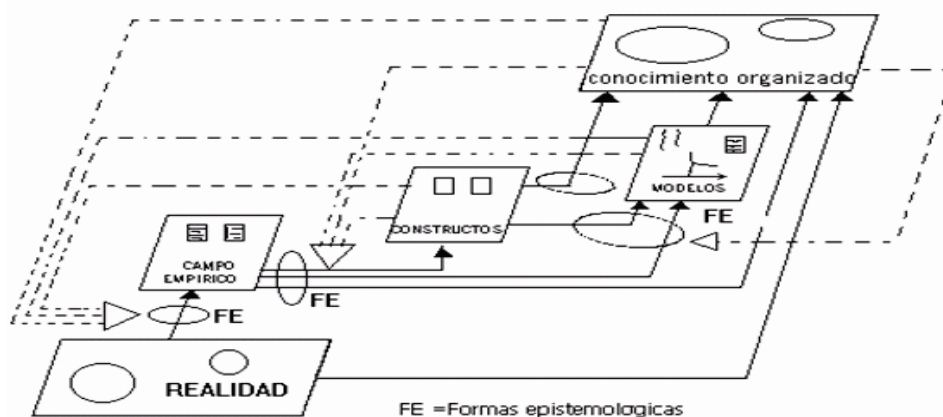
El proceso de conocimiento de las cosas puede explicarse por medio de dos caminos: el primero, por la experiencia práctica que genera un conocimiento empírico, de manera espontánea, por las acciones que se realizan diariamente, conforme al medio ambiente que rodea al individuo; y el segundo, de acuerdo con el conjunto de conocimientos teóricos adquiridos a través de la diversidad de los textos que presentan un conjunto de conocimientos cuasi teóricos, abordando el problema de la explicación de fenómenos (Gelman

y García ,1989),. A partir de ahí se desprende una de las características más importantes de la ciencia, consistente en su capacidad de conocer, explicar y controlar la realidad. También se destacan dos papeles principales del constructo en el proceso cognoscitivo: *Papel epistemológico,* busca la obtención de conocimiento crucial para las formas epistemológicas, transformando las viejas o produciendo las nuevas. *Papel morfológico,* busca dar un estatus especial al constructo, declarando que cierta estructura de las relaciones formales de los constructos corresponde a la estructura de la cosa, o aún más, que el constructo existe en la realidad (Gelman y García, 1989). Las fases del proceso del conocimiento, según Gelman y García (Gelman y García (1989), en el proceso epistemológico de producción del conocimiento se identifica a las formas epistemológicas, como medio de observación de ciertas partes de interés del mundo real, y elaborar constructos, como sus representantes. El resultado del proceso de conocimiento se explica por medio de las fases de observación, construcción y modelación, en donde se explican las diferentes formas de adquisición del conocimiento y de su proceso de estructuración (ver figura 3): En la fase de observación, se plantea la necesidad del análisis de producción del conocimiento, de la realidad y de su existencia. En el momento que el observador entra en contacto con la realidad, empieza a conceptualizar los elementos que integran a la cosa; la forma de cómo interviene la realidad en la imagen se va estructurando de manera tal que el conocimiento se va generando con la experiencia que se inicia. La fase de construcción parte de las imágenes obtenidas de la fase de observación; en esta fase las imágenes se convierten en diseños organizados, estructurados e integrados por el analista o indagador, que las conceptualiza y les da forma para lograr una sola imagen que permita dar solución al problema planteado, y de esta manera ir adquiriendo el conocimiento que se va integrando al proceso de aprendizaje. La fase de modelación busca construir el (los) modelo(s) a través de las fases anteriores descritas; el proceso cognoscitivo busca conseguir información sobre la cosa, describirla y explicar su comportamiento, así como pronosticar acontecimientos futuros y, finalmente, controlarla. Sin embargo, la consecución de estos objetivos a través de las fases de observación y construcción, encuentra ciertas dificultades, debido a la compleja naturaleza de algunas cosas que obstaculizan frecuentemente la observación y experimentación directa con la cosa.

METODOLOGÍA

La metodología de esta investigación se fundamenta en realizar un estudio detallado de los procesos administrativos en todos los niveles de la organización. Partiendo del nivel operativo para llegar al nivel estratégico con información totalmente estructurada, determinando y conceptualizando las necesidades de información; esto le permitirá a la organización poder integrar los factores internos y externos que intervienen y generan incertidumbre en el proceso de gestión. En este caso, específicamente, son para el apoyo del GD, con la finalidad de estimar y mejorar la *confiabilidad* de la *organización ante* la *ocurrencia* de *calamidades;* no obstante cabe mencionar que su funcionamiento depende de la intensidad de los diversos fenómenos destructivos, así como de la importancia y vulnerabilidad del sinnúmero de elementos que la conforman. Se elaboró con base en los diferentes tipos de investigación presentados por los diversos autores, necesarios para delimitar y entender la investigación que se lleva a cabo, es un estudio observacional; en este estudio el observador sólo describe el fenómeno estudiado. La observación realizada es participativa, debido a que interactúa con los fenómenos observados. Es una técnica de medición no obstrusivas, en el sentido que el instrumento no estimula el comportamiento de los sujetos, por lo que aceptan material no estructurado y puede trabajar con grandes volúmenes de datos (material). Para el caso del SC, se observaron físicamente los tramos y documentos que presento el Comisión Nacional del Agua (CNA), para la elaboración de la investigación. Estudio retrospectivo parcial; el estudio cuenta con una parte de información; el resto se obtuvo con la investigación de campo. Con la información proporcionada por la CNA y el SC sobre el funcionamiento del mismo, en donde los documentos proporcionados planteaban la necesidad de tener herramientas basadas en las TIC´s, es tal el caso del SSI para el proceso de toma de decisiones, para mejorar la confiabilidad del SC. Estudio de investigación de campo; analiza un determinado límite para conocer su estructura y relaciones sociales. Se realizaron varias visitas de campo en donde se recorrieron partes de los tramos y las presas que integran al SC, se identificaron algunos problemas

tales como la fuga de agua en los tramos debido a la ruptura por parte de los campesinos, que derraman el agua para ser utilizada en los cultivos; asimismo, se determinaron cuales serian las mejoras para su confiabilidad. La ventaja principal de esta investigación consiste en que los resultados se pueden generalizar a una población, y se manifiesta en la confiabilidad del SC. Estudio transversal; estudio en el cual se miden una sola vez las características de uno o más grupo de unidades en un momento dado. Su propósito es describir el comportamiento del SC, identificar los fenómenos y eventos de desastres en el proceso de confiabilidad en la entrega del agua potable al Valle de México; analizar el papel que juegan las autoridades, como interactuar y que función desempeñan en caso de desastres. Estudio descriptivo, que solo cuenta con una población la cual se pretende describir en función de variables. No obstante, la metodología aplicada a la GD tiene muchas dificultades para llevarse a cabo eficazmente; una de las causas primordiales es la escasa literatura especializada para la exposición de los métodos de planteamiento de problemas de la GD y, en particular, de lo que se refiere a la conceptualización de sistemas dentro del área de desastres.

RESULTADOS

En esta investigación se presenta un modelo conceptual basado en flujos de información de acción recíproca, para integrar los recursos materiales, potencial humano, recursos financieros, máquinas, instalaciones, entre otros, con los que cuenta la organización, a fin de presentar y lograr la Gestión de Desastres (GD), construido alrededor de los lazos de información requerido, además, para el manejo de los flujos de información que le permitan resolver dichos problemas. De acuerdo a lo anterior, el compromiso de proporcionar agua potable se dificulta debido, entre otras causas, a la escasez de fuentes superficiales de abastecimiento, con la consecuente sobreexplotación de los mantos acuíferos subterráneos, y al desenfrenado y desordenado crecimiento de la mancha urbana, lo que propicia la disminución de las zonas naturales de recarga del acuífero, así como a la paulatina degradación en la calidad del agua, como consecuencia de la creación de gran número de industrias y fraccionamientos. Como propuesta de solución, la Comisión de Aguas del Valle de México planteó la construcción del SC, para complementar el abastecimiento del Área Metropolitana.

De acuerdo a las necesidades del SC, se procedió a identificar y a realizar el análisis y la conceptualizar del papel de las TIC´s en situaciones normales y de emergencia, que se basa en las necesidades de información en la Comisión de Aguas del Valle de México, para la toma de decisiones en dichas situaciones y que se apegue a los objetivos, metas, políticas, normas, misión y visión de la organización. Por lo que era necesario plantear un modelo de toma de decisiones idóneo, que le permita al tomador de decisiones resolver los problemas que se presenten durante las situaciones normales y durante las de emergencia, en caso de desastres; este modelo incluye el impacto de los cambios tecnológicos y las situaciones que se presentan en el entorno administrativo (financieros, de personal, equipos de trabajo, equipos de cómputo, entre otros), que apoyen al proceso de gestión y al tomador de decisiones. Los beneficios que aportarían las TIC´s como herramientas y con su estructura del SSI en el apoyo del GD son: reducir los altos riesgos de desastres en cualquier ocurrencia de fenómenos naturales y los provocados por el hombre, tales como el arrojo de materiales contaminantes a los canales de distribución del agua potable, que registran los rondines que resguardan las zonas descubiertas de los canales de distribución; éstos proporcionarán un beneficio al área administrativa desde el punto de vista del
manejo integral de desastres.

El estudio se enfocará desde los siguientes cuatro puntos de vista: Planeación, Capacitación, Procedimientos y Control y Supervisión. Aspectos de las Aportaciones, en este aspecto básicamente se realizaron dos aportaciones importantes: La adecuación de la estructuración y formulación de planes y programas que apoyan al proceso de gestión y de toma de decisiones en el área de desastres, a fin de plantear las acciones, desde el punto de vista administrativo, que deben tomarse en cuenta en el SSI, en caso de situaciones normales y de emergencias; quiénes son los responsables administrativos de llevar a cabo cada una de las actividades; y cómo deben de realizarse de acuerdo con el tipo de situación que se

presente en ese momento. La conceptualización de la metodología de diseño basada en el enfoque sistémico, que proporciona los lineamientos para el desarrollo de la herramienta SSI. Ésta apoya al proceso de toma de decisiones y cumple con los requisitos de almacenamiento de los planes y programas establecidos, permitiendo de esta manera, que la herramienta proporcione la información de manera oportuna al tomador de decisiones, y que éste lleve a cabo las acciones correspondientes de acuerdo con la situación presentada. Aportaciones prácticas, gracias al diseño conceptual que se realizó en este trabajo fue posible sustentar la parte de desarrollo del SSI, que se implementó como un programa de cómputo completo de apoyo a todas las actividades del GD; asimismo, el desarrollo de la metodología de diseño, apoyada con el enfoque de sistemas, ayudó a determinar cómo se integrarían los módulos del SSI, las relaciones entre las bases de datos, los detalles de las mismas y el establecimiento físico entre sus relaciones. Por último, el caso práctico, en el cual se realizó una simulación teórica para determinar y visualizar la eficiencia del SSI en el apoyo del GD, donde los resultados proporcionados establecen que la herramienta cumple con las necesidades de información del tomador de decisiones, dependiendo de la situación normal o de emergencia que se presente, según sea el caso.

CONCLUSIONES

Por último, puede concluirse que se hace necesario e indispensable que la organización cuente con el proceso de gestión de desastres y lo lleve a cabo durante la planeación, el control y la toma de decisiones, a fin de apoyar al tomador de decisiones en situaciones normales y de emergencias. Por ello es preciso seleccionar herramientas como los SSI, que proporcionen la información adecuada para la toma de decisiones y apoyen con rapidez al tomador de decisiones; para lograrlo se requiere: identificar los fenómenos destructivos a los que toda organización está propensa y, en especial el Sistema Cutzamala; además de determinar las medidas adecuadas de protección, con la adecuada planeación. Definir los niveles de responsabilidad de los tomadores de decisiones y de la coordinación entre ellos en torno al control, tanto de la planeación como de la implantación de los resultados. Permitir el desarrollo de los elementos normativos y operativos necesarios para el funcionamiento de la organización y su órgano de coordinación, así como la definición de su personal, las necesidades de capacitación y la logística, indispensables para el aseguramiento de la comunicación. Con la metodología del enfoque sistémico se prevé la necesidad de realizar las siguientes actividades básicas: Estimar cuantitativamente los diversos riesgos por la interrupción del agua potable en el Cutzamala. Determinar las medidas necesarias para la prevención y mitigación de desastres y la integración del Programa de Reducción de Riesgos y Rehabilitación.

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PRINCIPALES DETONADORES DE LA COMPRA EN AMAS DE CASA DE CLASE MEDIA EN TIENDAS DE AUTOSERVICIO, COMO INSUMO PARA LA ESTRATEGIA COMERCIAL

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RESUMEN

El anaquel es un espacio de encuentro entre el consumidor y la propuesta del empresario mediante el conjunto de esfuerzos que realiza para incrementar la probabilidad de vender, en él se pone de manifiesto la labor de merchandising visual en cuanto al arreglo que se hace para agradar al cliente; acomodo, iluminación, surtido de productos y presentaciones, esfuerzos de mercadotecnia tales como la labor de venta, la publicidad, la promoción, por mencionar algunos Treviño (2000); pero sobre todo la creatividad del empresario por mantener el interés del cliente y que este interés culmine en el acto de la compra, o incluso un poco más allá, que la marca se posicione en la mente del cliente como la marca que lo satisface plenamente y desde luego se de el efecto de la recompra Cohen (2006). Por su parte el cliente se ve premiado con la posibilidad de tomar la mejor decisión y ejercer su poder de compra, pone de manifiesto la carga de información que ha acumulado por diferentes fuentes, para poder discriminar entre los productos ofertados que, le permitirán hacer la evaluación de las alternativas, para finalmente comprar el que mejor convenga a sus intereses Schmitt (1998). En este encuentro se ponen de manifiesto elementos por demás interesantes como lo son la habilidad del empresario para descubrir la necesidad del cliente y la forma como el producto logrará satisfacer esa necesidad para poder argumentar de forma más eficiente y lograr el cierre de la venta.

PALABRAS CLAVE: comportamiento del consumidor, motivadores para la compra, punto de venta, labor de venta, comportamiento en anaquel.

INTRODUCCIÓN

Son muchos los esfuerzos que realiza el empresario en su objetivo por atraer al cliente, realmente desde que el hombre existe y ha logrado producir productos más allá de la satisfacción propia, el excedente lo regala, lo cambia o lo vende. Cuando esto lo hace de manera sistematizada aparece el fenómeno de la venta y con él los esfuerzos por persuadir al cliente para que compre el producto. Cuando además aparece la competencia surgen en automático factores para procurar la venta de una manera más consistente y con ellos un conjunto de esfuerzos encaminados a sostener las ventas y a competir. Como todos hemos experimentado, la evolución del "anaquel" ha sido paulatino al principio y vertiginoso en los últimos años dado que pasó de la simple exposición de la mercancía en aparadores y demás instrumentos (góndolas, racks, vitrinas, etc). Hasta la sofisticación total de los anaqueles de Saks Fifth Avenue, Macy´s, Bloomingdale´s en New York, El palacio de Hierro y Liverpool en México. La mayoría de los autores hablan sobre el comportamiento del consumidor en lo general, por ejemplo Kotler (2004), manifiestos que "El punto de partida para comprender al comprador es el modelo de estímulo-respuesta, los estímulos ambientales y mercadotécnicos entran en la conciencia del comprador; las características del comprador y el proceso de decisión conducen a cierta decisiones de compra la función del mercadólogo consiste en comprender qué sucede en la conciencia del comprador entre la acción del estímulo externo y las decisiones de compra del mismo a partir de estas dos preguntas:

¿De qué naturaleza son las características del comprador, culturales, sociales y psicológicas que influyen en la conducta de compra ¿Cuáles serán los principales elementos, que apoyan a la persona para decidir la compra?

Los empresarios realizan esfuerzos importantes para atraer a sus clientes, ponen en juego un conjunto de herramientas para lograrlo, tales como la fuerza de ventas, el merchandising, la investigación de los mercados, la publicidad, la promoción, las relaciones públicas, las acciones del endomarketing y demás posibles acciones con el fin de satisfacer plenamente al consumidor y con ello intentar cautivarlo para que probablemente se convierta en un elemento más del factor de recompra.

Por su parte los clientes acuden a los establecimientos a intentar satisfacer sus necesidades con las diferentes ofertas de productos. Para decidir la compra toman en cuenta posiblemente factores del punto de venta tales como el precio del producto, la marca, la variedad, la presentación o factores personales como la costumbre, la tradición familiar, el arraigo, etc., o factores del marketing por ejemplo la labor de venta, el merchandising, la publicidad, las acciones de la promoción por mencionar algunos Cohen (2008).

La presente investigación pretende encontrar la posible jerarquía de los principales factores que posiblemente detonen la decisión de comprar en el mercado formado por la amas de casa de nivel medio, cuando acuden a tiendas de autoservicio.

PLANTEAMIENTO DEL PROBLEMA

El problema a investigar estriba en caracterizar y analizar los factores de recompra positivos por parte del mercado formado por las amas de casa de nivel socioeconómico medio, mediante acciones realizadas por los empresarios a partir del conocimiento de los principales elementos de decisión que impulsan la compra en este sector de mercado específico, como insumo para la estrategia comercial.

Es decir que una vez conocidos los principales elementos que influencian mayormente la decisión de compra por parte del sujeto de estudio tipificado como amas de casa de nivel socioeconómico medio, en establecimientos de autoservicio, los empresarios podrán establecer estrategias optimizantes y optar por concentrar los esfuerzos en fomentar esos elementos de decisión, minimizando con ello la inversión para el incremento del factor de recompra, y canalizar esfuerzos de una manera más racional. Muchos empresarios se quejan de la gran inversión que representan por ejemplo los proyectos publicitarios que, por mínimos que sean representan siempre una gran erogación (Treviño, 2007). Si el empresario pudiera saber que, por ejemplo, el merchandising, fuese un elemento que puede promover más la compra al mercado considerado (Carrano y Hernández, 2004), tal vez se podría optimizar la inversión, y apreciar mejores resultados con menos inversión. Pero en la realidad no ocurre así, el empresario realiza los esfuerzos que le marca la tendencia en marketing, es decir un presupuesto dosificado en publicidad, promoción, distribución, fuerza de ventas, merchandising, relaciones públicas y tal vez en investigación de mercados. Pero es difícil para el empresario asegurar cuál de estos elementos contribuirán con más peso en el momento de la decisión de compra del cliente. Aun mas es difícil saber qué elementos incorporados a los argumentos de venta y publicidad pueden agregar más al impulso de compra.

OBJETIVO CENTRAL DE LA INVESTIGACIÓN

El objetivo central de la investigación es: Determinar los principales factores y su jerarquía como detonadores de la compra en tiendas de autoservicio por la población objeto del estudio.
Objetivos particulares: Determinar la gama de factores de influencia en el comportamiento del consumidor sujeto de estudio (amas de casa de nivel medio, que compran en tiendas de autoservicio). Determinar el posible peso específico de los factores de influencia para la compra en este mercado.

Contexto De La Investigación

La investigación se realiza en la ciudad de Celaya Guanajuato en un momento de expansión comercial, sobre todo en el giro de las tiendas de autoservicio, Walmart, Soriana, Costco que vienen a competir con las propuestas añejas de Comercial Mexicana y Gigante. De igual forma la oleada de tiendas de oportunidad como Oxxo, Matador, Extra, que prácticamente han invadido la ciudad. En los últimos años se han instalado un conjunto de propuestas comerciales que han modificado el comportamiento en el consumo del mercado de interés para esta investigación, por ejemplo el advenimiento regional de las tiendas Office Depot, Office Max, Home Depot y los grandes almacenes como Sears, Liverpool, Fabricas de Francia, Sara, aunadas a las propuestas como Sanborns y El Globo, que junto con las franquicias de Mc Donals, KFC, Burguer King y las Pizas Hut, Italian Coffe y ante los efectos de una crisis gloval…Que definitivamente han modificado la costumbre en el consumo tradicional.

NATURALEZA DE LA INVESTIGACIÓN Y METODO

La investigación se propone mixta (cualitativo-cuantitativo). El estudio se propone como explicativo, dado que se pretende encontrar y explicar factores relacionados con la decisión de compra de un mercado meta específico.

En este capítulo se describe los procedimientos para realizar la recogida de la información, recordando que esta parte es muy sensible y representa un conjunto de posibilidades de error dado que el levantamiento de la información implica el diseño de instrumentos, pilotaje de los mismos, enmiendas del instrumento, diseño de planes de muestreo, localización geográfica de los respondientes, selección del equipo de encuestadores y su entrenamiento, supervisión del trabajo de trabajo de campo (Janny, 2000). Para esta investigación se propone de 2 tipos de recogida de la información atendiendo a la parte cuantitativa y a la cualitativa, desde luego seleccionados a partir de los niveles socioeconómicos implicados (C/D+), toda vez que se pretendió levantar información de respondientes cara a cara en sus domicilios, lo cual requirió la selección aleatoria de colonias, calles y domicilios. En cuanto a la parte cualitativa se optó por la aplicación de los grupos de enfoque.

El plan de muestreo para la parte cuantitativa se diseño usando el método aleatorio simple, a partir del total de las colonias tipificadas como C/D+ y de ellas se seleccionaron mediante una rutina randum, 8 colonias meta y de estas 3 calles por colonia, los hogares a encuestar se seleccionaron por afijación proporcional en atención al número de hogares y el tamaño de la muestra. Para el caso de grupos de enfoque, prueba a realizar en laboratorio Gesell, se uso el método de atributos, en el cual se seleccionan a los respondientes por la calidad que se les atribuye a sus posibles contribuciones en opinión, por ello se seleccionan personas respondientes netamente típicas del sujeto de estudio, en este caso en amas de casa de nivel socioeconómico medio, se realizaron 5 sesiones con 6 participantes por sesión.

Se seleccionó una muestra de 650 amas de casa, que equivalen a una confiabilidad estadística del 96% con un error permisible del 4%. Para la parte cualitativa se seleccionaron 30 participantes, 6 para cada una de las 5 sesiones programadas.

Hipótesis

H1 Existe una jerarquía en los factores que influyen en la decisión de compra en las tiendas de autoservicio en las amas de caso de nivel medio.
H2 Los factores de marketing tales como el precio, la marca, la cantidad de publicidad, la labor de venta, el merchandising y los esfuerzos promocionales, son determinantes para la decisión de compra.

Relación entre Variables

X1 Variable independiente = Factores de mercadotecnia para la decisión de compra
X2 Variable independiente = Factores sociales para la decisión de compra
X3 Variable independiente = Factores productivos para la decisión de compra
D1 Variable dependiente = Decisión de compra.
Para esta investigación el dominio de las variables (Budnick, 1990) se definen de la siguiente manera:
X1 Factores de mercadotecnia;   precio, marca, publicidad, labor de venta, lo agradable del lugar y promoción.
X2 Factores sociales; Influencia del entorno, Oportunidad y Tradición.

X3 Factores productivos; Calidad, Garantías, El diseño y Vigencia.

Tabla 1 Operativización de Variables

Variable	Conceptualización	Operativización
	Precio	Precio justo o injusto
	Marca	Marca reconocida o no
X1 = Factores de marketing	Publicidad	Publicidad, cantidad y persuasión
	Labor de venta	Labor de venta eficiente
	Merchandising	Anaquel atractivo
	Promoción	Promoción convincente
	Influencia del entorno	Recomendación
X2 = Factores sociales	Oportunidad	Ventajoso
	Tradición	Siempre lo ha comprado
	Calidad	Calidad
X3 = Factores productivos	Garantías	Por las garantías
	Know How	Por el diseño
	Vigencia	Es actual

RESULTADOS DE LA INVESTIGACIÓN

El orden de importancia de las categorías detectadas, atendiendo a las menciones directas e indirectas, en los 5 grupos de enfoque fue:

Tabla 2 Categorías detectadas

Categoría encontradas en los grupos de enfoque		Menciones por categoría		
		Directas	**asociadas**	**total**
Precio	X1	63	70	133
Marca	X1	13	42	55
Promoción	X1	6	24	30
Tradición	X2	0	17	17
Recomendaciones	X2	11	0	11
Calidad	X3	10	13	23

El orden de importancia atendiendo al número de menciones es:
El precio, la marca, la promoción, la calidad, la tradición y las recomendaciones.
X1 = Factores de marketing suman 218 menciones = al 81.04% del total de la menciones.
X2 = Factores sociales suman 28 menciones = al 10.4% del total de las menciones
X3 = Factores productivos suman 23 menciones = al 8.55% del total de las menciones.

Tabla 3 Resultados cualitativos por variable.

Variables	Frecuencia total	Porcentaje
X1 = Factores de Marketing	218	81.04%
X2 = Factores Sociales	28	10.4%
X3 = Factores Productivos	23	8.55%

En cuanto al resultado del levantamiento cuantitativo los resultados fueron:

Tabla 4 Resultados cuantitativos por factor de influencia

Factores de influencia		Frecuencia
Marca	X1	225
Precio	X1	135
Tradición	X2	62
Recomendaciones	X2	38
Promoción	X1	69
Calidad	X3	58
Merchandisig	X1	21
Publicidad	X1	42

Cabe aclarar que los factores de X3, tales como Know how y vigencia y de X2, Influencia del entorno así como la labor de venta de X1, no tuvieron participación significativa en las respuestas del levantamiento.

Tabla 5 Resultados cuantitativos por variable.

Variables	Frecuencia total	Porcentaje
X1 = Factores de Marketing	492	75.69%
X2 = Factores Sociales	100	15.38%
X3 = Factores Productivos	58	8.92%

De estos resultados se realiza la siguiente matriz de comparativa sobre los resultados cuantitativos y cualitativos por variable.

Tabla 6 Resultados comparativos cuantitativos vs., resultados cualitativos

Variables	Resultado cualitativo	Resultado cuantitativo
X1 = Factores de Marketing	81.04%	75.69%
X2 = Factores Sociales	10.4%	15.38%
X3 = Factores Productivos	8.55%	8.92%

CONCLUSIONES

Definitivamente los principales factores que posiblemente detonen la decisión de compra en amas de casa de nivel medio, en tiendas de autoservicio, con una confiabilidad del 96% y un error permisible de 4% son en lo general aquellos que se derivan de las acciones de mercadotecnia de manera dominante, tales como el precio, la marca, la promoción, la publicidad y el merchandising, lo cual corrobora la hipótesis 2.

Se encontró un arreglo en orden de importancia de las variables con posible peso en la detonación de la compra para este mercado, el cual fue: Los factores de marketing, los factores sociales y en último lugar los factores productivos, con lo cual queda corroborada la hipótesis 1.

En la parte específica de los resultados se puede apreciar una jerarquía por factor según la siguiente tabla:

Factores	Factores cualitativos	Factores cuantitativos
Marca	2°	1°
Precio	1°	2°
Tradición	4%	3°
Recomendaciones	5°	4°
Promoción	3°	5°
Calidad	6°	6°
Merchandisig	sin	7°
Publicidad	sin	8°

BIOGRAFIA

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PROPUESTA DE ESTRUCTURACIÓN DEL PROGRAMA EDUCATIVO EN LA LICENCIATURA EN ADMINISTRACIÓN BASADO EN LA PLANEACIÓN EDUCATIVA DEL CENTRO UNIVERSITARIO UAEM-AMECAMECA

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RESUMEN

Actualmente la educación es un ámbito que constantemente cambia y que de manera paralela exige una visión de mayor preparación en procesos de enseñanza-aprendizaje, con el fin de desarrollar competencias de calidad que sean determinantes para lograr la pertinencia en el cumplimiento de los requerimientos que exige el ámbito laboral. Por ello, en base a la estructura actual del programa educativo de la UAEM, está desarrollándose una propuesta de reestructuración del mismo en la Licenciatura en Administración de CU-Amecameca con el propósito de lograr converger la vinculación de la planeación educativa y perfil de egresado como elementos esenciales para lograr la adquisición de aprendizaje-conocimiento de calidad con la formación de profesionales capacitados y el nivel de competencia idóneo , logrando así egresados aptos que accedan a la competitividad en el mercado laboral y por ende un optimo impacto en la sociedad regional, estatal e internacional. En base a lo anterior, se enfatiza el objetivo del artículo que es mostrar la importancia que tiene la Planeación Educativa en la estructura de la propuesta de la Licenciatura en Administración con el propósito de lograr su pertinencia y cumplir con los requerimientos de los empleadores aportando así, beneficios a generaciones posteriores que son factor angular y plataforma de la solidez con que se modela la sociedad presente y futura.

INTRODUCCIÓN

En el mundo laboral se considera una ventaja competitiva el conocimiento y aprendizaje de calidad que otorgan las instituciones educativas a los alumnos que egresan cada año de las variadas licenciaturas impartidas en todo el país y el resto del mundo; por lo tanto universidades tanto públicas como privadas se ven obligadas a implantar diversos modelos educativos, que les permita gestionar los denominados factores de competitividad como la tecnología, educación de calidad, innovación y desde luego el conocimiento. Por lo tanto el presente artículo tiene como finalidad identificar y analizar la estructura del programa educativo enfocado a la pertinencia de la Planeación Educativa con el objetivo de lograr la competitividad del mercado laboral de los planes de estudios de la Licenciatura en Administración del Centro Universitario UAEM Amecameca, que fungen de manera determinante en la formación de los estudiantes y en su desempeño en el ámbito laboral. Por consiguiente, se utiliza una metodología basada en apoyos teóricos y metodológicos, que permitan lograr establecer la adecuada Planeación Educativa y Estructura del Programa educativo, partiendo de la planeación y organización de las materias por semestre, hasta el seguimiento del egresado y determinar si esta cumple con las necesidades laborales que exige la vida profesional. Es relevante describir que el artículo se desprende como resultado del proyecto de investigación "Pertinencia y perfil de egresado basado en la Planeación Educativa para lograr la

Competitividad en el mercado laboral. (Programa Educativo de la Licenciatura en Administración del Centro Universitario UAEM Amecameca)" con clave PROMEP PTC-154, bajo la responsabilidad de Dr. Omar Ernesto Terán Varela y por lo tanto se busca desarrollar planteamientos y resultados tangibles en el Centro Universitario UAEM - Amecameca específicamente en la matricula de la licenciatura en Administración con la finalidad de aportar grandes beneficios a generaciones posteriores que aprovechen las oportunidades y mejoras propuestas para la misma.

REVISIÓN LITERARIA

En un mundo en constante y rápida evolución, la Educación Superior debe participar de una manera diversificada al desarrollo. En ese sentido, la pertinencia en el perfil del egresado de la Licenciatura en Administración es un factor determinante que tiene en cuenta la concordancia entre las misiones de las Instituciones de Educación Superior y las expectativas de la sociedad y la competitividad en el mercado laboral del profesionista, así como el acceso y la participación de la educación y el aprendizaje, la función de investigación de las universidades, la responsabilidad de la Educación Superior para con otros sectores de la sociedad, el mundo del trabajo y los servicios prestados a la comunidad.

Es importante mencionar que las Instituciones Educativas mexicanas han tenido como objetivo fundamental, el lograr la vinculación con la sociedad, específicamente con el sector productivo. Efectivamente, han celebrado una gran cantidad de convenios de colaboración, y aunque han creado costosas estructuras administrativas encargadas de esta función, y realizado foros, y debates, no se han logrado resultados significativos. (Campos, Sánchez Daza, 2005). Por otra parte las universidades del país cuentan con estructuras y organizaciones tradicionales acordes con una visión fundamentalmente formadora de profesionales en las diversas disciplinas y áreas del conocimiento, donde la investigación en ocasiones responde más a las prioridades de los investigadores que a las del entorno o, inclusive, a las de la propia institución. (Alcántar y Arcos, 2004) En base a lo anterior las diferentes estrategias pedagógicas que se emplean en el proceso de enseñanza – aprendizaje, en la formación de los profesionistas traen como consecuencia la producción de capital humano competitivo, siendo este pobre, debido a la extensión de las comprensiones y las aplicaciones que tiene el conocimiento aprendido en las aulas de clase, por lo que pueda ser aplicado con eficiencia y eficacia en el ámbito laboral, e insuficiente a lo largo de una carrera profesional; esto, aunado a la rápida desactualización de los conocimientos adquiridos y a la constante evolución profesional, hace que se reconozca la ineficiencia de los métodos pedagógicos y la deficiente integración de vinculación entre las instituciones educativas con el ámbito laboral, por lo que se hace necesario cumplir como institución el rol social para la cual está obligada.

Es relevante mencionar ,que en México este tipo de trabajo ha sido muy poco explorado, debido a que el desarrollo de los planes y programas de estudio que diseñan la mayoría de las instituciones educativas no están basados en un modelo educativo que cubra las expectativas de los ámbitos labores, sino más bien como un negocio atiborrado, que les permitirá tener un mercado cautivo y cuando los estudiantes salen al mercado laboral sin ninguna experiencia en muchos de los casos, salen a buscar oportunidades en otras especialidades a las que realmente fueron formados. Los expertos en la elaboración de los planes y programas de estudio, en la mayoría de las veces son especialistas en pedagogía y se les escapa que dentro de la estructura de esos diseños existen elementos esenciales tales como la planeación educativa y que tienen una vinculación estrecha de integración con la pertinencia y el perfil del egresado para poder atender necesidades de un país y de las organizaciones que son las que reciben a los profesionistas, con la finalidad de lograr el desarrollo sustentable de una región y del país mismo.Por lo anterior, las exigencias actuales en el mercado laboral requieren profesionistas inteligentes, adaptables y flexibles que sepan enfrentar el cambio y la incertidumbre; que sepan trabajar en equipo, que demuestren habilidad para relaciones interpersonales, que se responsabilicen de su área de trabajo, que ejecuten las tareas con eficiencia y eficacia para aportar valor añadido a la organización, es decir, recursos humanos que colaboren en la transformación de la dinámica organizacional y aporten competencias cognitivas y de

acción de alto nivel. (Ríos y Leyva, 2006) en donde las exigencias actuales en cuanto a conocimiento y preparación son base para realizar un análisis de las causas que originan el descontrol y la falta de secuencia lógica en las materias que se imparten en cada generación flexible del que se tenga registro actualmente. Finalmente se busca establecer estrategias de Pertinencia en el Programa Educativo de la Licenciatura en Administración basadas en la planeación educativa, con el propósito de lograr la competitividad del mercado laboral, asimismo, buscando la eficiencia de la calidad académica en el Centro Universitario UAEM Amecameca, basado en el perfil docente, las habilidades y competencias, con la finalidad de que cumplan con el perfil del egresado.

Por lo tanto, ahora las Instituciones Educativas deben mantener relaciones con todos los sectores sociales, sin identificarse con ninguno de manera exclusiva, ni ser manejadas por alguno de ellos. Así, sin enajenarse en el ámbito social, las universidades han de intervenir en la vida social con espíritu crítico y de manera positiva. Las funciones sustantivas de docencia, investigación y difusión se han de planear con miras a contribuir al desarrollo integral de la sociedad. (Martínez Rizo, 2000)Sin embargo, no deben perderse de vista otras dimensiones igualmente esenciales: las que se refieren al desarrollo social y político, al mejoramiento continuo de los sistemas tradicionales, y a la adecuada integración de valores y tradiciones locales. (Alcántar y Arcos, 2004)

Con este marco hay que definir los elementos que permitan la competitividad de los egresados de la Licenciatura en Administración del Centro Universitario UAEM Amecameca, y que se tome la educación como estrategia transversal para el logro de las metas trazadas. Hay que hacer acciones para fomentar el sistema educativo pertinente, en el cual la formación del capital humano responda a las necesidades demandadas por los sectores productivos estratégicos para el país.

Para la elaboración del plan de mejora, incluso, la propuesta en la estructura del programa educativo (Tabla 1. Propuesta de Estructuración del Programa Educativo en la Licenciatura en Administración basado en la Planeación Educativa del Centro Universitario UAEM- Amecameca) muestra la importancia de analizar los recursos, características, capacidades, estado actual y futuro del plan de estudios de la licenciatura como base para la formulación de una estrategia que implique vincular la pertinencia idónea y adecuada conforme a la planeación educativa ayudando así a optimizarla; en otras palabras, se debe conocer bien el terreno en donde se fincara una propuesta de mejoramiento.

CONCLUSIONES

Es trascendental destacar que el estudio está en desarrollo y por lo tanto la propuesta de la estructura del plan de estudios se basara en la pertinencia, vinculación y planeación educativa, con esto se modificara la ideología de cómo involucrar las diferentes áreas de conocimiento de forma idónea y oportuna, obteniendo un alto índice de egresados con las capacidades y aptitudes necesarias para enfrentarse al mercado laboral tanto nacional e internacional con alto índice de competencias que fungirán como ventaja competitiva ante egresados de las diferentes Instituciones Educativas y que de manera determinante satisfagan las necesidades laborales que exigen las organizaciones. Por ello el diseño curricular en base a los aspectos antes mencionados son esenciales para el desarrollo académico en el ámbito de enseñanza-aprendizaje en los alumnos de la Licenciatura en Administración del Centro Universitario UAEM-Amecameca para enfrentar a las diferentes perspectivas y tendencias de su formación en el contexto educativo modernizante.

En base a lo anterior se determina que factores tales como la secuencia lógica de las materias impartidas en la licenciatura a lo largo de su formación, profesores calificados y especializados para las diferentes áreas de conocimiento, pertinencia y planeación educativa adecuada en los planes de estudio y finalmente las capacidades, conocimientos, aptitudes y habilidades adquiridas a lo largo de la licenciatura funcionen como plataforma de transición profesional en el ámbito del mercado laboral.

Como conclusión, se puede decir que la vinculación es un fenómeno social y humano, pues es una actividad transformadora e integradora que forma parte del proceso de cambio del siglo XXI, que permite a las Instituciones Educativas al interactuar con su entorno, coordinando eficientemente sus funciones de docencia e investigación con los sectores productivo y social en acciones de beneficio mutuo, favoreciendo su posicionamiento estratégico. (Gould, 2001)

Finalmente se observa en la (Tabla 1. Propuesta de Estructuración del Programa Educativo en la Licenciatura en Administración basado en la Planeación Educativa del Centro Universitario UAEM-Amecameca) el objetivo plasmado de este articulo, mostrando que la elaboración fue en base a estrategias y contenidos específicos que rigen a la planeación educativa, pertinencia, perfil de Egreso, vinculación educativa así como habilidades, valores, áreas de conocimiento, secuencia lógica de materias, contenidos temáticos así como en los núcleos determinados por la UAEM como son , integral, básico y obligatorio, numero de créditos y leyes que rigen directamente los estatutos de la legislación Universitaria de la máxima casa de estudios a la que pertenece la licenciatura, en donde como resultado de establecer la vinculación de la planeación educativa en la integración de la Pertinencia y perfil de egreso del Programa Educativo de la Licenciatura en Administración del Centro Universitario UAEM Amecameca de manera adecuada y oportuna desencadena la competitividad del mercado laboral tanto a nivel regional, nacional e internacional, proyectando las capacidades con la que cuentan los alumnos egresados de la Universidad Autónoma del Estado de México, México.

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Tabla. 1   Propuesta de Estructuración del Programa Educativo en la Licenciatura en Administración basado en la Planeación Educativa del Centro Universitario UAEM- Amecameca

Área de conocimiento		Secuencia lógica de Materias							
Administración		Fundamentos de administración	Teoría y diseño organizacional	Comportamiento humano en la organización	Desarrollo organizacional	Administración estratégica	Auditoria administrativa		
			Ecología organizacional	Administración por competencias					Administración de las Pymes
Matemáticas		Matemáticas básicas	Estadística	Matemáticas financieras	Modelos de optimización				
Producción y operaciones						Logística	Producción y operaciones	Calidad y certificación	
								Simulación de producción y operaciones	
Derecho				Fundamentos de derecho	Derecho mercantil	Derecho laboral			
Fiscal						Teoría general de la tributación			
Economía		Microeconomía	Macroeconomía						
Recursos humanos				Administración de recursos humanos	Desarrollo del capital humano	Simulación de recursos humanos			
Contabilidad		Contabilidad básica	Sistemas contables y boletines de activo	Contabilidad de costos	Presupuestos				
Finanzas						Mercados financieros	Análisis y planeación financiera	Proyectos de inversión	
Mercadotecnia				Administración de mercadotecnia	Técnicas de mercadotecnia	Simulación de mercadotecnia	Comercio internacional		
Complementarias		Habilidades y pensamiento creativo	Sistemas de información administrativos			C1	C2	Metodología de la investigación	Desarrollo empresarial
		Valores socioculturales							
Optativas		Redacción y comunicación	Responsabilidad ética en la empresa	Administración del sector publico	Administración de compensaciones		Diseño de productos y servicios	Publicidad y promoción de ventas	Taller de titulación
		Estrategias de aprendizaje						Tópicos de comercio internacional	Habilidades directivas

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DISCUSIÓN TEÓRICA SOBRE MEDICIÓN DEL CAPITAL HUMANO EN LA ECONOMIA DEL CONOCIMIENT0

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RESUMEN

El objetivo principal de este trabajo es conocer cuál es la discusión teórica sobre medición del capital humano en la economía del conocimiento. Para ello se han formulado las siguientes preguntas de investigación ¿Cuál es la discusión teórica del retorno de inversión en Capital Humano? ¿Cuáles son las formas de medición del Capital Humano y de investigación? De los hallazgos al revisar la literatura hemos encontrado una vasta producción científica de la medición del capital humano y la investigación. Las teorías se enfocan a los tres tipos de capital que genera la Universidad, que es Capital Humano, Capital Intelectual y el Capital Social. Además se empieza hablar de una tercera función de la universidad que es el emprendurismo en Ciencia y Tecnología y su medición.

PALABRAS CLAVE: Discusión Teórica**,** Medición del capital humano, capital intelectual, capital social, economía del conocimiento.

THEORETICAL DISCUSSION ON MEASUREMENT OF THE HUMAN CAPITAL IN THE ECONOMY OF THE KNOWLEDGE

The main aim of this paper is to know the current discussion about human capital measurement in the Knowledge economy. Therefore we have created the following research questions: What´s the theoretical discussion about the return of investment in Human Capital?, What methods can we use to measure Human Capital and Research? We have found a vast scientific production about human capital and research. The theories are focused in three types of capital are generated by the University, which are: Human Capital, Intellectual Capital and Social Capital. Furthermore the theories had started to talk about the third function of the University (beyond teaching and researching) which is entrepreneurship in Science and Technology and its measurement.

KEY WORDS: theoretical discussion, human capital measurement, intellectual capital, social capital, knowledge economy.

INTRODUCCIÓN

En este trabajo se presenta un análisis teórico de la discusión y teorías sobre la medición del capital y la inversión en investigación en la economía del conocimiento. La investigación tiene antecedentes previos de trabajos realizado por el equipo de investigación lidereado por el Dr. Adam Helbrock en Canadá y los trabajos realizado por la Dra. Madrigal en México.

Comprende el análisis de la literatura sobre Capital Intelectual, Capital Humano y su medición, así como el capital social. Se identifica el nivel de análisis o los medios de medición así como las metodologías utilizadas por los autores de los artículos científicos. Se presentan los hallazgos como es el papel que juegan la inversión en educación y las políticas de innovación de cada país, las cuales van encaminadas al desarrollo del capital humano y las redes de colaboración en la ciencia y tecnología principal variable para el desarrollo del capital humano y el retorno de su inversión.

REVISIÓN LITERARIA

Capital humano y economía del conocimiento: Las economías emergentes y las consolidadas se aciertan en una transición de la economía industrial hacia la economía del conocimiento, en la cuál existe una interrelación entre la educación, el conocimiento, ciencia y tecnología lo cuál provoca que el motor del desarrollo de un país sean las ideas y la aplicación de la tecnología sobre las habilidades, aprendizaje y capital humano. La piedra angular de esta economía del conocimiento es el capital humano, es decir, el conocimiento, habilidades y capacidades que posee, desarrolla y acumula cada persona. Para lo cual la OCDE (Organización para la Cooperación y el Desarrollo Económico) desde 1965 ha diseñado mecanismos de evaluación del capital humano en ciencia y tecnología, los cuales se discuten y aportan parámetros e indicadores para medición de la inversión en el capital humano y su aportación a la ciencia y la tecnología.

Economía del conocimiento y el capital humano: Economía del conocimiento es la explicación, contabilidad y gestión estratégica de la totalidad de elementos de valor percibidos y apropiados por una sociedad. Denota una transición hacia una producción basada en la ciencia y tecnología, siendo estos los principios motores de las economías desarrolladas.

Una economía basada en el conocimiento se soporta en su Capital Humano (CH) en el uso de las ideas más que en el de las habilidades físicas, en las aplicaciones de la tecnología más que en la transformación de materia prima o la explotación de mano de obra. La economía del conocimiento demanda nuevas competencias vinculadas con las necesidades de la sociedad, involucra la capacidad de aprendizaje de las instituciones nacionales, el sector productivo y académico, así como la generación de redes interinstitucionales para la solución de problemas y el uso intensivo del conocimiento en el espacio social.

La economía del conocimiento es el resultado de la evolución de la sociedad industrial a la sociedad del conocimiento. Ver tabla uno, donde se aprecian los niveles donde interviene el capital humano que tiene correlación en esta evolución.

Tabla 1. Evolución de la Sociedad Industrial a la Sociedad del Conocimiento

Alcance	Dominio previo	Medición previa	Elemento incorporado	Nuevo dominio	Nueva medición
Individual	Inteligencia analítica	Coeficiente intelectual	Inteligencia emocional	Personalidad integral	Perfil de madurez CH y CI
Organizacional	Estrategia de negocio	Estados financieros	Capital intelectual	Organización integral	Reporte integral de valor
Social	Desarrollo económico	Producto Interno Bruto	Calidad de vida	Sociedad integral	Cuentas de capital social

Adaptada de Javier Carrillo 2006

La economía mundial se ha movido en su transformación de una sociedad de la información (flujo de mensajes) a una del conocimiento, se considera a este último como el recurso principal del crecimiento, la competitividad y el empleo (Madrigal y Camarena, 2007) Lo cual nos lleva a determinar que debemos fortalecer los recursos humanos y desarrollo de su capital humano, para que tenga las competencias y habilidades para un mejor desempeño en la economía del conocimiento.

Teorías y enfoques de la medición del capital humano: En el primer acercamiento a la literatura estamos dando respuesta a una de las variables de la primera pregunta de investigación. ¿Cuál es la discusión teórica de la medición del capital humano? Al realizar una discusión y análisis de la literatura y teorías existentes sobre la medición y alcance tanto del capital humano e investigación, hemos localizado cierta similitud en relación a la producción de los campos semánticos de investigación, CH, CS, Y CI teniendo un ligero incremento el de medición del capital humano. Como se puede apreciar en la Figura 1.

Figura 1. Discusión Teórica Sobre Medición del Capital Humana por Tópico
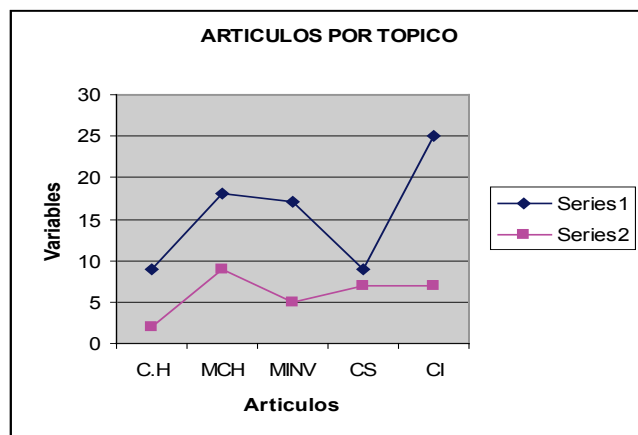
Fuente: elaboración propia 2008.

Uno de los hallazgos elementales de la revisión bibliográfica, son dos variables más que han aparecido permanentemente en la literatura, cuando vemos cuál es la medición del capital humano e investigación, así como su retorno a la sociedad es la *Administración del conocimiento, Políticas Públicas sobre CH y Capital Intelectual (CI)*.

METODOLOGÍA

Esta investigación tiene como antecedentes dos trabajos previos de investigación que se realizan en the University Simon Fraser (SFU), bajo la dirección del Dr. Adam Helbrock, "Medición del capital humano en la economía del conocimiento" y "Medición del retorno de la inversión en investigación". Para la revisión de la literatura existente sobre el tema, nos apoyamos en las sugerencias de Cooper, H. (1998). Galván, J.L. (1999) Macauley, P. (2001) para tal efecto se siguieron los siguientes pasos:
Identificar la principal pregunta de investigación y planteamiento del problema. ¿Cuáles son los principales tópicos relacionados con el tema a investigar, que tienen amplia interrelación?, en este caso fueron cinco variables las elegidas, las cuales son:
1. Medición de la investigación (MI)
2. Retorno de la inversión en posgrado e investigación (RII)
3. Capital humano (CH)
4. Medición del capital humano (MCH)
5. Capital intelectual (CI)

Se buscó e identificó la literatura relevante que tiene correlación con el objeto de estudio, quedó estructurada en: 97, artículos científicos, ocho libros y tres reportes de investigación. Para lo cual se pretende responder a las siguientes preguntas de investigación ¿Qué hallazgos tenemos de la revisión de la literatura ¿Quién está trabajando sobre el tema? ¿Qué resultados se tienen? ¿Qué metodología utilizan? ¿Cuál es el tópico más relevante? ¿Cuál es la literatura predominante? ¿Cuál es el nivel de análisis y discusión? Para lo cual se elabora una base de datos lo cual incluye: Autor, título del trabajo, Nivel de análisis, teorías de referencia, metodología y año ver tabla dos.

RESULTADOS

Capital Humano, Intelectual

En la formación de Recursos humanos que están formando las universidades, sus habilidades, competencias, alcance y como éste se convierte en capital humano, capital social, capital intelectual conforman sociedades del conocimiento se pueden mencionar a los siguientes teóricos y enfoques, así como el nivel de alcance de las investigaciones que han realizado para sustentar sus teorías ver tabla 2,3,4,

Tabla 2. Capital Humano y Medición del Capital Humano

Titulo	Autor(es)	Nivel de Análisis	Teóricos de ref.	Año
Measuring Human Capital in Canada	Mireille Laroche, Marcel Mérette	País	Mulligan 97, Barro 95	2006
Measuring Human Capital in the Knowledge Economy	Melanie Klingbeil	Estado	Adam helbrok , manuales de CHCYT	2008
Measuring Returns to Education in Turkey	B. Müge Tunaer and Dokuz Eylul	País	Talsel 1994-99	2006
Measuring Investment in Education	Eric A. Hanushek	Institución	Auto-cita	1996
Public Investments in University Research: Reaping the Benefits	Varios	Institución		1999
Characteristics Of Innovation In The Services Sector In British Columbia	Holbrook, J.A.D.& Hughes, L.P.	Estado	Adam helbrok , Baldwin, J., Gellatly, G., Johnson, J., & Peters, V. (1999)	2003
Commercializing Knowledge: University Science, Knowledge Capture, and Firm Performance in Biotechnology	Lynne G. Zucker; Michael R. Darby; Jeff S. Armstrong	Vnculación U-E-G	Schutz, A. 1962, Zucker, L.G.}, M. R. Darbay. 2001	2002
How Do University Inventions Get into Practice?	Jeannette Colyvas; Michael Crow; Annetine Gelijns; Roberto Mazzoleni; Richard R. Nelson; Nathan Rosenberg; Bhaven N. Sampat	Institución	Cohen, W., R. Nelson. 1998.	2002

Fuente: Madrigal y Cervantes Medición del Capital Humano (2008) Reporte de investigación.

El capital humano. Es el conocimiento que posee, desarrolla y acumula cada persona) "El Capital Humano se entiende como la inversión en conocimientos, formación e información, lo que permite obtener un mayor rendimiento y productividad en las organizaciones, fenómeno que se da en la inversión del capital humano. Becker, (2002)

En la tabla uno, se puede apreciar como el CH, se mide con diferentes alcances desde el nivel macro como es el caso de las políticas de operación para el desarrollo del capital humano en un país, o estado ver Mireille Laroche (2007) Melanie Klingbeil (2008) Helbrook (2008). Así como los estudios y teorías que van desde el nivel micro como es el impacto es una institución y el proceso de vinculación interinstitucional Jannette Colyvas (2008) Eric A. Hanusheck (2005) entre otros. Estos teóricos destacan la importancia de la medición del capital humano, su impacto y alcance, de cómo se genera el conocimiento, como se comercializa y el papel que juega la Universidad, la industria y el gobierno. El emprendurismo denominado tripe elipse Henry Etzkowitz (2000), para lo cual se han creado diferentes metodologías y enfoques que miden el impacto de las políticas y el desarrollo del capital humano, capital intelectual y social de una región o estado.

Fleisher y Wang (1992) investigan ¿Cuál es el retorno de la inversión en el Capital Humano de China? El autor indica que la Tasa de Retorno de la Educación en China durante 1900's fue de cuatro por ciento, pero la productividad de la educación en un lugar de trabajo en la década de los 80´s y 90´s afirman

(Fleisher y Wang 1992) qué entre 30 y 40 por ciento mientras que solo se le pagaba al trabajador el 10 por ciento de su producto marginal. De esta manera los trabajadores obtienen una pequeña fracción de su pago por habilidades, tienen incentivos débiles para adquirir nuevas habilidades. Pero, si las personas pueden tener un retorno de las 30 o 40 por ciento en inversiones del Capital Humano, entonces querrán pagar a las escuelas para desarrollar esas habilidades en sus personas. El autor afirma que hay una relación directa entre el Capital Humano, la educación, habilidades de la población y el producto interno bruto de los países.

Medición del Capital Humano

El alcance y medición del capital humano se ha manejado desde diferentes perspectivas en este caso vamos a presentar los teóricos que han trabajado en el enfoque de educación. Carol Royal and Luneta O´Donnell, mencionan y presentan evidencias de cómo fomentan el capital humano mediante el estudio de posgtrado con responsabilidad social y que sus egresados son los CEOS (director de empresas) de las grandes compañías, sustentadas y apoyadas por las teorías de Bassi, Collins y Porras (1999). El caso de Mirell Laroche, apoyada por la teoría de Bantis Mulligan (1997), Barro (1995), hace un estudio del "stokc" de Capital Humano de Canadá mediante los años de inversión en su formación escolar desde primaria hasta concluir un doctorado. Melanie Kingbeli and Adam Helbrok (2008), se han enfocado a medir el capital humano en ciencia y tecnología (CHCT), apoyados por metodologías cuantitativas como cualitativas.

James J. Heckmant (2003), Menciona que China en todos sus niveles de gobierno invierte el 2.5 por ciento de su producto interno bruto en educación y que esto tiene un reflejo del más del 30 por ciento en investigación lo cual se puede apreciar por ser una de las economías más solidas del mundo, esto refleja la inversión de su capital humano. James J. Heckman† and Lance Lochner (1998) Hacen un análisis de cómo se van desarrollando las habilidades y el crecimiento del capital humano desde pregrado, posgrado y después en el contexto laboral Mireille Laroche, Marcel Mérette (2005) Melanie Klingbeil (2005) B. Müge Tunaer and Dokuz Eylul University (2004) Eric A. Hanushek and Adam Helbrok que ha venido trabajando en la medición del capital humano en la economía del conocimiento, enfocado principalmente en el capital humano de ciencia y tecnología.(CHCT)

Capital Intelectual y Su Discusión Teórica

Capital Intelectual es el conjunto de aportaciones no materiales que en la era de la información se entienden como el principal activo de las empresas y organizaciones del tercer milenio. Este se ha incorporado en los últimos años al mundo académico como empresarial Brooking (1997) lo dividió para su estudio y análisis en cuatro categorías:
1. Activos de mercado (potencial derivado de los bienes inmateriales que guardan relación con el mercado).
2. Activos de propiedad intelectual (know-how, secretos de fabricación, copyright, patentes, derechos de diseño, marcas de fábrica y servicios).
3. Activos centrados en el individuo (calificaciones que conforman al hombre y que hacen que sea lo que es).
4. Activos de infraestructura (tecnologías, metodologías y procesos que hacen posible el funcionamiento de la organización

Existe una discusión muy amplia Mestrovic (2001), Jaia (2000)… Braowing (2001) Der-Juinn Horng; Chao-Chih Hsueh (2004) Katherine T Durack (2006) de cómo medir el capital intelectual de una persona de una institución, y de una sociedad ya que los indicadores de ciencia y tecnología solo contabilizan los registros de marcas y patentes. Sin embargo, Brooking (1997) los ha clasificado como activos de mercado, propiedad intelectual , activos centrados en el individuo y activos de infraestructura, lo cual da mayor elementos para medir, desarrollar,

evaluar el capital intelectual de un individuo, de una organización de una región y de un país. Ver tabla tres, donde se aprecian los principales enfoques sobre la medición del capital intelectual y los teóricos de referencia.

Tabla 3: Capital Intelectual y Su Medición

Título	Autor(es)	Nivel de Análisis	Teóricos de ref.
Intellectual Property and the University	Marta Mestrovic Deyrup	Personal	No tiene citas
Measuring intangible corporate assets Linking business strategy with intellectual capital	Luiz Antonio Joia	Empresa	Andersen, A. and The Economist Intelligence Unit 1992
The Economic Impact of Educational Institutions: Issues and Methodology	Melanie Blackwell Steven Cobb David Weinberg	Institución	Beck, R., Elliot, D., Meisel, J.,&Wagner, M. (1995).
How to Improve Efficiency in Transfer of Scientific Knowledge from University to Firms: The Case of Universities in Taiwan	Der-Juinn Horng; Chao-Chih Hsueh	País	Siegel, D., Waldman, D., and Link, A. 2003
Technology Transfer and Patents: Implications for the Production of Scientifi Knowledge	Katherine T Durack	Análisis Teórico	Hansen, S., Brewster, A., and Asher, J. (2005)
Intellectual Capital Measurement and Holistic Value Approach (Hva)	Dr.. Stteve Piike IInd.. Proff.. Göran Roos	Análisis teórico	M. Van Buren, A 1999
Equity and the Technology Transfer Strategies of American Research Universities	Maryann Feldman; Irwin Feller; Janet Bercovitz; Richard Burton	País Universidades	Lerner, J, R.P. 1998 y 1999; Thursby, J., S. Kemp. 1999
University-Industry Interactions: the Case of the UK Biotech Industry	Helen Lawton Smith; Sharmistha Bagchi-Sen	Vinculación Universidad--Industria	Zucker, L. G. Darby, M. r. and Armstron J. (1998-20022); Florida, R. and Cohen W. (1999); Cohen, W. M., Nelson, R. R. and Walsh, J. P. (2002

Fuente: Elaboración propia 2009

Uno de los teóricos clásicos de la medición del capital humano con enfoque en capital intelectual es Nick Bontis an Jac Fitz.enz (2002) su teoría principal es que el CH es el primer componente de Capital Intelectual y lo relaciona con las causas y consecuencia de una efectiva administración del CH. Zucker, Darber, and Asnstrong (2002) Encontró una consistencia entre los investigadores que hacen y definen los descubrimientos; proveen de capital humano, intelectual que define la tecnología de la firma, al menos siguiendo los descubrimientos científicos lo que indica la evolución de su investigación y cada 24 horas están innovando algo nuevo en ciencia y tecnología. El registro de una patente. El trabajo de los autores se puede resumir. El registro de una patente, mejora de un proceso, innovación en el diseño y empaque le genera ingreso a la firma, además permite la captura de conocimiento al establecer los derechos de propiedad, evolución del conocimiento. Esto a la vez recompensa las invenciones comerciales, hasta que la patente expira, sin embargo después de su expiración sigue un recogimiento de marca. El éxito de las patentes también impacta en la habilidad de la firma para innovar y desarrollar. Argumento de Zucker, Darby, and Armstrong (2002).

En el aspecto de cómo las universidades ponen en práctica sus innovaciones y patentes, Jeannette Colyvas (2002) describen como los diferentes sectores tienen la forma de poner en marcha sus innovaciones y las llevan a la práctica. Así mismo el incremento de ingresos por el registro de patentes de tres universidades que atienden a cinco sectores, como es el de Software, tecnología y biotecnología.

Capital Social

El capital social es el conjunto de normas de confianza, valores, actitudes y redes de colaboración entre personas e instituciones de una sociedad, región o país; lo cual facilita acciones colectivas y de cooperación y trabajo entre redes. Millan (2008) cita en forma textual a Lin para un mejor entendimiento del alcance del capital social

La literatura analizada nos refleja el papel que juega la universidad ante la generación del CH, CI y CS. En este caso podemos mencionar que el Capital Social es la suma de los dos capitales CH Y CI. O en su caso ¿Es el resultado de una eficiente administración del conocimiento? que en este caso es otro reto de la Universidad el de formación de profesionales que sean capaces de generar conocimiento y gestionarlo adecuadamente.

H, Lawton Smith & Bagchi-Sen (2006), demuestran con un estudio de la industria de la biotecnología en Londres, de cómo mediante closter y la vinculación universidad se puede cuidar la propiedad intelectual y con ello incrementar el capital social de una región. Maryann Feldman; Irwin Feller; Janet Bercovitz; Richard Burton (2000) Plantean un mecanismo de comercialización distribución del capital intelectual que generan las Universidades. Helen Lawton Smith; (2005) como generar valor con el conocimiento que tienen las empresas, la investigación que se realice en la universidades y el sector público, genera un híbrido para el capital social que requiere la región. Sharmistha Bagchi-Sen, (2006) presentan un estudio empírico de como el caso de la industria y de la biotecnologia tienen interacción con la Universidad y la industria, generando un capital social y además comercializando su propiedad intelectual. Jaana Woiceshyn and Loren Falkenberg (2007) En un estudio donde participan 112 universidades mencionan los autores que agregando valor mediante la innovación y tecnología a sus productos y sobre todo generando una cadena de comercialización. Las empresas y organizaciones serán más competitivas
Nivel de análisis de la producción científica en la Medición

El nivel de análisis de la literatura recae en estudios realizados donde la muestras es el país, en segundo lugar las instituciones o de cómo miden estas instituciones tanto su capital humano, intelectual y social. En tercer lugar se localizaron revisión teórica o estudios teóricos. Recae igual importancia el número de estudios que la muestra es el estado y el principal aspecto de medición es la medición es el impacto de la vinculación universidad empresa y gobierno(Ver Figura 2)

Figura2: Objeto de estudio en la Medición del Capital Humano, Intelectual y Social
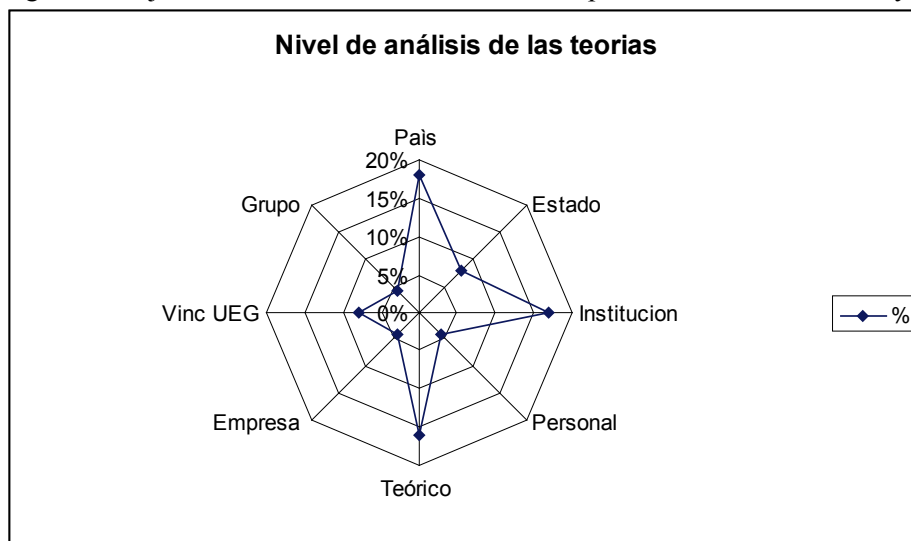
METODOLOGÍAS

En lo que se refiere a las metodologías empleadas predomina los estudios cuantitativos el 65 por ciento donde utilizan diferentes herramientas estadísticos como es el caso de estudios econométricos, la combinación de diferentes modelos, así como aplicación de encuestas tanto a empleados como empleadores y análisis de datos duros. Hay estudios que utilizaron la metodología cualitativa están

apoyados por la encuesta, estudios de caso y análisis sectorial. Esto esta relacionado con el nivel de estudio como se puede apreciar en la gráfica dos.

Más hallazgos (Metodologías de la medición del Capital humano): Otra de los hallazgos de este estudio es el análisis de las metodologías del capital humano y analizan las diferentes metodologías de la medición del capital humano, éste esta sustentado en diferentes teóricos como Barro, J.M. los manuales de OCDE entre otros, así mismo un estudio de cómo regresa la inversión del capital humano en la economía del conocimiento. J. Heckaman, Lochener and Taber (1998) realizaron un modelo con diferentes variables entre el aprendizaje del capital humano, su escolaridad, edad, lugar de trabajo entre otras variables, estos apoyados principalmente por la teoría de J. Heckaman 1975 al 1977.

Inversión en educación, retorno a la economía: Así mismo hay teóricos y diferentes teorías de cómo la inversión en educación tiene un retorno económico para el país tal es el caso de James, Herman (2003), que se sustenta con las teorías economistas de Tehodoro Schultz. Lo demuestra con estudios econométricos donde dice que la inversión en educación tiene un retorno entre el 30 % y 40%. Estos se puede comprobar en el mercado mundial que acapara China y las políticas de capital humano del mismo país, invertir en educación. A mejor educación el trabajador produce nuevas ideas y nuevos conocimiento James (2003) Adam Helbrock.J.H.. En su investigación en la Columbia Británica de impactan los beneficios con la investigación e innovación en las empresas de servicios habiendo encontrado que el 83 por ciento de las empresas tienen un incremento y el 80 % otras firma. Apoyado esta investigación de como agregar valor a las empresas mediante la investigación e innovación y la inversión en el capital humano.

Las Políticas de Innovación

Ionara Costa y Serge Filippov (2008) sugiere y remarca que la literatura dice que para fortalecer la inversión extranjera el país deben concentrar las capacidades de innovación y de desarrollo de los países con mayor desarrollo en vez de atraer inversión. El primer lugar de fortalecer los sistemas locales de innovación y el sector industrial para que innove los procesos y dinamice su producción.

Para lo cual es elemental identificar y conocer el medio ambiente de los negocios, las oportunidades de las firmas para su crecimiento, sus habilidades y capacidades, la cultura organizacional y empresarial así como su cultura en emprendurismo y la cultura organizacional de sus directivos y su iniciativa, asì como la inversión en el capital humano. Lo cual implica la vinculación con los sistemas regionales y las políticas de fortalecimiento y desarrollo de los tres tipos de capital y su medición que a lo largo de este artículo hemos venido mencionando. Así como está concentrado el nivel de innovación e emprendurismo en las pequeñas empresas.

CONCLUSIONES Y DISCUSIÒN

La perspectiva del retorno de la inversión que se realice en el capital humano, en su educación en desarrollar las habilidades de investigación tiene diferentes vertientes de cómo medir su retorno de la inversión, desde aspectos macroeconómicos, como es desarrollo y crecimiento económico de un país hasta aspectos individuales de cómo retorno la inversión en capital social, capital humano y el capital intelectual que este genere así como retorno de la inversión. Predomina la discusión de cómo evaluar la eficiencia de la inversión en el capital humano y la instigación y el posgrado a través de registro de patentes y marcas, el cuidado del capital intelectual, entonces se tiene que hacer una reflexión y regresa a la universidad a las empresas, para responder a las siguientes preguntas. ¿Cómo se gestiona el conocimiento en las organizaciones, cuantos tienen un área de gestión de la innovación, cual es la norma y los estándares para la creatividad, que tipo de conocimiento es administrado, como se da el conocimiento en las organizaciones que no tienen un área específica para su gestión, como se gestiona y

administra la innovación en la investigación universitaria, de quien es el conocimiento, como administrarlo eficientemente. Cuales son las empresas de éxito.

Los niveles de medición de los resultados de investigación implica la medición y correlación de varias variables como es el caso de CH, CI, CS, y la Medición del CH en CT. No podemos excluir un factor de otro. Así como la medición de los diferentes niveles, hemos localizado investigación a nivel micro donde identifican, las habilidades, conocimiento y característica de los investigadores y el impacto al haber realizado investigación. También se encontraron con el nivel de grupos, organizaciones e instituciones principalmente el fenómeno de investigación y de vinculación con la universidad, el análisis de un estado hasta llegar a aspectos macros de la medición e impacto de la investigación, el posgrado, la enseñanza en un país.

Nuevas veredas de investigación el análisis de la literatura sobre la medición del CH, CI, CS, y el MIV, cual es el papel de las políticas públicas para la medición del capital humano en cada región en cada sistema de innovación, como se da la movilidad y el retorno de la inversión en el capital humano, cual es la estrategia para la mejor gestión del capital humano, cual es la estrategia para fomentar el capital intelectual_ como se gestiona? Se habla de una tercera función de la Universidad el emprendurismo, que este tiene que esta ligado a la investigación y para que el Capital Humano tenga una alta tasa de retorno:

- Liberar los mercados laborales
- Eliminar la disparidad regional en acceder ala educación
- Desarrollar créditos para financiar la formación del Capital Humano.
- Crear más escuelas privadas para el valorar de la competencia entre escuelas
- Promover vínculos entre Industria y Universidad

Surgen nuevas preguntas de investigación del análisis realizado incluimos otras dos variables, lo anterior para ver cómo responder a las siguientes preguntas de investigación ¿Cuál es el rol de la gerencia en administración de la ciencia y la tecnología? ¿Cuáles son las políticas públicas para la ciencia y Tecnología en su capital humano? ¿Por qué varios teóricos le dan un gran realce a la labor de la gestión del conocimiento y sobre todo al papel del líder y estratega en ciencia y tecnología?

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RECONOCIMIENTO

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APRENDIZAJE ORGANIZACIONAL EN LAS MIPYMES

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ABSTRACT

Esta investigación descriptiva analiza con un diseño cuantitativo el aprendizaje organizacional en su proceso de alcanzar nuevos niveles de competencia e innovación. Para el análisis de la información se utilizó la tasa de concentración de Herfindahl y el modelo de Ren. Dado que este estudio se fundamentó en analizar el grado de desempeño y diversificación de empresas del ramo electrónico un análisis estadístico de regresión fue llevado a cabo. Los resultados permiten concluir que cubrir múltiples mercados crea un mercado más seguro para las empresas. Los resultados brindan información para determinar que la competencia e innovación se encuentra estrechamente ligada al aprendizaje organizacional. Esto es el resultado de sistematizar el aprendizaje generado por los errores cometidos. A medida que se corrigen los sistemas y los procesos se amplían las oportunidades de ser más competitivos. Los resultados de este estudio sugieren que la innovación y la competitividad de las empresas de este tipo se dan en función del avance en el aprendizaje organizacional. Dado que este estudio se realizó en tiempos de crisis económica futuras investigaciones podrán analizar el aprendizaje organizacional en diferentes tiempos y desde otras perspectivas o enfoques., Las limitaciones del estudio también son presentadas.

INTRODUCCIÓN

El entorno de las Mipymes se da en un terreno de cambio constante, caracterizado por globalización, consumismo, cambios tecnológicos dinámicos y profesionales del "self-thinking" que atienden a un mercado que puede cambiar al instante. Mientras algunos pequeños negocios están siendo presionados para sobrevivir, otros son catapultados a la prosperidad hasta convertirse en alguna de las más grandes organizaciones mundiales. Las Mipymes son retadas para adaptarse, generar y generalizar nuevo conocimiento antes que la competencia. Hace más de una década que Adler y Cole (1993) establecieron, "el consenso que está surgiendo es que el sello de calidad más efectivo de las organizaciones del mañana será su capacidad de aprender".

Los expertos en administración consideran también que el aprendizaje y el nivel de conocimiento es la clave del éxito de este nuevo milenio. El aprendizaje organizacional es la clave para rápidamente cambiar el clima de negocios, lo cual es esencial en el enfoque de nuevos escenarios y explotar las oportunidades al máximo (Prokesch, 1997). Para lograrlo, las Mipymes exitosas utilizan el aprendizaje organizacional con énfasis en el aprendizaje de capacidades. En este sentido, el reto no es convertirse en una organización en aprendizaje, sino el de desarrollar su adaptabilidad o capacidad de perspectiva. En ésta edad de la información, en el que el conocimiento se duplica en tres años o menos, este reto es alcanzado por empresas exitosas quienes demuestran disponibilidad para el aprendizaje organizacional con mecanismos que facilitan el aprendizaje individual, de equipo o de toda la organización.

En el mundo globalizado del siglo XXI, la competitividad se ha convertido en una obligación de las empresas de todos los tamaños, grandes, medianas o pequeñas, estas últimas se encuentran en desventaja toda vez que no tienen estructuras, procedimientos, y sistemas que les permitan capturar los conocimientos adquiridos y en base a esto, desarrollar un conocimiento sistemático de sus propias experiencias, es decir un aprendizaje organizacional que les permita obtener con ello una ventaja competitiva. El concepto de aprendizaje organizacional y el de la organización que aprende ha recibido una atención significativa desde 1990. La investigación realizada se ha dirigido primordialmente ha

estudios empíricos en grandes organizaciones (Amstrong y Foley, 2003; Murray, 2003). Sin embargo, la evidencia empírica ha fallado en determinar los mecanismos esenciales, las características y la infraestructura entre las micro, pequeñas y medianas empresas.

La búsqueda por sobrevivir y prosperar en el medio ambiente de hoy tan dinámico y turbulento, las organizaciones necesitan reconfigurar sus competencias primarias. La innovación tecnológica en general y la innovación de productos en particular han sido reconocidas como el recurso primario en construir, expandir y reconfigurar las competencias organizacionales en el tiempo. La innovación de productos juega un rol fundamental en la industria electrónica. Tal industria es caracterizada por bajas barreras de entrada, economías de escala limitadas y una fiera competencia basada en productos. Debido a estas características, la ventaja competitiva de una empresa se basa en su habilidad para introducir nuevos productos, más que en el costo beneficio en términos de producción.

Esta investigación se presenta organizada como sigue. En la sección de revisión literaria, una discusión de la literatura relevante es presentada. En este apartado se aborda el aprendizaje organizacional como proceso estratégico en el desarrollo de las organizaciones. Se presentan las teorías que han tratado de explicar la creación de las capacidades de innovación. Se presenta y justifica la metodología utilizada para la evaluación del modelo planteado. Los resultados obtenidos se presentan realizando las pruebas estadísticas y su significancia estadística. El apartado de conclusiones y limitaciones presenta la discusión crítica de los resultados obtenidos, así como las recomendaciones para futuras investigaciones.

REVISIÓN DE LITERATURA

El aprendizaje organizacional como proceso estratégico de desarrollo de las organizaciones es un proceso relativamente nuevo como concepto, apenas en la década de los 60's surgió la inquietud. Uno de sus principales precursores aunque no el primero fue Chris Argyris, quien señala que es importante para las organizaciones estar detectando errores o anomalías, los corrigen reestructurando la teoría organizacional en uso. Unos de los principales autores que comenzaron a explorar el proceso del aprendizaje organizacional fueron Cyert y March (1963), los cuales ligaban el aprendizaje organizacional al comportamiento de la empresa y sugiere la adaptación de metas y reglas y obtención del aprendizaje en base a las experiencias.

Más adelante Argyris y Schon (1978), refuerzan lo anterior señalando que el aprendizaje organizacional es el proceso en el cual los miembros de la organización detectan errores o anomalías y los corrigen, trabajando tanto de manera individual como colectiva. Hedberg (1981) agrega el aprendizaje experimental y por imitación, indicando que los miembros de una organización adquieren y procesan información a través de la interacción con su medio ambiente en orden a aumentar su entendimiento de la realidad observando los resultados de sus acciones. Levitt y March (1993) señalan que en las organizaciones se da el aprendizaje por codificar inferencias de historias dentro de una rutina de conductas, usando para ello dos procesos: El aprendizaje de experiencias directas de otros y el aprendizaje por interpretación de paradigmas.

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MERCADOTECNIA DE SERVICIOS

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INTRODUCCIÓN

La Mercadotecnia de Servicios se refiere a la aplicación de los mismos principios de la Mercadotecnia General a bienes intangibles, con las respectivas diferencias que su propia naturaleza implica. Al comenzar ésta exposición del marketing y gestión de servicios, es importante trazar distinciones entre industrias y compañías de servicio, servicio como productos, servicio al cliente y servicio derivado. A veces cuando las personas piensan en servicio, sólo piensan en el servicio al cliente, pero el servicio puede dividirse en cuatro categorías distintas.

Las industrias y compañías de servicio incluyen aquellas industrias y compañías clasificadas por lo común dentro del sector servicios cuyo producto central es un servicio (empresas dedicadas al alojamiento, transporte, servicios financieros, etc). Los servicios como productos representan una amplia gama de ofertas de productos intangibles que los clientes valoran y por los que pagan en el mercado, los productos de servicio son vendidos por compañías de servicios y de otro tipo, como fabricantes y compradores de tecnología (tiendas departamentales que ofrecen servicio de envoltura de regalos y tienda de mascotas que vende servicios de cuidados y entrenamiento de mascotas. El servicio al cliente es el servicio proporcionado en apoyo de los productos centrales de una compañía. Y por último el servicio derivado es otra forma más de ver lo que significan los servicios.

En un artículo premiado en el journal of marketing, Steve Vargo y Bob Lusch exponen una nueva lógica dominante para el marketing que sugiere que todos los productos y bienes físicos se valoran por los servicios que proporcionan. Basándose en el trabajo de respetados economistas, mercadologos y filósofos, los dos autores sugieren que el valor derivado de los bienes físicos en realidad es el servicio proporcionado por el bien, no el bien en sí mismo.

Las actividades estratégicas importantes en una empresa de servicios, deben estar desagregadas para comprender los potenciales de diferenciación y generar ahorro en los costos, dado que toda empresa es una suma de actividades que se ejecutan para proyectar, producir, comercializar, entregar y sustentar un servicio. La cadena de valores de una empresa y el modo como ésta ejecuta sus actividades, reflejan la estrategia empleada en un área en particular. La identificación de las actividades de valor requiere de un análisis individual de su función, recursos, insumos y tecnología para dividirlas en actividades primarias y de apoyo. Las actividades primarias se relacionan con la creación del servicio, su venta y transferencia para el consumo del comprador y el servicio de atención en la postventa. Las actividades de apoyo se sustentan tanto a sí mismas como a las primarias, proporcionando recursos humanos, tecnología y otros elementos.

SERVICIO Y CALIDAD EN LA MERCADOTECNIA DE SERVICIOS

La esencia de la Mercadotecnia de Servicios es el Servicio mismo. La Mezcla de la Mercadotecnia se considera a través del producto, precio, plaza y promoción; es decir las empresas buscan la ventaja competitiva y la sinergia por medio de los elementos principales a través de las cuatro "pes" antes mencionadas. Ninguno de estos elementos funciona si no existe calidad en el mismo, un servicio de calidad innovador es generalmente más difícil de imitar que el concepto de servicio, la calidad de un servicio proviene de un liderazgo inspirado en una cultura corporativa orientada hacia el cliente, un excelente diseño de servicio, el uso efectivo de información y tecnología, y otros factores que se desarrollan gradualmente en la organización.

¿Qué es entonces la calidad en el servicio?
Son elementos tangibles, cumplimiento de promesas, actitud en el servicio, competencia del personal y empatía.

Elementos tangibles: Se refiere a la apariencia de las instalaciones de la organización, la presentación del personal y hasta los equipos utilizados en determinada compañía (de cómputo, oficina, transporte, etc.). Una evaluación favorable en este rubro invita al cliente para que realice su primera transacción con la empresa.

Cumplimiento de promesa: Significa entregar correcta y oportunamente el servicio acordado.
Actitud de servicio: Con mucha frecuencia los clientes perciben falta de actitud de servicio por parte de los empleados; esto significa que no sienten la disposición quienes los atienden para escuchar y resolver sus problemas o emergencias de la manera más conveniente según la situación en particular.
Competencia del personal: El cliente califica qué tan competente es el empleado para atenderlo correctamente; si es cortés, si conoce la empresa donde trabaja y los productos o servicios que vende, si domina las condiciones de venta y las políticas, en fin, si es capaz de inspirar confianza con sus conocimientos como para que usted le pida orientación acerca de cualquier producto de la empresa.
Empatía: Preocupación y atención individualizada de acuerdo a tres aspectos diferentes que son:
Facilidad de contacto (quien o quienes dan ayuda al cliente)
Comunicación (idioma según el cliente)
Gastos y necesidades (brindar lo que el cliente necesita y superar expectativas).

La Brecha del Cliente

La Brecha del Cliente es la diferencia entre las expectativas y las percepciones del cliente. Las expectativas son estándares o puntos de referencia que los clientes han obtenido de las experiencias con los servicios, mientras que las percepciones del cliente son evaluaciones subjetivas de las experiencias de servicios reales. Las expectativas del cliente con frecuencia consisten en lo que cree que debería suceder o sucederá. Por ejemplo, cuando visita un Restaurante caro, espera un nivel alto de servicio, uno que sea considerablemente superior al nivel que esperaría en un restaurante de comida rápida. Cerrar la brecha entre lo que esperan los clientes y lo que perciben es básico para entregar calidad de servicio; forma la base para el modelo de Brechas debido a que la satisfacción del cliente y el enfoque en el cliente son tan importantes para la competitividad de la empresa, cualquier compañía interesada en entregar servicio de calidad debe comenzar con una comprensión clara de sus clientes.

Las fuentes de expectativas del cliente son tanto factores controlados por el mercadólogo (tales como precios, publicidad y promesas de ventas) como factores sobre los que tiene una capacidad limitada de modificación (necesidades personales innatas, comunicaciones de boca en boca y ofertas competitivas). En mundo perfecto las expectativas y las percepciones serian idénticas: los clientes percibirían que han recibido lo que pensaron que recibirían y que deberían recibir en la práctica estos conceptos, con frecuencia, incluso por lo general, están separados por alguna distancia. De manera amplia la meta del marketing de servicios es eliminar esa distancia.

Formalidad, Alta calidad del servicio y excelencia en la mercadotecnia de servicios

Considero la formalidad como una dimensión de influencia en la calidad del servicio, es decir, la capacidad de desempeñar el servicio de una manera exacta y fiable. El primer grupo considera: 1) La retención de clientes actuales y más negocio de los mismos, 2) Incremento en la comunicación positiva boca a boca, 3) Mayor oportunidad de manejo de precios y a través de estos tres elementos lograr la mejora en la efectividad de la mercadotecnia y mayores ingresos por ventas. El segundo grupo considera: 1) Reducción de costos por repeticiones de trabajo, 2) Empleados con moral alta y entusiasmo y 3) Baja

Rotación de personal y a través de estos tres elementos del segundo grupo lograr el incremento en la productividad y menores costos. En conjunto lograr mayores utilidades. Considero la formalidad del servicio que opera con tres constantes continuas, como: liderazgo en servicio, infraestructura de servicio a prueba de errores y prueba a conciencia del servicio.

Objetivos primordiales para la recuperación efectiva del servicio

De manera esencial considero la investigación de manera ordenada y evidenciada hacia los clientes a través de la identificación de problemas de servicios esto conlleva al seguimiento de quejas y seguimientos de los procesos de servicio, la resolución efectiva de problemas a través de estimular el factor humano y compensación del factor de molestia, el aprendizaje de la recuperación de los clientes a través del análisis de la causa raíz del problema y el establecimiento de seguimiento del problema interpretando esta secuencia de situaciones a seguir se logra la modificación del seguimiento del proceso del servicio.

La discrepancia entre la brecha de expectativas y percepciones es el factor primario determinante de la evaluación de la calidad por parte de los clientes.
El mercadeo interno se identifica con atraer, desarrollar, motivar y retener empleados calificados en una secuencia constante por ofrecer una visión, desarrollar gente para un buen desempeño, enfatizar trabajo en equipo, apalancarse del factor libertad, conocer a su cliente y competir por talento. Todo ello asegura que las promesas reflejen la realidad, manejo de las expectativas y así exceder las expectativas logrando lealtad intensa. Mercadotecnia de servicios y su rol con calidad y productividad

"ASPECTOS BÁSICOS A SER TOMADOS EN CUENTA"

En el presente no se puede ignorar el rol determinante de la mercadotecnia de servicios en calidad y productividad. De ahí, la importancia de tomarse en cuenta dentro del análisis de estos tópicos en la realidad moderna empresarial en nuestro país.

La calidad la integran varios elementos: actitudes de los empleados; las relaciones entre ellos; la importancia de los empleados que tienen contacto con los clientes; la apariencia del personal de servicios; la accesibilidad general de los servicios para los clientes; la propensión general del personal hacia el servicio. Aquí cobra importancia nuevamente lo que he dicho acerca del marketing interno: el trato del personal hacia los clientes y la cultura de servicios juega un papel clave en la calidad percibida por el usuario. Hay varias formas para que una empresa de servicios pueda mantener y mejorar la calidad del personal y su rendimiento.Algunas de las formas son: selección cuidadosa y capacitación del personal; utilizar métodos para obtener comportamiento uniforme; asegurar apariencia uniforme; reducir la importancia del contacto personal y el control cuidadoso mediante vigilancia del personal de servicio entre otros.

Además dentro de la calidad del servicio deben manejarse índices de productividad para controlar y monitorear con que grado de eficiencia en cuanto al manejo de los recursos se está brindando un servicio de calidad que sea competitivo en cuanto a precio y rapidez.

Las funciones de mercadotecnia de servicios deben estar interconectadas con la calidad y productividad, y la gerencia debe aprovechar o basarse en la calidad de los procesos internos para brindar un servicio de calidad y productividad.

RECOMENDACIONES

1) Diseñar programas de mejoramiento continuo de la calidad y productividad que este orientados a mejorar la calidad del servicio.

2) Manejar indicadores de productividad relacionados con la mercadotecnia de servicios como por ejemplo: reclamos atendidos/empleado, clientes satisfechos/horas hombre utilizadas, entre otros, que permitan monitorear el desempeño de la empresa en cuanto a la calidad del servicio brindado.

3) Involucrar a todo el personal en la búsqueda del mejoramiento del servicio. La calidad de servicios no es una disciplina distinta del marketing de servicios, es la parte central de este. Las compañías que no prestan un buen servicio no pueden tener éxito en el ambiente mercantil, por mas llamativa que sea su publicidad por mas visitas que hagan sus vendedores. Las ofertas de su publicidad y de sus vendedores solo sirven para persuadir a más personas para que experimente un servicio malo y aprendan por sí mismas a evitar a esa firma en el futuro.

4) Lo esencial de la calidad de un servicio es su confiabilidad, que se cumpla lo prometido. La empresa que rutinariamente no cumple con lo que prometen, que no son confiables que cometen frecuentemente errores pierden la confianza de sus clientes y la confianza de la clientela es el activo mas valioso de una compañía de servicios.

5) Un producto atractivo para el cliente es aquel que lo satisface, con alta calidad a un precio adecuado. Dadas las características de los servicios, la tarea de determinar los ingredientes de la mezcla de mercadotecnia para un programa total en una industria de servicios es a menudo única y retadora.

6) En cada caso, el personal de mercadotecnia debe seleccionar y analizar sus mercados meta y proseguir a crear un programa de mercadotecnia alrededor de sus variables de la mezcla de mercadotecnia; el producto (o servicios), la estructura de precios, el sistema de distribución y al programa promocional. Y repito, las tácticas y estrategias utilizadas en la mercadotecnia de un producto convencional son frecuentemente, inadecuadas para una mercadotecnia de servicios. Tal vez la clave para aumentar la eficacia en las industrias de servicios es que la administración adopte una actitud de fabricantes.

6) En este sentido, se pude sugerir que se refuerce la capacitación de personal, para que se desempeñe bajo una filosofía de servicio y permita construir un ambiente de intensa empatía con el cliente en el momento de prestar el servicio como forma de garantizar la calidad de la interacción entre este y la empresa. Igualmente, sea capaz de manejar la brecha entre las expectativas de los clientes al demandar el servicio y el formato que se tiene preparado para entregarlo, mediante el establecimiento de mecanismos de retroalimentación que se originen en los clientes y que le permita a la empresa resolver en tiempo real, y a favor de los clientes involucrados, las quejas sobre el servicio y contar con una mayor precisión respecto de lo que los clientes quieren resolver con su consumo.

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BIOGRAFIA

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DIAGNÓSTICO PARA LA IMPLEMENTACIÓN DE UN PLAN MOTIVACIONAL EN COMISION NACIONAL FORESTAL

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ABSTRACT

La motivación es uno de los factores más importantes que inciden de manera directa sobre el grado de productividad de una organización. Robbins (2004) la define como los procesos que dan cuenta de la intensidad, dirección y persistencia del esfuerzo de un individuo por conseguir una meta. Los individuos necesitan ser motivados de diversas maneras para lograr obtener de ellos su máximo rendimiento y cumplir con los objetivos de la organización; pero también los individuos alcanzar los propios, es decir, la realización profesional.

El presente estudio tiene la finalidad de analizar las condiciones de motivación laboral que se presentan en la Comisión Nacional Forestal (CONAFOR) Región I de México (organismo descentralizado del orden federal del gobierno Mexicano) entre los colectivos de trabajadores con plaza definitiva y el colectivo de trabajadores por cuenta propia (por pago de honorarios), esto de acuerdo con lo establecido en la Teoría Bifactorial de Hezberg y mediante el diseño de un cuestionario aplicando la escala de Likert. Los resultados obtenidos fueron utilizados para diseñar un plan motivacional que permitiera incrementar el grado de involucramiento y compromiso por parte de los trabajadores por cuenta propia hacia la organización y, obtener de esa manera, mayores niveles de productividad.

PALABRAS CLAVE: motivación, organización, teoría bifactorial de Hezberg, productividad, escala de Likert.

INTRODUCCION

Motivar al personal es una entre tantas tareas que debieran cumplir las organizaciones y/o empresas de distinta índole, junto con potenciar el desarrollo de sus habilidades y la retroalimentación de su desempeño. ¿Pero por qué motivar al personal? La motivación es un proceso interno y propio de cada persona, que consiste en la ejecución de conductas hacia un propósito que la persona considera necesario y deseable, es un proceso producido por el resultado de una evaluación que el empleado realiza de una situación determinada, es por eso que es más fácil cuando la organización se preocupa por crear y mantener un ambiente sano y confortante para el trabajador, función importantísima de una organización, conocer a sus empleados, sus aspiraciones, deseos y necesidades.

El presente Plan ofrece el panorama que viven los empleados en Comisión Nacional Forestal y cuáles son los factores motivantes y que desmotivan a los empleados, enfocándose en la Teoría que maneja Hezberg (factores intrínsecos y extrínsecos) que son los factores más comunes y que deben satisfacer las expectativas de los empleados para el mejoramiento del desempeño de los trabajadores. Que los trabajadores estén motivados a trabajar en un ambiente limpio y seguro es uno de los desafíos de este Plan. No basta tener los procedimientos rudimentarios, sino lo que importa es hacer de esos procedimientos un estilo de vida en los trabajadores. La seguridad debe traducirse en prácticas y hábitos, debe ser incluso un valor en cada persona, pero *¿Cómo lograr esto?* A través del reforzamiento en las áreas de oportunidad en la Organización y la implementación de algunas recomendaciones que son de gran importancia para la motivación del trabajador. Hay que recordar que la motivación del trabajador es beneficiosa tanto para la organización como para él mismo, porque va a determinar el esfuerzo final del

empleado en la consecución de los objetivos de la organización, ya que cada trabajador debe ser capaz de trabajar con calidad y seguridad.

La investigación se realiza por la necesidad de hallar herramientas que permitan a los colaboradores de la Organización a sentirse a gusto en el desempeño de sus funciones e involucrados con ellas y con la Organización, se habla de la Motivación como un elemento multifacético y primordial para la Empresa, es por eso que la Propuesta de un Plan de Motivación es un signo de buena señal, ya que hay una preocupación por elevar el nivel de motivación en los empleados, es decir si se trabaja en todos los factores vistos en la investigación que se muestra se pueden tener resultados favorables para el incremento de un ambiente laboral sano.

Objetivo General

Realizar un análisis del actual nivel de motivación que se presenta entre los empleados de plaza presupuestal (empleado permanente) y por honorarios (empleado por cuenta propia) en la Comisión Nacional Forestal (CONAFOR) Gerencia Regional 1 y proponer un plan motivacional que permita incrementar los niveles de motivación y de esa manera, los trabajadores realicen sus actividades con una mejor disposición.

Objetivos Específicos

- Analizar las condiciones de motivación laboral que se presentan en la Comisión Nacional Forestal
- Determinar las fortalezas y debilidades que se presentan en el actual programa de motivación laboral, así como descubrir las áreas de oportunidad dentro del mismo; esto con el propósito de proponer acciones correctivas y preventivas orientadas al logro de mayores niveles de motivación laboral.
- Detectar los principales factores intrínsecos y extrínsecos de motivación existente entre los empleados de CONAFOR Mexicali.
- Desarrollar un plan de acción para incrementar los actuales niveles de motivación laboral para los trabajadores de plaza presupuestal y por honorarios.

HIPOTESIS

- La motivación del trabajador de CONAFOR Mexicali se debe principalmente a factores de carácter extrínsecos.
- La implementación de factores motivacionales de carácter intrínsecos no han sido prioritarios para la administración.
- El instrumento de motivación laboral más eficaz para el trabajador de CONAFOR, consiste en implementar una serie de reconocimientos por el esfuerzo que desempeña.
- Los trabajadores de plaza presupuestal cuentan con mayores niveles de motivación (tanto intrínseca como extrínseca) que los trabajadores que son contratados por honorarios.

REVISIÓN LITERARIA

Bruce, A y pepitone, J. (2002), visualizan a la motivación como los motores que mueven a las personas a hacer lo que hacen. Se parte de la idea de que se tienen muchos motores y que todas las personas están motivadas para realizar aquello que se cree que es lo más conveniente. Por su parte, Robbins, S. (2004) define la motivación como los procesos que dan cuenta de la intensidad, dirección y persistencia del esfuerzo de un individuo por conseguir una meta.

Los tres elementos que menciona Robbins son fundamentales para el estudio de la motivación en la Organización, por ejemplo, es cuanto se esfuerza un empleado enfocándose en una dirección que

beneficie a la Organización y por cuanto tiempo puede o logra la persona sostener este esfuerzo, por ello, un empleado motivado se aferra a una tarea con vehemencia para alcanzar las metas propuestas, en este logro se considera la calidad, el esfuerzo y la intensidad puesta en acción.

En el área laboral la motivación se considera como las actitudes que dirigen el comportamiento de una persona hacia el trabajo y lo apartan de la recreación y otras esferas de la vida. Un trabajador se sentirá motivado por su trabajo si el cumplimiento de la tarea que realiza se identifica con la satisfacción de sus necesidades.

La motivación se puede clasificar en: *Intrínseca y extrínseca.* La motivación *Intrínseca* esta dentro de nosotros, sentimos el deseo de hacer algo y actuamos de una manera determinada para conseguirlo (*Bruce, A. y Pepitone, J. 2002).* Es intrínseca, cuando la persona fija su interés por el estudio o trabajo, demostrando siempre superación y personalidad en la consecución de sus fines, sus aspiraciones y sus metas. Definida por el hecho de realizar una actividad por el placer y la satisfacción que uno experimenta mientras aprende, explora o trata de entender algo nuevo.

Vivimos en el mundo y por tanto todo lo que experimentamos nos afecta. Consecuentemente, nuestra motivación está afectada por factores externos. Estos factores pueden incluir retribución, reconocimiento, bonos, ascensos y alabanzas. En el trabajo, es magnífico que uno se ilusione con lo que se hace, pero si por el esfuerzo, no se recibe algún tipo de recompensa, lo más probable es que el individuo empiece a pensar si vale la pena dedicar tanto esfuerzo a esas actividades. A estos aspectos externos de la motivación se les conoce como actividades extrínsecas. *(Bruce, A. y Pepitone, J. 2002).* La motivación extrínseca pertenece a una amplia variedad de conductas las cuales son medios para llegar a un fin, y no el fin en sí mismas.

Hay tres tipos de motivación extrínseca:
1. *Regulación externa:* La conducta es regulada a través de medios externos tales como premios y castigos.
2. *Regulación introyectada*: El individuo comienza a internalizar las razones para sus acciones pero esta internalización no es verdaderamente autodeterminada, puesto que está limitada a la internalización de pasadas contingencias externas.
3. *Identificación:* Es la medida en que la conducta es juzgada importante para el individuo, especialmente lo que percibe como escogido por él mismo, entonces la internalización de motivos extrínsecos se regula a través de identificación.

Estos factores extrínsecos afectan la motivación intrínseca para hacer algo. Normalmente se hace referencia a los factores extrínsecos como fuerzas motivadoras, pero de hecho no es del todo correcto, Jueguen el papel que jueguen estos factores externos de la motivación, están siempre sujetos a preocupaciones individuales intrínsecas; es decir, se tienen que apoyar. Para ello, se tiene que hacer una conexión entre la motivación intrínseca y los estímulos externos. Sin esta conexión, los premios o recompensas no serán suficientes para motivar el alto rendimiento a largo plazo.

Teoría Bifactorial de Hezberg

Fue propuesta por el psicólogo Frederick Hezberg (1964), convencido de que la relación de un individuo con su trabajo es básica y de que su actitud hacia este bien puede determinar el éxito o el fracaso, ciertas características se relacionan constantemente con la satisfacción laboral y otras con la insatisfacción laboral.

La teoría de los dos factores afirma que los individuos poseen necesidades básicas que deben satisfacer, dos necesidades básicas o satisfactores: Motivadores, e Higiénicas, la satisfacción en el cargo es función

del contenido o de las actividades desafiantes y estimulantes del cargo: estos son los llamados factores motivadores. La insatisfacción en el cargo depende del ambiente, de la supervisión, de los colegas y del contexto general del cargo: Estos son los llamados factores higiénicos.

Los **Factores higiénicos** (extrínsecos) permiten que la persona no se sienta insatisfecha en su trabajo pero no implica que generaran la motivación necesaria para la consecución de los objetivos, como por ejemplo las condiciones de trabajo, la supervisión recibida, el salario.

Los **Factores Motivacionales (intrínsecas)** es la energía que da el impulso necesario para conducir a las personas a depositar sus fuerzas en la organización con el objeto de alcanzar los resultados por ejemplo el grado de responsabilidad, el reconocimiento, la posibilidad de progreso. En la vida de la organización la falta de cobertura de los factores higiénicos provocará la insatisfacción de sus miembros, impidiendo a los mismos permanecer en un estado de motivación debido a su preocupación por satisfacer necesidades de este tipo. Una vez satisfechas en forma mínima las necesidades higiénicas esto evitará que los miembros de la organización padezcan un estado de insatisfacción, pero no será suficiente para provocar una actitud motivante. Muchas personas consideran que lo opuesto a satisfacción es insatisfacción y viceversa. Sin embargo lo opuesto a satisfacción es ausencia de satisfacción y del mismo modo, lo opuesto a insatisfacción es ausencia de insatisfacción.

METODOLOGÍA

Diseño de la Investigación.

La presente investigación se basa en un diseño de carácter *no experimental*; es decir, lo que se lleva a cabo es solamente observar la situación ya existente, sin interferir ni manipularla de alguna manera, por lo que solo se analizan los aspectos motivacionales que presentan los encuestados y sobre los resultados obtenidos se realizan los análisis. Adicionalmente, dentro de los tipos de investigación no experimental, se seleccionó el de *corte transversal* o también conocido como *transeccional*, dado que la aplicación del cuestionario se realizó en una sola ocasión y fue para analizar la situación en un momento dado; por consiguiente, no se dio un seguimiento a los aspectos motivacionales tiempo después de la aplicación del mismo. Por último, la investigación lleva a cabo un análisis *correlacional*; es decir, se describen relaciones entre dos variables en un momento determinado, que en este caso, son las variables motivación y ambiente laboral, que a su vez son las posibles causantes de problemas de desmotivación, falta de rendimiento laboral, entre otros. Cabe aclarar que se establecieron dos grupos de encuestados y los resultados se analizan de manera independiente, para posteriormente, realizar asociaciones (correlación) de resultados entre dichos grupos y así, encontrar similitudes y diferencias en el comportamiento de ambos que permitan profundizar en las condiciones que experimentan dentro de CONAFOR.

Diseño del Instrumento.

Para la recolección de los datos, se diseñó un cuestionario el cual se basó en los argumentos teóricos de la teoría bifactorial de Herzberg, esto al estudiar los factores motivacionales de carácter intrínseco y extrínseco. Además, el cuestionario siguió los lineamientos establecidos por la metodología de la escala de Likert; es decir, se realizaron una serie de afirmaciones que deben ser contestadas en una escala de 5 posibles respuestas que va del "*completamente desacuerdo*" hasta el "*completamente de acuerdo*". Con ello, se obtienen datos de intervalo que permiten cuantificar las respuestas y con ello obtener resultados de carácter numérico que serán analizados posteriormente.

Población Objeto de Estudio y Tamaño de la Muestra.

La población objeto de estudio es el personal que actualmente trabaja por honorarios y personal de plaza presupuestal en CONAFOR sin importar su nivel de antigüedad. Dado que el número de personal adscrito a CONAFOR es muy pequeño, resulta estadísticamente insuficiente tomar una muestra de los 31 empleados, por lo que se debe aplicar el cuestionario a cada uno de los empleados que trabajan por honorarios y que son de plaza presupuestal.

Procesamiento de Datos.

Una vez que los cuestionarios fueron aplicados por completo, se procedió a realizar una base de datos con la finalidad de obtener los resultados que permitan analizar los niveles de motivación y las relaciones causales entre distintas variables.
Se diseñaron dos bases de datos (una para los empleados por honorarios y otra a los de plaza presupuestal), para ello, se utilizó el programa informático Excel de Microsoft. Posteriormente, se realizaron una serie de gráficos y con ello se procedió a la interpretación de la información.

RESULTADOS

El 55% de todos los trabajadores encuestados fueron del sexo masculino; por su parte, el 53% de los encuestados son solteros y el 47% casado. El rango de edad que predomina es el de 26 a 30 años con un 52%; por su parte, le sigue el rango entre 31 y 35 años con un 19% y los demas rangos varian entre un 10% y 3%. Con respecto a la antigüedad en el trabajo, casi la mitad de los empleados de CONAFOR tienen una antigüedad que oscila entre los 6 meses y los 2 años, lo que indica que el personal tiene relativamente poca experiencia y es además muy joven (52% entre los 26 y 30 años); por consiguiente, el ambiente tiende hacer más homogéneo que en otras dependencias del gobierno federal. Además, la mayoría de los empleados tienen grado de Licenciatura con un 74%, de ahí le siguen con grado de maestría el 13%, con nivel de especialidad y técnico solo un 7% y 6% respectivamente.

De acuerdo con la Figura 1, el personal considera que las condiciones físicas del trabajo en Comisión Nacional Forestal son buenas, pero no muestra un confort total hacia los empleados, ya que el porcentaje que predomina (36%) muestra una falta de conocimiento y desinterés en la cuestión a tratar.

Figura 1. Las Condiciones Físicas del trabajo, Oficina (Mobiliario), Cafetería, Ventilación, Luz, Salidas de Emergencia, Brindan Confort al Empleado.
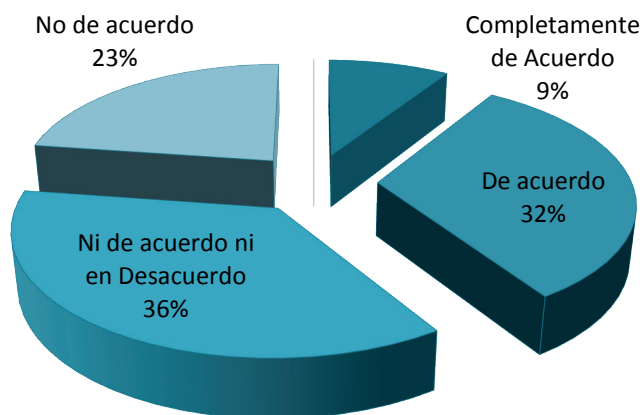
En cuanto al personal de honorarios en CONAFOR, hay un empate con el 36% entre los que no están de acuerdo y los que están en una posición intermedia en cuanto a la utilización de los procedimientos para

lograr obtener un ascenso dentro de la dependencia; probablemente como resultado del desinterés o falta de conocimiento por parte del personal de los procedimientos que se manejan dentro de la organización y la falta de promoción en los ascensos que se ofrecen en CONAFOR. A diferencia del personal con plaza presupuestal que tienen un porcentaje del 33% que respondió que está de acuerdo con los ascensos que se ofrecen; sin embargo, un 45% no se encuentra ni de acuerdo ni en desacuerdo, lo que permite intuir también la existencia de cierto grado de desinterés y falta de conocimiento en la cuestión a tratar. Ambos tipos de empleados están de acuerdo con la facilidad de poder aplicar sus habilidades en las actividades desarrolladas dentro de la organización, mostrando un porcentaje mayor al 50%.

En otro de los resultados de la encuesta, se detectó que el personal de honorarios tiene dos percepciones distintas de acuerdo al salario que perciben, ya que es muy poca la diferencia entre la aceptación y el descontento por parte del personal acerca del salario que reciben en relación a las actividades que realizan diariamente, en comparación con el personal de plaza presupuestal que muestra un alto índice en el descontento acerca del salario que se percibe, pero también muestra alto índice de respuesta neutral de algunos encuestados.

En la Figura 2 se observa que el personal de Honorarios muestra el índice más alto en estar de acuerdo en que si son reconocidos por parte del líder de la organización. No obstante, es muy poca la diferencia con la opción neutral (ni de acuerdo ni en desacuerdo). El comportamiento de este tipo de empleado es similar al de plaza presupuestal, ya que también muestra el índice más alto en el aceptar que si hay un reconocimiento por parte de líder de la Organización pero también va muy empatado con la neutralidad en algunos de los encuestados.

Figura 2. Recibe Reconocimiento por Parte del Líder (Jefe) a su Trabajo y Desempeño Laboral
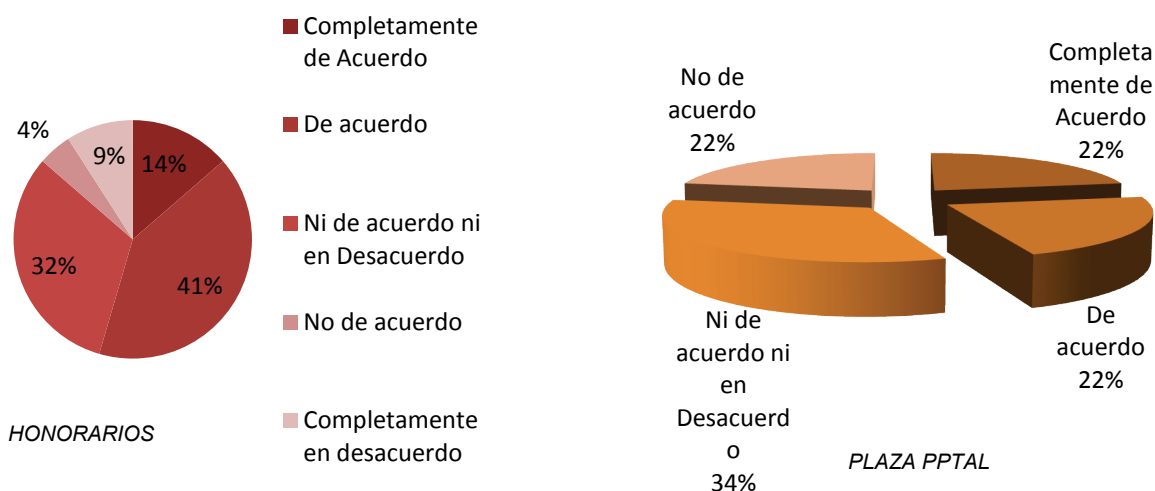
Entre los resultados que se obtuevieron se tiene que la mayoria de los empleados sienten seguridad para realizar su trabajo, mostrando que el 45% de la totalidad del personal de plaza presupuestal se sienten seguros, tambien muestra que en el personal de honorarios tiene un empate con una respuesta neutral, lo cual refleja una posicion ligeramente alejada con respecto de la seguridad que tiene el personal de plaza. Además, el personal de honorarios y de plaza presupuestal se sienten integrados en el equipo de trabajo en el que participan fomentando la convivencia en eventos festejados durante el año. Se observó también que en ambos tipos de trabajadores consideran que no existe mucha justicia en la asignación de las actividades y responsabilidades dentro de la organización.

Ambos tipos de trabajadores sienten que reciben una capacitación de calidad para poder responder a las necesidades de conocimiento en el puesto desempeñado, predominando con el 45% en el personal de honorarios y con el 34% el de estar de acuerdo que son capaces de responder a las necesidades de su puesto. Asimismo, se puede detectar que en el personal de plaza presupuestal un elevado índice (33%) responde con neutralidad a la afirmación realizada. Adicionalmente, se detectó que ambas partes no se sienten satisfechos con el pago que reciben en relacion a las responsabilidades que se les asignan, predominando el descontento en el personal de plaza presupuestal. En otro resultado, se observó que la relación de compañeros tanto en el personal de honorarios como en el de plaza presupuestal es buena, tornándose en un ambiente agradable predominando en un 45% y 56 % respectivamente. Además, se observó que la organización ha permitido tanto al personal de honorarios como al personal de plaza presupuestal desarrollar sus objetivos personales, predominado un 59% por parte del personal de horarios y un 45% del personal de plaza presupuestal.

Se detectó que en el personal de plaza presupuestal hay un gran descontento en cuanto al salario, prestaciones y compensaciones que reciben predominando con un 44%; por su parte, entre los empleados por honorarios se acentúa el mismo comportamiento con un 59%. En ambos casos existe una cantidad significativa de empleados que se mantienen en una posición neutral. También se observó que tanto el personal de honorarios como el de plaza presupuestal consideran que Comisión Nacional Forestal les ha permitido tener una mejor calidad de vida.

Se considera en la grafica 10 que más del (50%) en el personal de honorarios están de acuerdo que el desempeño que han tenido se ha visto beneficiado para poder lograr incrementar el nivel de puesto dentro de la Organización a comparación del personal de plaza presupuestal mas del (60%) que también aciertan que si se ha visto beneficiado su desempeño en la organización.

Figura 3. Mi Desempeño se ha Visto Beneficiado en Cuanto que he Logrado Incrementar mi Nivel Jerárquico en la Organización.

HONORARIOS

PLAZA PRESUPUESTAL
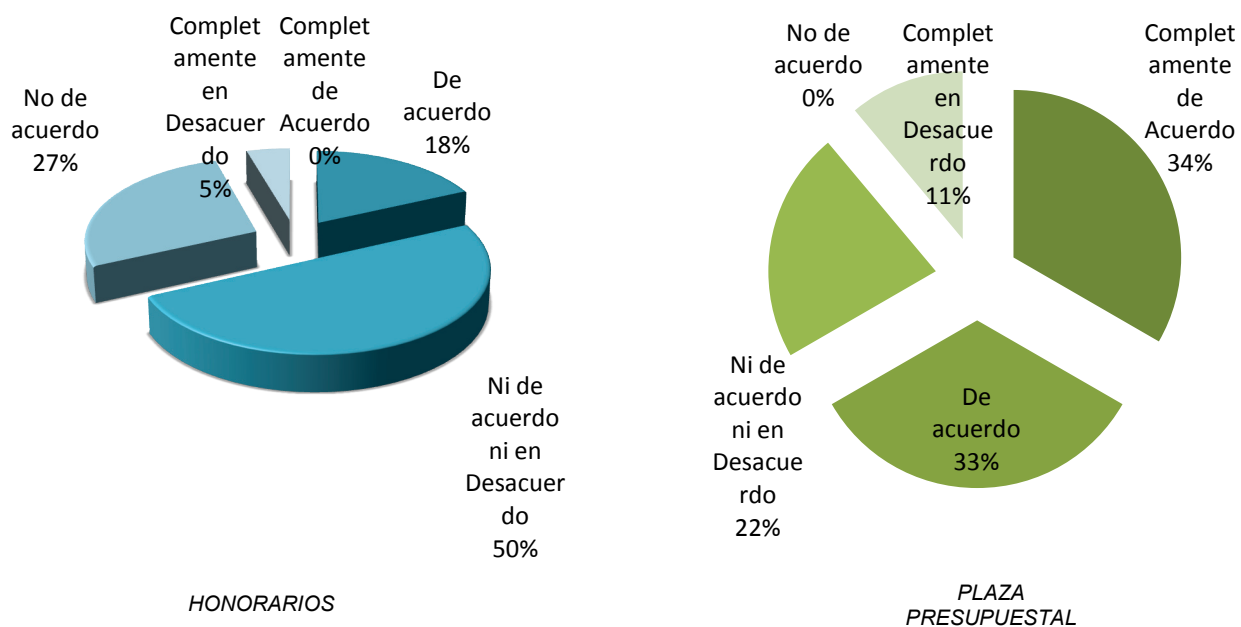
CONCLUSIONES

El diagnóstico aplicado a través de la Escala de Likert sirvió para detectar que factores intrínsecos y extrínsecos se presentan en los empleados de Comisión Nacional Forestal, tanto en el personal de Honorarios como el de Plaza Presupuestal, además de detectar ciertas áreas de oportunidad en las que se deben trabajar así como los elementos que fortalecen a la organización. Al analizar las encuestas se observó que los Factores Intrínsecos no muestran un alto índice de ausencia en los empleados y sobre todo en el personal de plaza presupuestal, ya que sus responsivas fueron positivas en cuanto a la satisfacción de estos factores. Analizando a los factores extrínsecos, se detecta una gran área de oportunidad en las cuestiones monetarias y de procedimientos en la organización, por lo que se ofrecen ciertas recomendaciones en el presente Plan para poder trabajar en este ámbito y ya no sea un elemento desmotivador en los empleados, es visto que no es muy bajo el nivel de motivación intrínseca, pero hay que tomar en cuenta que las respuestas no son totalmente verídicas ya que el comportamiento de algunos de los encuestados mostraron incertidumbre y el miedo a represalias por el líder de la organización, lo que puede ser otro punto débil para Comisión Nacional Forestal. La neutralidad en las respuestas comprueba la falta de conocimiento y/o de interés en temas elementales en el Ambiente Laboral, sobre todo en el personal de honorarios, ya que la mayoría de sus respuestas se mantuvieron al margen de la opinión por miedo a la inestabilidad que presentan sus condiciones laborales, otro de los puntos débiles en la organización. El presente Plan trabaja para el desarrollo de promociones y procedimientos que permitan ascensos en los departamentos de la organización que a su vez favorecería al personal de honorarios en oportunidades de vacantes de puestos que desempeñaban algunos de plaza presupuestal, se pudiera decir que la satisfacción en la calidad de compañerismo e integración de los empleados se encuentra en buenas condiciones pero lo que se consideraría una fortaleza en CONAFOR, pero eso no quiere decir que se cubra en la totalidad esta satisfacción por lo que este Plan pretende mejorar las condiciones de un ambiente laboral que brinde un confort al empleado y que al momento de aplicar otro diagnóstico las respuestas sean realmente satisfactorias tanto en el personal de honorarios como en el de plaza presupuestal.

RECOMENDACIONES

Las variables que intervienen en la realización de una tarea concreta y el entorno en que ésta se realiza, son determinantes para el trabajador, es por eso que este Plan Motivacional tiene como tarea recomendar la implementación de un Plan de Seguridad e Higiene en la oficina de Comisión Nacional Forestal, el cual debe ser promovido por el Departamento de Recursos Humanos a todo el personal de la organización. Esta medida tiene por objetivo que los empleados conozcan la importancia de contar con dicho plan y lograr que a mejores condiciones de seguridad e higiene, exista un incremento en la motivación del empleado y con ello un mayor grado de eficiencia en el trabajo. Estas medidas se desglosan de la siguiente manera:

Buena Iluminación, una iluminación pobre provoca que los empleados sientan fatiga visual, sueño, desconcentración, es por eso que la condiciones de las lámparas deben proporcionar la luz adecuada para que el empleado no sufra desconcentración al momento de realizar sus funciones.

Revisión de las condiciones termohigométricas (circunstancias del medio ambiente de trabajo,) la situación corporal es muy importante ya que si tu cuerpo esta desagusto por razones del ambiente, no te va a permitir trabajar al cien porciento porque es incomodo y frustrante en temperatura desagradables.

Carga Física (Postura de trabajo), el trabajo administrativo implica bastante concentración psicológica y física es por eso que no se le debe dar una enorme carga de trabajo a un solo empleado porque va a provocar en el enfado y tensión.
Carga Mental, la saturación de información puede llegar a ser una enorme carga mental es por eso que las funciones deben ser bien delimitadas en tiempo y forma que sean adecuadas al ritmo de trabajo del empleado.

Organización del Trabajo, el trabajar en un ambiente organizado limpio y en orden provoca un grado de satisfacción y comodidad.

Espacios reducidos de trabajo, el espacio donde se laboral debe ser adecuado ya que las instalaciones deben ser cómodas, refrescantes y que brinden un confort al empleado.
Almacenamientos inadecuados, siempre debe haber espacios como almacenes donde se puedan introducir y almacenar las cosas que no están ocupando en el momento para no saturar la oficina de cajas u otros materiales.

Falta de Orden de Limpieza, una oficina limpia y ordenada habla bien de la organización y sobre todo los empleados se sienten mas seguros y motivados a laborar.

Adicionalmente, al Plan de Seguridad e Higiene se recomiendan las siguientes medidas que permita incrementar el grado de motivación entre los empleados:

*Facilitar un puesto de trabajo cómodo que cuente con el espacio y herramientas necesarias para realizar su trabajo en orden, limpieza y tranquilidad.

*Ofrecer un lugar (cocineta) donde el empleado pueda tomar un café, guardar su refrigerio además de calentarlo en el horario de la comida.

*Brindarle al personal capacitaciones para el perfeccionamiento y mejoramiento de sus funciones.

*Confiar en la delegación de tareas de responsabilidad.

*Es importante que los jefes roten las funciones, realicen cambios de área, den responsabilidad y capaciten a los miembros de su personal para que puedan hallar el área más acorde a sus habilidades, en el cual puedan alcanzar mayores resultados y ascender en un mediano y largo plazo.

*Incorporar a la organización el escalafón profesional como parte del entorno laboral, para poder ofrecer al empleado la oportunidad de aprender habilidades nuevas y ascender a puestos superiores.

*Implementar lo que se llama desarrollo de personal (capacitación, sistema de retroalimentación efectiva, rotación de trabajo) para crear un entorno en el que se logre la cooperación, comunicación y un intercambio de ideas.

*Como pueden saber el salario no es un factor motivador (Extrínseco), mas sin embargo, influye en el pensamiento (Intrínseco) para motivar al empleado, es por eso que este Plan recomienda que se realice una descripción de puestos y a su vez una evaluación del desempeño para poder determinar la equidad entre el salario percibido y las funciones que se realizan.

*Programas de reconocimiento de la organización a los empleados (lo que se puede denominar un reconocimiento formal), o los informales por iniciativa del líder de la organización.

*Programa de recompensas que también son formales e informales pueden consistir en regalos o actividades, tomando en cuenta el esfuerzo y el tiempo del empleado, y deberán ser entregadas lo antes posible.

*Se puede realizar un colage de las fotos de lo empleados que participaron en algún proyecto importante para la empresa.

*Lugar especial del estacionamiento.

*Llamadas personales del Jefe del Departamento, del subdirector o director de la organización al empleado reconocido.

*Reconocimiento vía correo electrónico.

*Si el trabajador tiene hijos, sería importante que se le brinden facilidades en cuanto a sus horarios para que pueda acudir, por ejemplo, a las reuniones de padres o a las presentaciones escolares de su hijo. Luego, esas horas podrían ser recuperadas en cualquier otro día de la semana.

*Ofrecerles cursos o charlas a las esposas o padres del trabajador que impliquen temas de interés de la problemática actual.

* Asimismo, ofrecer actividades de vacaciones útiles para los niños y concursos de becas de estudios para los hijos de los trabajadores.
*Agradecimiento por parte del líder de la organización, una sincera palabra de agradecimiento en el momento preciso puede significar para un trabajador mucho más que un aumento de sueldo.
*Hacer ver al empleado la importancia de su trabajo, un trabajador tiene que captar que gracias a su trabajo la empresa esta logrando sus objetivos.
* Delegar responsabilidades, además de que la delegación es necesaria para la correcta gestión de una organización, los empleados trabajarán mejor si tienen autonomía, utilizan la creatividad de sus mentes y se sienten dueños y responsables de sus decisiones.
*Implementar la carrera profesional (promulgada por el gobierno federal desde el sexenio de Vicente Fox), los trabajadores necesitan sentir que evolucionan profesionalmente, que tienen una meta y que cada día avanzan en esa dirección.
*Eficientizar la comunicación en Comisión Nacional Forestal, los trabajadores tienen que recibir constantemente la comunicación necesaria de todo lo que acontece en la organización, sea bueno o malo, los resultados del ejercicio, las estrategias y planes de futuro, un trabajador debe conocer cuál es el futuro de la empresa y las decisiones importantes que se toman. De esta forma, se sentirá dentro de la organización, tendrá sentimiento de pertenencia.
*Programas de sugerencias y política de puertas abiertas, los trabajadores se sentirán motivados si perciben que se escuchan y valoran sus sugerencias. Mucho más si los directivos y responsables de procesos mantienen una política de puertas abiertas y el trabajador percibe un clima de comunicación abierta con sus superiores.
*Trabajar en el Ambiente laboral, un buen clima laboral favorece la integración de las personas en la organización y es una de las bases del éxito empresarial. El ambiente laboral comienza en el recibimiento grato en la empresa y la preocupación de la organización por el nuevo trabajador. Se alcanza cuando la persona trabaja en un entorno favorable propiciado por la calidad del líder, flexibilidad en reglas y procedimientos, grado de confianza, formación, comunicación ascendente y descendente, retribución justa, condiciones de trabajo adecuadas (salud laboral).
*Para poder trabajar en los actos no éticos en la empresa es recomendable impartir cursos de Código de Ética y valores así como un Plan de Incentivos que aliente al empleado a actuar con veracidad en las funciones diarias.

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COSTOS DE PRODUCCIÓN EN AGRONEGOCIOS

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RESUMEN

La apertura comercial, así como el proceso de globalización de las economías, han generado una gran cantidad de oportunidades para los distintos sectores productivos a nivel mundial; ofreciéndoles la posibilidad de participar en el dinámico y creciente mundo del comercio internacional. Si bien los mercados importadores se han vuelto en general más exigentes para cualquier tipo de producto que demandan, existen algunos bienes que por su naturaleza requieren cumplir con mayores requisitos. Este es el caso de los alimentos destinado para el consumo humano. Las exportaciones de alimentos procesados, entre los que se cuentan los obtenidos de la industria alimentaria, han registrado las mayores demandas a nivel mundial en los últimos años. La globalización, la innovación tecnológica, la competencia mundial; resaltan la necesidad de industrializar ésta actividad, para aprovechar al máximo las propiedades de éstos alimentos; mantener el valor justo de los mismos y, obtener productos con una mayor vida de anaquel; de fácil manejo y operación, que puedan ser consumidos en forma directa; o bien, servir como base o ingredientes en la elaboración de otros productos.

PALABRAS CLAVES: Costos de producción, industria alimentaria, competitividad, exportaciones, mercados globales

INTRODUCCIÓN

El crecimiento de los mercados y el comercio internacional, han impulsado numerosos cambios en el ambiente de los negocios contemporáneo. Las crecientes presiones de la competencia mundial; la innovación tecnológica, el comercio electrónico (e-commerce) y los cambios en los procesos de negocios, originados principalmente por el fenómeno de la globalización, han orientado a la administración de los costos hacia un enfoque estratégico más amplio, crucial y dinámico. Las alianzas comerciales entre los diversos países se han vuelto más exigentes en cuanto a los requisitos de importación para cualquier tipo de producto. Ciertos bienes por su naturaleza, requieren cumplir con más condiciones; como es el caso de los alimentos procesados: son productos naturales a los que después de su recolección, se les somete a un proceso de transformación o manufactura, que permitan su conservación y preservación para transformarlo en un producto de consumo humano.

"El Estado de Baja California México, cuenta con 7'011,300 Has., de las cuales son cultivables un promedio de 430,000 Has. De este total, 30,000 Has. Corresponden al cultivo de hortalizas; el resto cultiva trigo, algodón, uva entre otros. Estos productos constituyen una importante fuente de ingresos para la región por su comercialización principalmente con los Estados Unidos de Norteamérica. Pero, no todo el cultivo y recolección de hortalizas, frutas, legumbres, reúne las especificaciones impuestas por los mercados nacional e internacional para su exportación, tales como: madurez, tamaño, color, forma; por lo que no toda la producción puede ser comercializada, y queda para consumo interno. Aunadas a las limitantes anteriores, está la reducida vida de anaquel, la fragilidad del producto, el elevado costo del transporte y el desconocimiento de los costos de transformación; lo que impide conocer oportunamente sobre la rentabilidad de los productos". SAGARPA.- Secretaría de Agricultura, Ganadería y Desarrollo Rural, Pesca y Alimentación (México 2009). Los pequeños y medianos horticultores de Baja California, comercializan su producción de manera directa – es decir sin someterlos a un proceso de transformación

para obtener alimentos procesados -. Instituciones del Gobierno Federal como: SAGARPA.- Secretaria de Agricultura, Ganadería y Desarrollo Rural, Pesca y Alimentación. El Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias, y el Banco Nacional de Comercio Exterior (BANCOMEXT) entre otros, prestan apoyo técnico en cuanto a proveer de tecnología de punta, y reingeniería de procesos para la industrialización de las hortalizas, frutas y cereales, para obtener productos de diferente capacidad, presentación y calidad; promocionar los productos mexicanos en el extranjero, apoyo a la exportación así como capacitación contable para el diseño y aplicación de los nuevos sistemas de costeo, para conocer oportunamente los costos unitarios de producción; el costo de venta y las utilidades; fijar precios de venta competitivos y poder acceder a mercados globales.

OBJETIVO

La mayor parte de la hortaliza y fruta fresca en Baja California, han tenido un repunte considerable en la producción y exportación en los últimos años; y han registrado las mayores demandas a nivel mundial. La globalización, la innovación tecnológica, la competencia mundial, los diversos acuerdos comerciales internacionales con diversos países, resaltan la necesidad de **industrializar** ésta actividad, para aprovechar al máximo las propiedades de éstos alimentos mexicanos; procesarlos para diversificar su producción; mantener el valor justo de los mismos, y obtener   productos con una mayor vida de anaquel; de fácil manejo y operación, o bien, transformarlos en materia prima básica o como ingredientes en la elaboración de otros productos; y así, tener acceso a los mercados internacionales.

Un método científico para la aplicación y distribución de costos a la producción múltiple (diversos productos), es la aplicación de "cédulas contenido teórico por unidad". Dichas cédulas, deben ser elaboradas por los técnicos de la producción; y se refieren a la estimación de la cantidad de   materia prima básica que teóricamente   contiene cada unidad de los diferentes tipos de productos que se manufacturan - considerando que se presentan en distinto tipo de envase en cuanto a forma, material y capacidad -. Así mismo, la estimación del tiempo (horas, minutos) que teóricamente requiere la elaboración de una unidad de las diferentes líneas de artículos. El principal problema que enfrentan estos procesos de transformación, lo constituye la aplicación del tercer elemento del costo: los cargos indirectos. De la adecuada aplicación de éste concepto, dependerá la integración correcta del costo unitario de producción: para valuar inventarios, obtener costo de ventas correcto, fijar precios de venta competitivos y, llevar a cabo la planeación estratégica para tomar decisiones adecuadas.   Las "cédulas de contenido teórico" mientras sean revisadas y actualizadas periódicamente, sobre todo cuando se introduzcan nuevos modelos, o cambios en los ya existentes, así como las bases de asignación de los cargos indirectos, se considerarán suficientemente razonables; tomando en cuenta que es un problema de difícil solución en   estos casos de determinación de los costos, cuando los productos adquieren ésta diversificación en cuanto a su presentación final.

METODOLOGÍA

La presente investigación sobre superficie cultivable y la estadística relativa a los principales cultivos de hortalizas en Baja California México, se obtuvieron de datos publicados por SAGARPA. Sistema de Información Agropecuaria de Consulta; de la Delegación Estatal de Baja California. SEDECO.- Secretaría de Desarrollo Económico del Estado de Baja California. INEGI.- Instituto Nacional de Estadística, Geografía e Informática. Sistema de Cuentas Nacionales de los Estados Unidos Mexicanos; y publicaciones en revistas de circulación nacional como El Economista. Los procesos de transformación para industrias que elaboran productos procesados de frutas y hortalizas, se obtuvieron de los Proyectos de Investigación de (BANCOMEXT), para la industrialización y exportación del mango. El esquema de producción y las cédulas, son aportación personal para el diseño de sistemas contables que faciliten la obtención oportuna y veraz de los costos unitarios de producción; el costo de las ventas y las utilidades; y llevar a cabo la planeación estratégica para la toma de decisiones.

RESULTADOS

La acumulación de los costos de producción a través de varios procesos, hasta llegar al último (envase, o empaque), y su aplicación a los diversos tipos de artículos en base a las "cédulas de contenido teórico" mencionadas, se muestra en el siguiente esquema (mostrándose sólo algunos de los procesos) relativo a una industria procesadora de alimentos que elabora diferentes líneas de productos. Figura 1.

Figura 1**: E**laboración propia: Esquema de Producción en la Industria de Alimentos Procesados
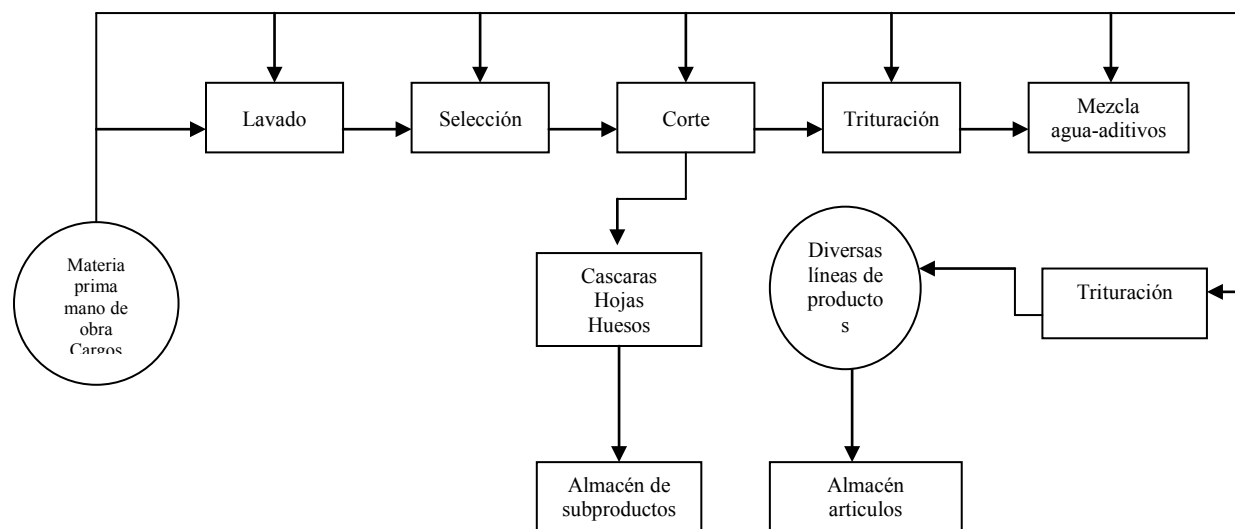
La fiura 1 muestra proceso que sigue la materia prima antes de ser envasada para su consumo.

En éste esquema podemos observar algunas de las operaciones por las que pasa una materia prima hasta llegar al proceso de envase; tratándose específicamente del la elaboración de alimentos procesados. Algunos de estos procesos de manufactura también se aplican cuando se trata de obtener insumos o sustancias básicas de éste tipo de alimentos, que sirvan para la elaboración de nuevos productos. A continuación se explican someramente los procesos más importantes:

La operación de corte permite separar la parte central de la hortaliza o la legumbre, de la raíz o de las hojas; en el caso de las frutas, en esta operación, se desprende la pulpa del hueso y de la cáscara; generalmente éste proceso se lleva a cabo en dos etapas, una gruesa (despulpado) y una fina (refinación); en la primera se separa la pulpa del hueso y de la cáscara; mientras que en la segunda se desprenden partículas finas, fibras, y otras materias que puedan quedar adheridas a la pulpa. Derivado de este proceso, se obtiene lo que se considera como sub-producto: hojas, raíces, cáscaras, fibras, huesos. La cáscara de ciertas frutas se pueden vender para producir dulce cristalizado; otros subproductos, como alimento para el ganado.

En el proceso mezcla de agua con aditivos, se incluyen los aditivos que pueden recibir los ingredientes básicos (frutas y hortalizas) que se están procesando, para su preservación al convertirlos en productos de consumo. Pero, dependiendo del tipo de artículo, clase de envase y mercado al cual esta destinado para su venta, las mezclas, conservadores, preservativos y edulcorantes, pueden ser principalmente: jarabe de glucosa, sacarosa, azúcar, almidón, dextrosa. Y, ciertos ácidos como: sodio,   potasio entre otros.

La última de las operaciones envase - empaque y etiquetado, consiste en envasar o empacar cada línea de productos y adherir el código de barras, y la etiqueta que contiene los datos sobre las características generales del producto como: lista de ingredientes, contenido nutricional, fecha de vencimiento y cualquier otra información sobre nutrición de acuerdo a las disposiciones de la Secretaría de Salubridad y Asistencia para la presentación final del producto. Otros procesos de transformación, pueden ser: pasteurización y esterilización, deshidratación, enfriamiento, congelamiento o escaldado. Estos pueden variar de acuerdo al tipo de producto: jugo, puré, refresco, mermelada, rebanada, polvos, ensalada, verduras mixtas, verduras cocidas, pre-cocidas etcétera; y según la capacidad y tipo de envase: vidrio, plástico, lata, aluminio, cartón entre otros, y el mercado al cual va dirigido.

CONCLUSIONES

Las empresas que industrializan sus materias primas básicas (fruta fresca, hortaliza, cereales Etc.), para la obtención de alimentos procesados con tendencia a la exportación, deben diseñar y aplicar sistemas de costeo adecuados, que les permitan conocer oportunamente los costos unitarios de los diversos productos, para valuar correctamente los inventarios, el costo de las ventas y las utilidades; medir el desempeño de los administradores y de los responsables de los procesos productivos; llevar a cabo la planeación estratégica para incrementar la productividad, la calidad y la competitividad

En la actualidad, las empresas que quieren exportar necesitan conocer no sólo en que mercados pueden vender sus productos, sino también los costos de producción, operación y comercialización de las diferentes líneas de artículos que quieran colocar tanto en el mercado nacional como internacional; que nos permitan obtener información relevante sobre los costos unitarios; para fijar precios de venta al exterior, elevar nuestra cultura de comercio internacional, incrementar la productividad, la calidad y la competitividad de los productos mexicanos.

Las "Cédulas de contenido teórico por unidad" se deben elaborar en base a estudios científicos sobre la cantidad y calidad de materiales que teóricamente requiere cada unidad de producto; aplicar análisis de tiempos y movimientos para determinar el tiempo necesario en la elaboración de cada producto. Los cargos indirectos calcularse en base a presupuestos de producción y de operación. Un sistema de costos estándar es recomendable para facilitar la obtención de las cédulas correspondientes.

En nuestro país, las pequeñas y medianas empresas alimentarias, que deseen industrializar su producción para obtener alimentos procesados con fines de exportación, cuentan con asistencia técnica por parte del Gobierno Federal y de los Gobiernos de los Estados. Estas entidades federativas prestan apoyos a la pequeña y mediana empresa para la industrialización de sus productos; que les permiten adoptar tecnología de punta; perfeccionar la distribución de la planta; rediseñar productos y empaques; automatizar los procesos productivos; diseñar y aplicar sistemas de costeo adecuados; capacitación de personal Etc., Así como orientación sobre las condiciones y requisitos que deben cumplir para la exportación de sus productos.

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CENTRO DE INNOVACIÓN TECNOLÓGICA Y DESARROLLO INDUSTRIAL

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RESUMEN

Las tecnologías de la información cada día forman parte esencial en la mayoría de las actividades del ser humano. Hemos sido testigos de la rapidez con la cual estas tecnologías han avanzado demostrándose con hechos y resultados lo importante que son para todos en la actualidad.

Estos avances han facilitado y agilizado dentro de las organizaciones sus procesos buscando reducir sus costos de producción de bienes y servicios e incrementar su nivel de competitividad en el mercado.

Esto, no solo ha afectado a las organizaciones, también a las Instituciones de enseñanza a nivel superior, las obliga a mantener actualizado los programas educativos que imparten, a tener académicos vanguardistas y alumnos que al término de su carrera logren un nivel de competencia que les permita desenvolverse en el mundo laboral de una manera rápida y eficiente.

Para mantener estos niveles competitivos, las empresas y las instituciones de nivel superior se conjugan para crear centros de innovación tecnológica buscando la atracción de empresas transnacionales.

PALABRAS CLAVES: Tecnologías de la información, competitividad, vinculación, innovación tecnológica, parques tecnológicos

INTRODUCCIÓN

A lo largo de la historia hemos visto como la tecnología cada día forma parte esencial en la mayoría de las actividades del ser humano. De igual manera hemos sido testigos de la rapidez con la cual estas tecnologías han avanzado. Estas avances tecnológicos nos demuestran con hechos y resultados lo importante que son para todos en la actualidad. Un factor que ha sido relevante en estos avances tecnológicos ha sido el software, ya que ha facilitado y agilizado varios procesos que ya se manejaban con anterioridad, además de convertirse en una característica primordial que deben tener las organizaciones para poder convertirse en una de las mejores a nivel mundial.

Hoy en día la mayoría de las organizaciones buscan a través de la tecnología reducir costos de producción de bienes y servicios e incrementar su nivel de competitividad en el mercado. Estos avances no solo afectan de manera positiva a las organizaciones, también a las Instituciones de enseñanza de nivel superior, como lo es la Facultad de Ciencias Administrativas de la UABC, las obliga a mantener actualizados los programas educativos que imparten, a tener académicos que estén a la vanguardia y alumnos que al término de su carrera logren un nivel de competencia que les permita desenvolverse en el mundo laboral de una manera rápida y eficiente.

El desarrollo de esta investigación se centra en generar una propuesta basada en los factores que determinan la vinculación de las Universidades con el sector empresarial para la creación de un centro de desarrollo de Tecnologías de la Información (TI) dentro de la Facultad de Ciencias Administrativas (FCA) de la Universidad Autónoma de Baja California (UABC). Dentro de la FCA surge la necesidad de desarrollar software propio que ayude a agilizar sus procesos internos; para ello se estudiaron los avances logrados en México y en otros países en relación a los centros o parques tecnológicos ligados a Universidades. Cabe mencionar que el concepto de parque o centro tecnológico no es nuevo en nuestro

país, más sin embargo, el desarrollo de software y tecnología son puntos a los cuales no se les ha puesto mucha atención, de igual manera existen otros factores que impiden este crecimiento, entre estos; la carencia de mano de obra calificada, gestión empresarial inadecuada y las barreras de acceso a nuevas tecnologías por falta de información y recursos económicos, entre otros.; razones importantes para realizar este estudio, que a través de la metodología de un plan de negocios propone la creación de un centro de desarrollo de TI dentro de la FCA. Este centro buscará ofrecer no solo a la comunidad universitaria sino a la sociedad en general a un nuevo proveedor de desarrollo de software y lograr con esto una ventaja competitiva y estar a la altura de las Universidades que ya cuentan con un centro de desarrollo de software así como el crear conciencia de la importancia que tiene la educación formal para poder cumplir con las exigencias del mercado actual de formar estudiantes mejor preparados, que tengan la capacidad de adaptarse a un entorno cambiante y hacer frente a los retos del futuro.   Por lo anterior, se busca fomentar el crecimiento económico de la Facultad al obtener ingresos de cada uno de los desarrollos que logre hacer; de igual manera logra dar la experiencia laboral necesaria a cada uno de sus integrantes a través de las capacitaciones y cursos que se otorguen a través del mismo, así como también incrementar el nivel académico de sus estudiantes y de sus docentes.

REVISIÓN LITERARIA

Varios años han pasado desde que en 1951 Frederick Terman, impulsó la creación del primer parque tecnológico universitario del mundo conocido actualmente como "Stanford Research Park", sin sospechar que su esfuerzo daría origen al "Silicon Valley" corazón tecnológico del planeta e ícono de la innovación y el desarrollo tecnológico a nivel global.

Desde entonces, más de 50 países han seguido el ejemplo dado por Terman y creado parques o centros de desarrollo tecnológico en todas las latitudes para fortalecer sus sistemas locales de innovación a través del desarrollo de "clusters".

Actualmente en Estados Unidos y Canadá existen más de 130 parques vinculados a universidades; China, Corea, India, Malasia, Marruecos, Brasil y muchos otros países en desarrollo no se han quedado atrás y han desarrollado en la última década algunos de los parques científicos y tecnológicos más avanzados como "IMEC City" en Hyderabad, India; "Casablanca Technopark" en Marruecos y el "Technology Park Malasya".
El impacto positivo generado por la interacción, en un mismo espacio geográfico, de empresas, universidades, centros de investigación y desarrollo, agentes financieros, incubadoras y agencias gubernamentales, difícilmente puede ser igualado por otras políticas públicas de fomento a la innovación y el desarrollo tecnológico.

Alfred R. Berkeley III en un artículo habla del impacto que tienen las universidades tecnológicas en la economía de los países, especialmente Estados Unidos. El dice que la tecnología es uno de los pistones más importantes en el crecimiento económico de un país mejorando la calidad de vida (Berkeley, 2005, p. 217)

Aunque éste modelo lleva más de 20 años en otros países, México, como muchos otros países con economías emergentes, tiene políticas para impulsar el desarrollo económico promoviendo las tecnologías de la información. La visión fundamental es reproducir al Silicon Valley, o lo acontecido en los últimos años en la India con el desarrollo de software. Existen varios casos exitosos en el mundo y aunque difieren en sus antecedentes socioeconómicos y políticos, coinciden en que se gestan alrededor de un núcleo académico sólido que impulsa la innovación a través de la libre circulación de una gran cantidad de ideas y la generación espontánea de núcleos emprendedores: en el Valle de San José fueron las universidades de California y Standford; en la India, el Sistema Estatal de Institutos Tecnológicos. Hoy en día se puede apreciar el gran crecimiento económico que empieza a tener nuestro país gracias a la

generación de empleos que estos centros de desarrollo tecnológico crean. Se espera que para el año 2040 México sea una de las cinco economías más grandes del mundo logrando ser un país competitivo. Esto gracias al potencial de recursos tanto naturales como humano con el que contamos lo que hace factible que esta meta se pueda cumplir (Presidencia de la República, 2007, p. 2)

Pese a la falta de una política federal que impulse el desarrollo de una economía basada en el conocimiento, en México los proyectos de creación de parque o centros tecnológicos dan sus primeros pasos en algunos estados del país, aunque aún como esfuerzos aislados y apoyados solo por un gobierno municipal o estatal.

La creación o instalación de estos parques o centros tecnológicos va a depender de las características naturales de cada región, es decir, va a depender su economía, aspectos demográficos, políticos y sociales; y en base a esto se pueden dividir en cuatro tipos o modelos. Estos modelos se describen en la tabla 1 que se muestra a continuación.

Tabla 1. Modelos de parques o centros de desarrollo tecnológico

Modelo I: Para el empleo de alto valor	Albergan empresas que buscan recurso humano para actividades de alto valor. Sus actividades no involucran ciencia e investigación. Son un buen medio para proveer talento a empresas en un ambiente cercano a la universidad. La retroalimentación por parte de estas empresas hacia la universidad es muy importante, ya que de esta manera ayudan a mejorar el modelo educativo y con esto enriquecer el perfil del egresado.
Modelo II: Para la atracción y desarrollo de empresas	Son combinaciones de incubadoras de alta tecnología, además que sirven de puente para que compañías foráneas que deseen operar dentro de la región lo hagan. Este modelo solicita los servicios de consultoría, administración de redes a las universidades.
Modelo III. Para las empresas con actividades científicas.	Cuenta con características similares a las del modelo II, solo que además incluye laboratorios especializados con el fin de satisfacer las necesidades de las compañías. En este modelo entran las compañías que se dedican a estudios de biotecnología o nanotecnología.
Modelo IV. Regionales de varios patrocinadores.	Este modelo es el más difundido en el mundo. Su infraestructura es muy parecida a la de un campus universitario, en el cual se encuentran empresas, universidades y diferentes servicios, todos compartiendo espacios y promoviendo las relaciones. Son proyectos regionales financiados por los gobiernos debido a su gran costo y alcance.

Los parques o centros ofrecen una gama de servicios a las empresas; entre estos servicios están en la Tabla 2.

La Secretaría de Economía en el marco del Programa para el Desarrollo de la Industria del Software (PROSOFT), que tiene como objetivo principal posicionar a México como un jugador global en la Industria de Tecnologías de Información y servicios relacionados, incluye en su plan de acción estratégico el desarrollo de agrupamientos empresariales, que permitan motivar las sinergias y estrategias de los principales actores de la industria (oferentes y demandantes de TI, academia y gobierno).

Los parques tecnológicos son agrupamientos empresariales que comparten un espacio físico, fomentando las relaciones formales, operativas y el incremento de la innovación y competitividad entre universidades, centros de investigación y empresas del Sector de Tecnologías de Información. Como se lista en el siguiente cuadro, se tienen identificados seis parques tecnológicos en la República Mexicana, los cuáles se han desarrollado en diferentes etapas.
Tabla 2. Servicios que ofrecen los parques o centros a las empresas

Landing	Ayudar a las empresas a establecerse en la región de un modo organizado, seguro y ágil, ofreciéndoles a las empresas servicios y un ambiente que reduce de manera significativa el riesgo de una mala experiencia en su ingreso a la región. Otros de los servicios son localizarles recurso humano adecuado, asesorarlos en aspectos legales y laborales.
Incubación	Permitir que las empresas en formación se fortalezcan y reduzcan riesgos de fracaso. Ofrece un ambiente que estimula a las empresas a crear con un alto nivel de innovación agilizando la comercialización de estas nuevas tecnologías.
Aceleración	Además de ofrecerle a las empresas espacio físico, el parque les da el ambiente apropiado para asegurar que el modelo funcione de forma adecuada.
Desarrollo tecnológico	El elevado costo de investigar y de desarrollar tecnologías nuevas hace que las empresas busquen otras alternativas para obtener conocimiento. Por otro lado las universidades buscan acercar su talento, sus investigaciones, sus laboratorios a las empresas. Todo esto es posible a través de los parques o centros tecnológicos quienes ponen al alcance de las empresas estos servicios de apoyo a su crecimiento.

Tabla 3: Parques tecnológicos en México

Nombre	Estado	Ciudad
Parque industrial Tecno polo Pocitos de Aguascalientes	Aguascalientes	Aguascalientes
Parque Científico - Tecnológico Silicon Border	Baja California	Mexicali
Tecno polis Esmeralda Bicentenario	Estado de México	Atizapán
Parque de Software en Ciudad Guzmán	Jalisco	Ciudad Guzmán, Zapotlán el Grande
Parque de investigación e Innovación tecnológica	Nuevo León	Apodaca
Parque tecnológico de Ciudad Obregón	Sonora	Ciudad Obregón

Fuente: Secretaría de Economía

Es importante resaltar que a su vez existen agrupamientos empresariales, que dadas sus características de infraestructura y congregación empresarial, mantienen vínculos estratégicos y actividades que fomentan la creación tecnológica en nuestro país y en un futuro su desarrollo promoverá la creación de nuevos parques tecnológicos.

Tabla 4. Agrupamientos Empresariales

Nombre	Estado	Ciudad
Esquema de parques tecnológicos en las universidades	Sinaloa	Mazatlán / Culiacán
PROSOFTWARE	Distrito Federal	Distrito Federal - Industrial Vallejo
Centro del Software	Jalisco	Guadalajara
Consejo de la Industria de la tecnología de la Información de Yucatán A.C.	Yucatán	Mérida
Parque tecnológico Milenio Ferrería	Distrito Federal	Distrito Federal

Fuente: Secretaría de Economía
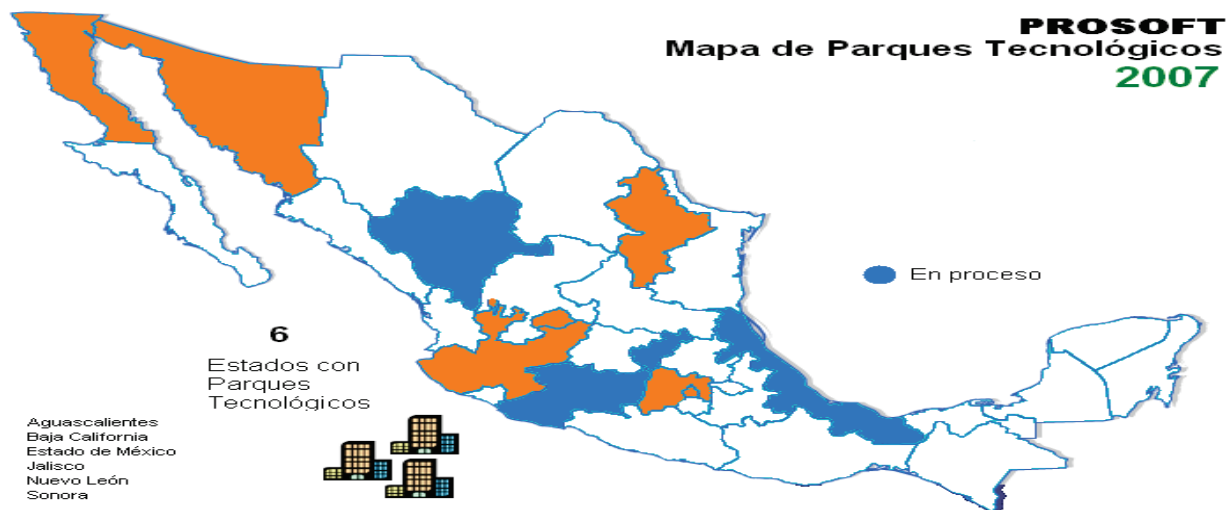
El fondo PROSOFT, que tiene el objetivo de apoyar a proyectos que fomenten la creación, desarrollo, consolidación, viabilidad, productividad, competitividad y sustentabilidad de las empresas del sector de Tecnologías de Información, así como fomentar su uso en los sectores económicos del país, ha apoyado la creación y consolidación, así como las iniciativas para el desarrollo de parques tecnológicos de los cuáles desde 2004 a 2006 han detonado una inversión total de 227 millones de pesos, donde la Secretaría de Economía ha aportado más del 36% por medio del dicho fondo. Durante el ejercicio fiscal de 2007 al mes de noviembre el PROSOFT ha detonado más de 25 millones de pesos para impulsar proyectos de parques tecnológicos que incluyen equipamiento tecnológico, habilitación de espacios, consultoría y asesoría especializada. Estos proyectos han impulsado la creación de 144 empleos.

Tabla 5 Indicadores Que Precisan las Dimensiones de los Parques Así Como su Estatus de Desarrollo Actual

Nombre	Estado	Ciudad	Vocación	Actores	**Capacidad de TI potencial**		**Ocupación Actual**	
					# empresas	# Empl	# empresas	# Empl
Parque industrial Tecno polo Pocitos de Aguascalientes	Aguascalientes	Aguascalientes	TI-Software Call Centers	IP + Academia+ Centros de Investigación	10	2000	4	1000
Parque Científico - Tecnológico Silicon Border	Baja California	Mexicali	Ti, energía renovable y microelectrónica	IP + Academia+ Centros de Investigación	100	70-100 mil	5	10000
Parque de Software en Ciudad Guzmán	Jalisco	Cd.Guzmán Zapotlán El Grande	TI-Software Call Centers y BPO	IP + Academia+ Centros de Investigación	n/a	120	n/a	n/a
Parque de investigación e Innovación tecnológica	Nuevo León	Apodaca	TIC biotecnología, nanotecnología,me catrónica y salud	IP + Academia+ Centros de Investigación	50	5000	43	2380
Parque tecnológico de Ciudad Obregón	Sonora	Cd. Obregón	TI	IP	n/a	3300	n/a	400-500
Tecno polis Esmeralda Bicentenario	Edo. de México	Atizapán de Zaragoza	Tics	IP+Academia	n/a	n/a	n/a	n/a

* Presenta el Estatus actual de desarrollo del Parque
NOTA: IP significa Industria Privada, TI significa Tecnologías de Información
Fuente: Secretaría de Economía, PROSOFT 2007.

Según esta información en la ciudad de Mexicali, se encuentra en desarrollo un parque o centro de desarrollo tecnológico el Silicon Border (frontera del silicio) lo que nos permite pensar a un mediano plazo la posibilidad de formar parte de él como Facultad de Ciencias Administrativas UABC-Mexicali.

METODOLOGÍA

Para desarrollar este plan de negocios se hizo un estudio en base a la situación actual que vive el desarrollo de software y tecnología en México. Esta información se obtuvo de internet, libros y artículos. Se consideró la opinión de los estudiantes de la UABC, directamente en la Facultad de Ciencias Administrativas. Para sacar la muestra solo se consideraron a alumnos de la carrera de Licenciado en Informática la cual cuenta con 400 (UABC, cgs 2008) alumnos vigentes. Se tomó como muestra una población de 240 alumnos considerando que ya cuentan con los conocimientos necesarios para trabajar con el desarrollo de tecnologías de la información; esto gracias a que ya llevan cursado asignaturas que se relacionan con el análisis y diseño de sistemas, desarrollo de software, bases de datos, entre otras, encontrándose en las etapas disciplinaria y terminal a quienes se les aplicó un instrumento de 9 preguntas (anexo), cuyo objetivo fue encontrar las habilidades y fortalezas de cada uno de ellos para lograr un mayor éxito en el centro.

Para esto se siguieren las siguientes actividades:

- Se estudio a detalle los requerimientos que la Facultad de Ciencias Administrativas tiene en cuanto al desarrollo de tecnología.
- Se utilización el Microsoft Project 2003 para planear cada una de las actividades a realizar.
- Se diseñaron las encuestas necesarias para obtener información por parte de los alumnos y maestros.
- Se utilizo el software SPSS para realizar estimaciones estadísticas del proyecto
- Se analizó la información recabada para verificar la factibilidad de crear un centro de desarrollo Tecnología de Información.
- Se elaboro una propuesta basada en los resultados obtenidos del análisis.

RESULTADOS

Como bien se vio en esta investigación, México, quiere convertirse en un país detonante y competitivo en el área del desarrollo de software y en este caminar, la Facultad de Ciencias Administrativas quiere poner su granito de arena empezando por crear un centro de desarrollo de software que sea capaz de solventar, en un primer lugar, las necesidades de la misma facultad, sin dejar de pensar que a un mediano plazo el centro sea capaz de convertirse en un proveedor de software para la UABC como Institución y en un plazo un poco más largo cumplir con la demanda externa de las pequeñas y medianas empresas con la mira de que la FCA pueda ser parte del parque tecnológico que actualmente esta en desarrollo en la ciudad de Mexicali: Silicon Border (Frontera del Silicio)

Resultado de todo lo anterior tenemos la creación de una propuesta para implementar un centro de TI dentro de la Facultad de Ciencias Administrativas la cual está basada en las necesidades que otros centros de desarrollo de software han requerido. Tiene como misión estratégica mejorar los servicios ofrecidos a la comunidad estudiantil de la Facultad de Ciencias administrativas a través de las Tecnologías de la Información; esto mediante el desarrollo de productos de software buscando siempre dar una respuesta eficaz y eficiente a las solicitudes o peticiones de los clientes en este caso los alumnos y así elevar la calidad del servicio; como visión estratégica desarrollar productos de software de calidad dirigidos a cualquier sector empresarial buscando ser un centro de desarrollo académico de excelencia y vanguardista en beneficio de la sociedad.

Teniendo como objetivos y planes estratégicos generales las actividades descritas a continuación son acciones necesarias para lograr cumplir con la misión y visión del Centro:

a) Elaborar propuesta con la finalidad de poder iniciar las operaciones del Centro a través del análisis de resultados del instrumento aplicado, analizando el funcionamiento de los centros creados en el país, leyes, políticas y normas aplicables y que de alguna manera afecten la operación del centro, logrando con esto tener claramente todos aquellos trámites requeridos para la apertura del mismo.

b) Seleccionar al personal capacitado, que cubra los requisitos necesarios para desempeñarse dentro de alguna de las áreas encontradas dentro del centro. Esto en base al análisis de resultados obtenidos del instrumento aplicado.

c) Segmentar el mercado, es decir, seleccionar solo a los alumnos de la carrera de Licenciado en Informática con el fin de analizar las fortalezas y habilidades de los alumnos

d) Posicionar en el mercado al Centro, a través de diseñar estrategias de mercado que logren dar a conocer los productos que el centro desarrolle al mercado meta: primeramente la FCA.

e) Establecer los mecanismos necesarios para mantener la calidad de los productos que el Centro desarrolle.

f) Como resultado de la operación, proyectar los productos desarrollados por este centro con el fin de mantener la viabilidad del proyecto y en un futuro generar ingresos propios y con esto convertirse en un proyecto rentable para la FCA.

g) Buscar académicos comprometidos que quieran supervisar cada una de actividades a desarrollarse en cada área del centro con el fin de que los productos que se desarrollen sean distribuidos y colocados en tiempo y lugar según los requerimientos definidos por el cliente.

En un mediano plazo y como parte de un proceso de mejora se establecen tres objetivos estratégicos. Primero, mejorar las condiciones laborales de los alumnos, a través de otorgarles becas que contribuyan a su economía buscando con esto motivar la innovación y la creatividad del personal, y permita la participación de los alumnos en la toma de decisiones y en el diseño de nuevos productos. Segundo, lograr que la Facultad de Ciencias Administrativas logre a través del centro obtener ingresos propios mediante la venta de los productos generados. Tercero, mantener la lealtad de los estudiantes mediante el trabajo en equipo, haciendo que los docentes sean capaces de transmitir sus conocimientos sin recelos y egoísmos. El centro puede empezar a laborar con un pequeño grupo de estudiantes guiados por 2 maestros, comprometidos en generar conocimiento, que sean capaces de desarrollar 2 proyectos.

Los requerimientos para iniciar con el centro son los siguientes (ver tabla 6)

Tabla 6: Requerimientos

Cantidad	Características del equipo
8	Computadora de escritorio Studio ^{TM} XPS^{TM} 8000
3	Laptops Studio TM 15 laptop
10	puertos de conexión 10/100Mbps Ethernet LAN
8	cables de Par trenzado categoría 5e, con conexión RJ45
1	Escáner con alimentador de hojas HP Scan jet 7000
1	Impresora Laser Serie HP Color Láser jet CP2020

Como área de trabajo, está destinado un pequeño laboratorio el cual se muestra a continuación
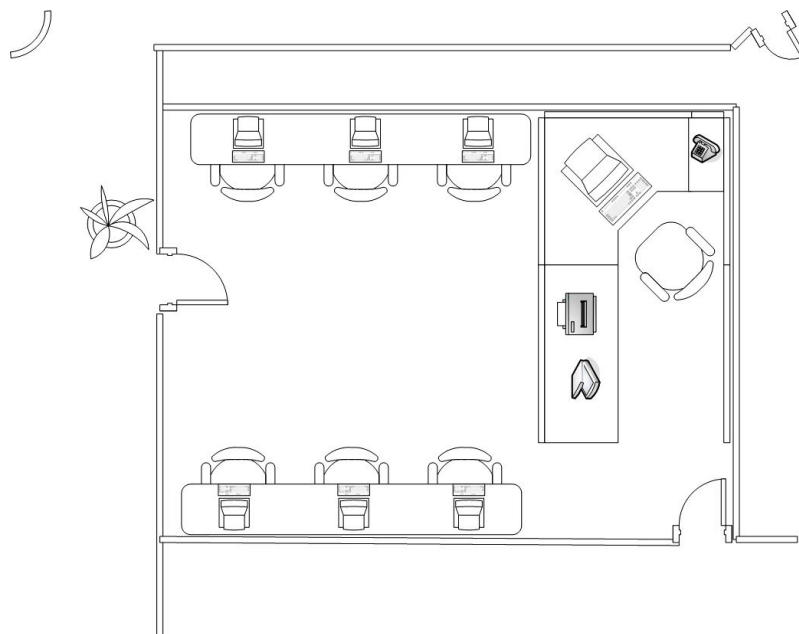
ANÁLISIS FINANCIERO (INVERSIÓN INICIAL)

La inversión inicial la hará la Facultad de Ciencias Administrativas y será de $117,040.00 pesos y solo será por compra de equipo de cómputo.

Para el arranque del centro solo se están contemplando 2 becarios y 4 servicios sociales, con la intención de en unos años todos los integrantes del centro sean becarios.

El sueldo de los becarios es de $2,800.00 pesos mensuales cada uno lo que nos da un total de $5,600.00 pesos mensuales.

CONCLUSIONES

Las ventajas para una universidad de acoplarse o pertenecer a un centro o parque tecnológico son muy claras. El parque o centro tecnológico trabaja con los esfuerzos aplicados de la investigación así como de la experiencia proveniente de sus estudiantes y académicos, con miras en la comercialización de sus ideas y descubrimientos. En muchos casos el plan de estudio de la universidad realza las habilidades emprendedoras del alumno para darles la oportunidad de crear productos y/o compañías exitosas durante sus estudios o al término de ellos. Estos parques o centros también traen aumento en la actividad económica de las comunidades y gobiernos locales generando ingresos y empleos bien remunerados por lo que no es de extrañar que varios países en vías de desarrollo se brincan del proceso lo que es la "universidad" tratando de crear centros autónomos ofreciendo incentivos fiscales y de otro tipo a los participantes. (Chatziioanou, Sullivan, 2004, p. 126).

Este proyecto le deja a la Facultad de Ciencias Administrativas la experiencia de saber que si adapta su plan de estudios a las demandas del mercado laboral podrá encontrar la ventaja competitiva de capitalizar el conocimiento que sus estudiantes tienen; esto a través de los productos que éstos alumnos desarrollen y vendan a las pequeñas y medianas empresas.

Ahora bien, si no olvidamos que hoy en día el desarrollo de tecnologías es a lo que el país le esta apostando para incrementar la economía, a un mediano plazo este centro podrá convertirse un proveedor

de tecnología reconocido a nivel nacional así como lo es el Centro de desarrollo tecnológico del Instituto Tecnológico de Estudios Superiores de Monterrey.

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LA COMPETITIVIDAD DEL SECTOR TEXTIL: EL CASO DE LAS EMPRESAS FAMILIARES DE TIJUANA, B.C.

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RESUMEN

El presente trabajo contempla una investigación sobre las empresas familiares del sector textil en Tijuana, B.C. México, abordando el tema de competitividad. Las empresas familiares son organizaciones que pueden crecer y superar los límites de pequeña empresa, para ello deben establecer estrategias de negocio como: disponibilidad de recursos, calidad del producto o servicio, las redes con clientes y proveedores, la administración del negocio y con la prevención de posibles conflictos entre los intereses de la empresa relacionados con la familia. El objetivo del presente trabajo es conocer las estrategias de competitividad de las empresas familiares del sector Textil en Tijuana, B.C. Para lograr los resultados se han realizado 43 encuestas representativas a los propietarios asociados al padrón de la Cámara Nacional de la Industria de Transformación (CANACINTRA) delegación Tijuana, en Baja California.

PALABRAS CLAVES: Empresa familiar, competitividad, estrategias

INTRODUCCIÓN

Las empresas familiares son organizaciones económicas que se forman para generar empleo e ingresos para sostener la familia, casi siempre son empresas micro y pequeñas desde la perspectiva de generación de empleo. Sin embargo, muchas tienden a crecer y tener éxito en base a una planificación de largo plazo, al adecuado ambiente familiar, a la responsabilidad social, a la calidad de la producción, a la innovación y a la competitividad de la empresa.

Las empresas familiares exitosas son aquellas que logran el balance entre la empresa y la familia. Su éxito se atribuye principalmente a dos factores: el compromiso de los miembros de la familia y su visión a largo plazo. Por tratarse del patrimonio familiar los encargados de su administración tienen muy claro que este debe perdurar por generaciones, y por tanto, sus acciones y estrategias están orientadas a buscar el crecimiento sostenido. (Shum, 2008)

Las estrategias competitivas son una parte fundamental para el desempeño de las empresas familiares, ya que los mercados son cada vez más competitivos y exigentes. En el mundo global, las organizaciones empresariales han encontrado que la velocidad en la que crece la competencia es cada vez mayor, asumir conscientemente esta situación permite que las empresas establezcan planes e iniciativas que produzcan resultados y mejoramientos competitivos.

Asimismo las estrategias competitivas pueden tomarse como un enfoque sistemático hacia una responsabilidad mayor y cada vez más importante de la estrategia general de la empresa familiar, es decir, relacionar a la empresa con su entorno estableciendo su posición, de tal manera que garantice su éxito continuo y la proteja de cualquier contingencia que se pueda presentar. La implementación o no de una estrategia competitiva puede determinar en el futuro el nivel de competitividad de la misma y su desempeño en el mercado. No obstante, para la implementación de esta estrategia se debe contar con el apoyo de los propietarios de la empresa y tener la accesibilidad y disponibilidad del personal para lograr las metas que persigue la empresa familiar.

El objetivo del presente trabajo de investigación es identificar las estrategias de competitividad de las empresas familiares dedicadas a la fabricación de prendas de vestir.

REVISIÓN LITERARIA

La Empresa Familiar y Sus Características

Existe una gran cantidad de definiciones de la empresa familiar. Donnelley (1964), indica que las empresas familiares son aquéllas que se identifican con al menos dos generaciones de la familia y donde ese vínculo conlleva a una influencia en la compañía de los intereses y objetivos de la familia. Para Rosenblatt et. al (1985), las empresas familiares son cualquier negocio en el cual la mayoría de la propiedad y del control se encuentran en manos de una familia y en el que, dos o más miembros familiares están implicados en los negocios de la empresa. De acuerdo a Eddy (1996) las principales características que presentan las empresas familiares son: la familia tiene cierta propiedad o propiedades, la familia tiene un alto control dentro de la dirección de la empresa y hacer negocios es el principal ideal de la familia.

Para Puig (2000) una empresa familiar es aquélla en que una familia controla la compañía mediante los derechos de propiedad, y con frecuencia mediante una implicación directa en la gestión. Una empresa familiar es aquélla empresa en la que el capital y, en su caso, la gestión y/o el gobierno están en manos de una o más 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, 2006). Es aquella en la que la propiedad y gestión de la empresa están en las mismas manos, y cuya actividad de desarrolla con una clara vocación de expansión y continuidad por parte de los mismos miembros de la empresa. (Amarjen, 2009)

La definición de empresa familiar puede abarcar multitud de características, sin embargo pueden distinguirse tres rasgos que deben estar presentes cuando se hace referencia a este tipo de organizaciones: a) la transferencia del negocio a través de distintas generaciones; b) la propiedad y dirección mayoritariamente en manos de una familia; c) la implicación de dicha familia en todo lo concerniente a la firma. Esta caracterización de la empresa familiar permite diferenciar con las otras formas de organización de las demás empresas. En primer lugar, habría que mencionar la existencia de varios subsistemas que engloban a un sistema común que es la empresa. Aquí se incluye el subsistema empresa, el subsistema familia y el subsistema propiedad y, la forma en que éstos, en la medida en que estén presentes en la compañía, van a influir en la firma de una u otra manera.

El modelo de los tres círculos (Davis y Tagiuri, 1982), es uno de los que han sido más empleados para describir distintas situaciones actuales y futuras de las empresas familiares. En este modelo cada círculo representa un grupo de personas, con características particulares en relación a la empresa familiar; las intersecciones de los círculos constituyen los grupos de personas que poseen dos o tres de las características identificadas por el modelo. Según coincidan -en mayor o menor grado- los tres círculos, es decir, cuando estas se superpongan como atraídas por una fuerza centrípeta (algo que suele ocurrir en primera y segunda generación) o se distancien como separados por una fuerza centrífuga, (como acostumbra a pasar en empresas familiares de gran tamaño) se estará frente a distintos tipos de empresas familiares, con características muy diferentes: por el número de protagonistas que en ellas trabajan o con ellas tienen relación, por los distintos roles que desempeñan y sus diferentes intereses, así como por el contenido de las relaciones y actitudes que entre unas y otras personas se dan.

Sobre este tema son muy importantes los estudios realizados por Davis y Tagiuri (1982) con el "Modelo de los tres círculos", el cual ha sido objeto de mención en trabajos posteriores (Leach, 1993; Gersick y Davis, 1997; Mc Collon y Lansberg, 1997). Otra característica que destaca en estas empresas es la

cultura, o dicho en otras palabras, los valores, actitudes y creencias propias de una familia que mayoritariamente dirige y controla la empresa en cuestión. Por último, hay que considerar otro aspecto significativo que es la visión a largo plazo que este tipo de negocios plantea y que es fruto de numerosas disparidades con las empresas no familiares. Estudios como los realizados por Daily y Dollinger (1993) o Donckels y Fröhlich (1991) demuestran esa afinidad a la continuidad a lo largo de las generaciones, la cual implica uno de los problemas más importantes tratados a través de los años como es la sucesión, puesto que aun existiendo esa visión a largo plazo muchas empresas no logran superar el cambio de generación.

Una vez conocidos los rasgos más distintivos de este tipo de negocios, a continuación se analizaran los retos que debe afrontar el gerente-propietario de una empresa familiar comenzando, en primer lugar, con una de las particularidades de estos negocios, la confluencia de varios subsistemas que interactúan en un sistema común, lo cual conduce hacia uno de los conflictos que deben hacer frente como es la confusión de los patrimonios, familiar y empresarial.

Competitividad En Las Empresas Familiares

De acuerdo con El Consejo Nacional de Competitividad (1997) la define como "la capacidad de la sociedad para hacer frente al desafío de la economía global y, al tiempo, incrementar sus niveles de bienestar", en este mismo sentido, Fajzylber (1998) la conceptualiza como la "capacidad de un país para sostener y expandir su participación en los mercados internacionales y elevar el nivel de vida de su población". Según Rivas Villatoro (1999) la competitividad se enfoca no sólo en la producción y comercialización cuando habla de la competitividad, sino que se centra en los aspectos conexos a ellas y que se enmarcan en lo social, lo que quiere decir, según este mismo autor, que "el nivel de competitividad de una empresa está siempre definido por su intrínseca manera de ser dentro de un determinado contexto socioeconómico y no sólo por las dinámicas exógenas en las que se desarrolla, ante lo cual Rivas Villatoro (1998) concluye que: 1) la competitividad es una característica interna al sistema empresa; 2) un mercado, o mejor un entorno sociopolítico y económico, determina el nivel temporal de su capacidad competitiva intrínseca y 3) una empresa tiene continuidad sólo si es capaz de adecuarse constantemente a las nuevas condiciones del entorno, el que puede estar determinado por factores institucionales más que por la oferta y la demanda. Estas conclusiones de una u otra forma remiten la competitividad a factores endógenos de la organización como por ejemplo su diseño, ya que "una empresa puede ser competitiva en el proceso de transformación y no serlo en el de distribución o tener gastos generales o financieros desproporcionados, o estar gravada por un exceso de personal de estructura, etc." (Rivas Villatoro, 1998).

Asimismo, la competitividad es vista desde el punto de vista meramente organizacional, subsumiéndola en la productividad y haciendo referencia a aspectos de orden sociopolítico que inciden directamente en ellas. Charlier (2000) afirma que un territorio adquiere carácter competitivo si puede afrontar la competencia del mercado y garantizar al mismo tiempo viabilidad medioambiental, económica, social y cultural, aplicando lógicas de red y de articulación internacional y determina que la competitividad social es la capacidad de los agentes para actuar eficazmente de manera conjunta sobre la base de una percepción consensuada y fomentada por una concertación entre los distintos niveles institucionales. Esta perspectiva de asumir la competitividad no está contrapuesta a los postulados de integración mundial ni a las dinámicas del mercado: más bien las complementa en procura de que los procesos de intercambio y relación propiciados por la globalización sean integrales y traspasen los aspectos meramente económicos, llegando al trasfondo social que los contiene y logren que todas las naciones que participan de un mundo globalizado puedan obtener los beneficios que este proceso de integración les pueda ofrecer. (Saldarriaga Ríos, 2007)

En lo que hace referencia a la conceptualización de las empresas familiares puede afirmarse que son empresas como cualquier otra, presentando algunas particularidades que las hacen diferentes y que están

directamente relacionadas con su origen como un negocio de familia, por lo que es ésta, sus variaciones y relaciones las que determinan esas diferencias. De acuerdo con Puig (2000), en una empresa familiar, los propietarios tienen el derecho de decidir quiénes han de desempeñar los papeles de alta dirección: por ejemplo, presidente del consejo, presidente y, por supuesto, director general. También tienen que aprobar el diseño definitivo de su sistema de gobierno, así como la dirección estratégica de la compañía.

De igual manera, Puig (2000), señala que una virtud fundamental de las empresas familiares es el hecho de que los propietarios pertenezcan a un grupo familiar, por tanto, tengan una identidad y una biografía en común; comparten una narrativa, por decirlo así, que crece a partir de un cúmulo de experiencias provenientes de administrar juntos un negocio durante generaciones. Esta identidad compartida, y los valores que de ella nacen, se hallan en el núcleo mismo de las compañías creadas por familias emprendedoras. Estas familias saben cómo construir un entorno de trabajo en el que tanto el personal como los ejecutivos se sienten como miembros adoptados de una familia extensa.
Por su parte Lozano Posso (1992; 1993; 1996), señala que los cambios y rupturas que se han dado en la familia como institución a lo largo del tiempo inciden de forma directa y radical en la configuración de este tipo de empresas y en las formas como se asumen a sí mismas y como enfrentan los retos que a diario se les presentan.

Bajo este contexto se desenvuelven las empresas familiares en el mundo, debatiéndose entre ser o no competitivas en los entornos locales y globales y aplicando diferentes estrategias que en ocasiones son acordes con las exigencias de una comunidad mundial cada vez más demandante y en otras tantas considerando sólo los aspectos locales que les permiten sobrevivir. (Saldarriaga Ríos, 2007). Estas empresas, de acuerdo con Ward (2004) poseen características especiales que les permiten aplicar estrategias comerciales distintas y originales con respecto a aquellas implementadas por las compañías que no son familiares, favoreciendo en muchos casos la productividad y el logro de los objetivos estratégicos de la organización y en este sentido, volviéndose cada vez más productivas y competitivas en el concierto internacional y contribuyendo de forma decisiva al logro del desarrollo de sus comunidades. (Saldarriaga Ríos, 2007).

Una estrategia competitiva surge de la relación entre una empresa familiar y su medio ambiente donde interactúan competidores y consumidores y tiene que ver con los costos, precios, cantidad, calidad, presencia en el mercado, innovación, la flexibilidad y adaptación a los cambios, romper con los paradigmas. Porter (1995), definió la estrategia competitiva como una combinación de los fines (metas) por los cuales se está esforzando la empresa y los medios (políticas) con las cuales está buscando llegar a ellas. La empresa debe desarrollar una amplia formula de cómo va ha competir, acciones que son la respuesta a las cinco fuerzas competitivas que rodean a las empresas, (nuevos competidores, competidores actuales, poder negociación proveedores, poder negociación compradores y productos sustitutivos). Es Porter (1995) quien sintetiza la estrategia competitiva y propone un axioma mediante el cual resume que las empresas pueden llevar a cabo 3 estrategias competitivas: a) Liderazgo en costos, b) Diferenciación y, c) Enfoque.

El *liderazgo en costos* se justifica cuando los consumidores de un sector productivo son sensibles a los precios, cuando existen pocas alternativas de diferenciación de producto o a los consumidores no les interesa diferenciar entre marcas, por lo que la competitividad busca producir a costos inferiores de los competidores. En lo que respecta a la estrategia de *diferenciación* se presenta cuando se incorporan en los productos o servicios características distintivas a los de la competencia.

La estrategia de diferenciación debe aplicarse sólo cuando se detectan las necesidades y preferencias del consumidor que busca atributos deseados. *El enfoque* o de alta segmentación se implementa cuando las organizaciones atienden a mercados muy segmentados y generalmente pequeños en comparación con el

mercado del sector productivo. La estrategia de enfoque busca descubrir y atacar nichos de mercado en los cuales sea eficiente utilizando una estrategia de liderazgo en costo o una estrategia de diferenciación.

El modelo conocido como Competitividad Sistémica se propuso, como resultado de un debate dentro de la Organización de Comercio y Desarrollo Económico (OCDE), el cual plantea cuatro niveles para explicar los elementos que permiten la posibilidad de competir para las empresas en un determinado país. Estos niveles son: Nivel meta, nivel macro, nivel meso y nivel micro. De acuerdo con este modelo la competitividad de la economía se basa en medidas dirigidas a un objetivo, articuladas en cuatro niveles del sistema (meta, macro, micro y meso) y se fundamenta también en un concepto pluridimensional de conducción que incluye la competencia, el dialogo y la toma en conjunto de decisiones, concepto al que están adscritos los grupos relevantes de actores. (Vega López, 2009)

Esser (1996), menciona que la competitividad sistémica constituye un marco de referencia para países tanto industrializados como en vías de desarrollo. La visión de mediano y largo plazo y la intensa interacción entre los actores no debe encaminarse únicamente a optimizar recursos potenciales de eficacia en los diferentes niveles del sistema, movilizando capacidades sociales de creatividad con el fin de desarrollar ventajas competitivas nacionales.

Nivel Meta. Se refiere a la capacidad que tiene la sociedad para lograr consensos y conseguir de manera integrada los objetivos establecidos de manera colectiva. Este elemento es importante porque permite que los esfuerzos se lleven a cabo en una misma dirección y evita el desgaste que se presenta cuando se dan conflictos entre distintos grupos sociales.

Nivel Macro. Para contar con un entorno macroeconómico adecuado, que permita la competitividad de las empresas, es necesario contar con mercados de bienes y servicios que funcionen eficientemente, los principales distorsionadores de este entorno son los altos déficits presupuestales y de balanza de pagos, los cuales contribuyen al incremento de la deuda externa y presionan las tendencias inflacionarias y se reducen las posibilidades de inversión.

Nivel Meso. Lo constituyen las redes de colaboración ínter empresariales, que permitan incrementar las capacidades individuales de las empresas, a través de una sinergia donde se obtengan capacidades mayores a la suma de las capacidades individuales de sus integrantes.

Nivel Micro. Se refiere al incremento de capacidades y fortalezas que logren las empresas, los retos planteados por la globalización obligan a las empresas a cambiar radicalmente sus relaciones tanto en el ámbito interno y en el inmediato.

METODOLOGÍA

Objetivo

Determinar las estrategias de competitividad de las empresas familiares dedicadas a la fabricación de prendas de vestir.

Determinación de la Muestra
Para el presente trabajo se eligió una muestra de 43 propietarios de empresas familiares del sector textil de la Cámara Nacional de la Industria de Transformación (CANACINTRA) delegación Tijuana, en Baja California.
Factores que se consideraron en el cálculo de la muestra:
   a) La población se considera con características homogéneas.
   b) Se cuenta con una población finita, ya que el número de empresas familiares es conocido.
   c) Fórmula empleada para el cálculo de la muestra:

$$n = \frac{\partial^2 pq}{e^2(N-1)\partial^2 pq} \tag{1}$$

Tabla 1: Total De Empresas Segun CANACINTRA, Marzo 2009

	Poblacion	Muestra
Total de empresas fabricantes de prendas de vestir	43	33

Esta tabla muestra que el total de las empresas encuestas si cuenta con un nivel de confiabilidad .

Validación del Instrumento

A los propietarios se les aplicó un cuestionario conformado con 75 preguntas, el cual fue validado (cuadro 2) relacionado al tema de estudio. Se utilizó una escala de medición con categorías de respuestas de opción múltiple. Se elaboraron los cuadros que permiten un análisis de la sucesión en las empresas familiares, así como de las estrategias de competitividad. Con dicha información, se pretende saber si el propietario ha pospuesto o desechado la idea de realizar un plan de sucesión familiar y si cuenta con estrategias competitivas en su empresa. La validez del cuestionario se determinó mediante el coeficiente de confiabilidad de Alfa-Cronbach, por medio del programa SPSS: el resultado arrojado por dicho programa fue de .80, un grado de confiabilidad aceptable (ya que esta por arriba .60 y de 0.70, puntuación mínima aceptable.).

Tabla 2: Análisis Factorial Confirmatorio

Variable	Dimensión	Alfha Normal	Alfha Estandar
Competitividad sistémica	Competitividad	0.70	0.70
	Tecnología	0.60	0.60
	Rentabilidad	0.70	0.70
Conflictos intergrupales	Proceso de sucesión	0.80	0.80
	Contexto familiar	0.80	0.80
	Desarrollo de personal	0.80	0.80
Actitudes propietarios	Consejo de familia	0.80	0.80
	Estilos de liderazgo	0.80	0.90
	Formación del propietario	0.80	0.80
Clima organizacional	Gestión	0.70	0.80
	Supervisión	0.90	0.90
	Esfuerzo	0.90	0.90

Esta tabla muestra los resultados del análisis confirmatorio efectuado para validar el instrumento de medición utilizado en la investigación.

RESULTADOS

Competencia y Estrategia Competitiva de la Empresa Familiar

Los propietarios consideran que su empresa familiar se encuentra con una alta competencia (35%) con respecto a otras empresas dedicadas a la fabricación de prendas de vestir; asimismo un 30% de los empresarios manifiestan que su empresa se encuentra en una mediana competencia (Tabla 3). La familia que trabaja en la empresa, es en sí una ventaja competitiva, porque tiene sentido de pertenencia a la empresa, dedicación plena, conocimiento del negocio, un compromiso, unidad de objetivos, motivación, lealtad, planteamientos a largo plazo, comunicación y claridad, la rapidez en la toma de decisiones, una menor burocracia y ofrece un trato personalizado al cliente. Sin embargo, el hecho de no contar con un plan estratégico puede limitar sus competencias y el crecimiento mismo de la empresa.

Tabla 3: Apreciación Propietario Sobre La Competencia

Opinión de los propietarios	Porcentaje
Alta competencia	35%
Mediana competencia	30%
Baja competencia	21%
Nada de competencia	14%
Total	100%

Esta tabla presenta los resultados de la apreciación del propietario sobre la competencia con las empresas dedicadas la fabricación de prendas de vestir. Nivel micro del modelo de competitividad sistémica.

Las empresas familiares en el 56% de los casos, cuentan con alguna estrategia competitiva; un dato importante es el hecho de que las empresas familiares están cada vez mejorando su gestión y visualizando mejor el mercado global en su afán de afianzarse con productos más competitivos con estándares internacionales. Sin embargo, un 26% de los gerentes propietarios manifiestan que cuentan con una estrategia competitiva de manera informal; el 14% de encuestados consideran que si cuentan con ella pero la desconocen sus empleados, y sólo el 4%, declaran que no cuentan con un plan de estrategia competitiva.

Tabla 4: Estrategia Competitiva

Opinión de los propietarios	Porcentaje
Si cuenta con ella	56%
Si cuenta con ella pero de manera informal	26%
Si cuenta con ella pero la desconocen los empleados	14%
No cuenta con ella	4%
Total	100%

Esta tabla presenta los resultados de la opinión de los propietarios de que si su empresa cuenta con una estrategia competitiva. Nivel micro del modelo de competitividad sistémica.

Los propietarios de las empresas familiares en el sector textil de Tijuana, consideran que la diferenciación del producto es su principal factor de competitividad la cual se convierte en su estrategia de competitividad (42%); asimismo, el 21% argumentan que su competitividad está en ser retador del mercado (un emprendedor), mientras que un 18% de los encuestados considera que su competitividad está basada en menores costos (Tabla 5). La calidad de las prendas de vestir que ofrecen en el mercado es altamente competitiva, reflejándose en los acabados de la prenda, tales como: botones, tipo de costura, encajes, cierres, tintura de la tela, etc.

Tabla 5: Principales Factores De Competitividad

Opinión de los propietarios	Porcentaje
Disminución de costos (precios)	18%
Diferenciación del producto (retador)	42%
Retador del producto	21%
Otra ventaja	19%
Total	100%

En esta tabla se presentan los resultados de los principales factores de competitividad de la empresa familiar. Nivel micro del modelo de competitividad sistémica.

A continuación se muestra en los resultados que el 27% de los propietarios esta en completo desacuerdo y el otro 27% está parcialmente en desacuerdo en que las actitudes de sus competidores y proveedores locales en términos de cooperación y aprendizaje no son excelentes, ya que entre ellos no cooperan con información y técnicas de aprendizaje de nuevos procesos, tendencias, diseños, etc., que les ayude a conformar un sector más fuerte y competitivo.

Tabla 6: Actitudes Competidores y Proveedores Locales

Opinión de los propietarios	Porcentaje
Completo desacuerdo	27%
Parcialmente en desacuerdo	27%
Indiferente	21%
Medianamente de acuerdo	1%
Completamente de acuerdo	9%
Total	100%

Esta tabla muestra el resultado de la opinión de los propietarios en cuanto a las actitudes de los competidores y proveedores locales en términos de cooperación y aprendizaje. Nivel meta del modelo de competitividad sistémica.

Asimismo en la tabla 7, se observa que el 36% de los propietarios está parcialmente en desacuerdo con que la habilidad del gobierno, las empresas y la sociedad en su conjunto a través de la organización, información y cooperación para formular estrategias y políticas de nivel local o regional marco legal en México para hacer negocios no es apropiado, debido a todos a que no existen redes de cooperación, organización e información entre los diferentes actores antes mencionados, el 30% de los propietarios esta en completo desacuerdo de la habilidad entre los tres actores.

Tabla 7: Habilidad Para Formular Estrategias y Políticas

Opinión de los propietarios	Porcentaje
Completo desacuerdo	30%
Parcialmente en desacuerdo	36%
Indiferente	16%
Medianamente de acuerdo	12%
Completamente de acuerdo	6%
Total	100%

Esta tabla muestra los resultados de la opinión de los propietarios en cuanto a la habilidad del gobierno y la sociedad en su conjunto a través de la organización, información y cooperación para formular estrategias y políticas de nivel local o regional. Nivel meta del modelo de competitividad sistémica.

Las empresas familiares del sector textil en un 52% mencionó que sus ventas se realizan de contado; el sistema de ventas para estas organizaciones son las ventas de contado, siendo una estrategia competitiva ya que los clientes están observando la ventaja que en este caso es "un precio con poco ganancia vendiendo de contado". El 34% dijo que a crédito y de contado, el 12% dijo que a crédito solamente y el 9% mencionó tener sistema de apartado, un 3% tenía otros métodos de venta.

De igual manera en la Tabla 9, se muestran los resultado de que el 52% de los propietarios mencionaron que la medida que se ha aplicado en su empresa para disminuir costos de fabricación es a través de negociación de precios con los proveedores, es decir, han logrado precios razonables en las telas que se están adquiriendo reflejándose esto en la disminución del costo por prenda fabricada, traduciéndose esto en una estrategia competitiva, el 24% compra de materia prima, el 9% capacitar al personal, 9% otros y un 6% disminuir el personal.

Tabla 8: Métodos De Venta

Opinión de los propietarios	Porcentaje
Crédito	12%
Contado	52%
Sistema de apartado	9%
Ambos, crédito y contado	24%
Otros	3%
Total	100%

Esta tabla muestra los resultados de los métodos de ventas que utilizan las empresas dedicadas a la fabricación de prendas de vestir. Nivel micro del modelo de competitividad sistémica.

Tabla 9: Medidas Para Disminuir Costos De Fabricación

Opinión de los propietarios	Porcentaje
Compra de materia prima	24%
Negociación de precios con los proveedores	52%
Disminución de personal	6%
Capacitación del personal	9%
Otros	9%
Total	100%

Esta tabla muestra los resultados de las medidas que utilizan los propietarios de las empresas dedicadas a la fabricación de prendas de vestir para disminuir sus costos de fabricación. Nivel micro del modelo de competitividad sistémica.

De acuerdo con los resultados el 73% los propietarios mencionaron que los precios se establecen por costos de producción y operación, las empresas familiares del sector textil aprovechan la capacidad de las maquinas existentes, ya que tienen ocupadas estas a plena capacidad al utilizarlas para fabricar diversas prendas organizando la producción por proceso, el 12% por negociación con los clientes, el 9% por referencia de su competencia, el 3% por estimación e intuición, el 3% por situación de mercado.

Tabla 10: Establecimiento De Precios De Los Productos

Opinión de los propietarios	Porcentaje
Por costos de producción y operación	73%
Por referencias de la competencia	9%
Por negociación de los clientes	12%
Por estimación e intuición	3%
Por situación del mercado	3%
Total	100%

Esta tabla muestra los resultados de cómo los propietarios de las empresas dedicadas a la fabricación de prendas de vestir establecen los precios de los productos. Nivel micro del modelo de competitividad sistémica.

CONCLUSIONES

Las empresas familiares del sector textil en la ciudad de Tijuana, B.C. México, se encuentran en un proceso de desarrollo, a pesar de las condiciones económicas del país y de la actual crisis económica mundial. Asimismo para que las empresas sean competitivas deben de contar con estrategias que las hagan fuertes frente a los mercados tanto locales, nacionales e internacionales; en el caso de las empresas familiares del sector textil en Tijuana, B.C., se le esta dando la importancia debida a través de la formulación de estrategias, y del establecimiento de políticas e incluso de un plan estratégico.

Las empresas trabajan con una producción flexible, al asegurar en todo momento el suministro exacto de producto acabado, cerciorándose de la cantidad y la variedad de las prendas de vestir que sus clientes les solicitan. Por lo tanto estas organizaciones cuentan con alguna estrategia competitiva, lo cual resulta como su principal ventaja competitiva la *diferenciación del producto* en cuanto a las costuras, botones, cierres, texturas, cortes a la moda y acabados; lo cual resulta como su principal estrategia de competitividad.

Algo que está afectado al sector son las actitudes de los competidores y proveedores locales en términos de cooperación y aprendizaje, ya que entre los actores no cooperan con información y técnicas de aprendizaje de nuevos procesos, tendencias de la moda, diseños, innovación etc., que les ayude a conformar un sector más fuerte y competitivo.

Otras estrategias con la que cuentan las empresas familiares de este sector para el mantenimiento de una ventaja competitiva son: el sistema de ventas el cual en su mayoría es de contado, ya que el cliente se da cuenta de que es "un precio con poca ganancia vendiendo de contado", es decir, reduciendo el margen de utilidad, así como bajando los costos de producción al realizar negociaciones con sus proveedores disminuyendo el costo por prenda fabricada y el establecimiento de los precios se realiza por costos de producción y operación, aprovechando la capacidad e las maquinas existentes.

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ESTRUCTURA DE OBSERVATORIO DE MICRO, PEQUEÑAS Y MEDIANAS EMPRESAS PARA EL SECTOR SERVICIOS EN LA REGIÓN ORIENTE DEL ESTADO DE MÉXICO

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RESUMEN

En México y en muchos países a nivel mundial, existe una gran carencia de información estadística concerniente a la situación económica de las MIPyMES, que permita al gobierno dentro del Plan Nacional de Desarrollo analizar de manera sistemática la importancia que tienen la MIPyME en la economía de los países, así como su representación inherente en la estructura económica. Sin embargo en algunas ciudades del mundo se ha subsanado estas carencias como en: Argentina, Costa Rica, Venezuela y la Unión Europea, los cuales han creado Observatorios de MIPYMES que son instancias que abren espacios de interacción y reflexión entre actores estratégicos, con el objetivo de ejecutar iniciativas o sustentar políticas"(Observatorio del Desarrollo, UCR, 2007).He ahí la importancia de crear una propuesta de estructura de observatorio para MIPyMES en la región oriente del Estado de México, sustentando dicho proyecto en información del Instituto Nacional de Estadística Geografía e Informática (INEGI), donde se estima que las MIPyMES constituyen el 99% del total de unidades económicas del país, representan alrededor del 50% del Producto Interno Bruto(PIB) y contribuyen a generar más del 70% de los empleos en México y con base en el Plan Nacional de Desarrollo para fortalecer a las MIPyMES como parte de la estrategia para aumentar los niveles de productividad del país y generar empleos, así como las propuestas de estrategias de política públicas para el Desarrollo de Sustentable de la región.

INTRODUCCIÓN

En la actualidad la importancia que tienen las Micro, Pequeñas y Medianas Empresas (MIPYMES) en la economía de México y en los diferentes países a nivel mundial, es de gran importancia, debido a que son las generadoras de empleo, desarrollo de innovación y tecnología, competitividad y que contribuyen de manera significativa al PIB, creando oportunidades de crecimiento y desarrollo de manera general en una región específica o un país en general. En el caso de México a pesar del papel fundamental que juegan las MIPYMES en el crecimiento económico, representando el 48.5% del PIB; no es posible detectar con exactitud cuál es su desempeño real, su magnitud y la forma en cómo enfrentan los diferentes cambios ante la globalización, creando definiciones erróneas y que varían sobre su propio desempeño. No obstante, los diferentes gobiernos que rigen el país y empresas privadas han puesto en marcha una serie de planes, políticas y programas que ayuden al fomento, crecimiento, desarrollo y sobrevivencia de las mismas, con el fin de contar con datos correctos, medibles, fiables, comparables, verídicos y sistematizados que sirva para diferentes propósitos como la toma de decisiones para el diseño de planes y políticas públicas, creación de estrategias de desarrollo sustentable del país y de regiones específicas dentro del Plan Nacional de Desarrollo, Plan Estatal de Desarrollo y los diferentes Planes Municipales de Desarrollo para el caso de regiones específicas, como es el caso de la región Oriente del Estado de

México (ROEM), región compuesta de MIPYMES del sector servicios los cuales son las únicas vías de desarrollo en las que se puede crear políticas de mejora y de esta forma fomentar un crecimiento y desarrollo sustentable de la región. Paradójicamente en Europa y en algunos países de América Latina ya están desarrollando estrategias para mejorar los lazos entre el sector empresarial (MIPYMES) y los gobiernos federales, locales y regionales a través de los denominados Observatorios de MIPYMES cuyo objetivo es ofrecer a los diferentes actores la información y conocimiento que requieren para desarrollar políticas y proyectos acertados y evaluarlos (Observatorio del Desarrollo, UCR, 2007) con el fin de poder obtener los datos e información para verificar el desempeño de las MIPYMES y establecer estrategias de Desarrollo Sustentable (DS) en ciertas regiones del país.

La estructura del Observatorio de MIPYMES para la ROEM que se propone en la siguiente investigación esta basada en la deficiente o nula información que se posee acerca del desempeño, competitividad, innovación y rendimiento de las MIPYMES de la región antes mencionada, así como el deficiente crecimiento, el aumento del índice en la tasa de desempleo y el nulo desarrollo sustentable que se presenta en la región, el cual se basará a partir de modelos de estructuras de Observatorio como es el de Costa Rica, Fundación Observatorio de Argentina, Observatorio Latinoamericano, Observatorio PYME UNED y el primer observatorio de Empresas Europeo, con las adecuaciones pertinentes a las necesidades que se presentan en México haciendo hincapié en la ROEM y que ayudará a gran medida al desarrollo de dicha región a través de la emisión de Clusters de Desarrollo Sustentable para la misma, ya que a través de la creación de un Consejo Consultivo (CC) integrado por una Comisión Sectorial (CS), que a su vez esta integrada por tres diferentes sectores, los cuales son: Sector Empresarial (SE), los Centros de Educación Superior (CES) y el Sector Gobierno (SGOB), así como el ámbito concerniente a los aspectos culturales de la región, los cuales permitirán de manera concreta conocer las necesidades que presentan cada una de las MIPYMES del sector servicios en la ROEM, para que de esta manera y con uso de las políticas públicas emitidas por los diferentes Planes de desarrollo (PND, PED y PMD) de los gobiernos en marcha se fomenten y crean las políticas públicas pertinentes (Cluster de Desarrollo Sustentable en la Región) para poder alcanzar la competitividad de la región y los efectos positivos que conllevan a un buen desarrollo regional sustentable.

REVISIÓN LITERARIA.

Actualmente las Micro, Pequeñas y Medianas Empresas de todos los sectores productivos juegan un papel importante en la economía Mexicana, ya que estas constituyen el 99% del total de unidades económicas del país, representan alrededor del 50% del PIB y contribuyen a generar más del 70% de los empleos en México, de acuerdo a los últimos estudios realizados por el Instituto Nacional de Estadística Geografía e Informática (INEGI). De forma general se habla que las MIPYMES son el pilar fundamental de la economía del país, del desarrollo económico sustentable y generadora de riqueza (Observatorio de La Pequeña y Mediana Empresa En México 2003). Por tanto los diferentes gobiernos que rigen al País en la actualidad, así como las Empresas del Sector Privado, están implementado una serie de planes, políticas y programas para el fomento y desarrollo de las MIPYMES, con apoyo y fundamento en los diferentes Planes de Desarrollo como son el Plan Nacional de Desarrollo (México 2007- 20012), Plan Estatal de Desarrollo (Estado de México 2005 – 2011) y los Planes Municipales de Desarrollo (2009 – 2012). Es de ahí la importancia que juegan estos tres factores para llevar acabo éste trabajo de investigación, ya que son parte fundamental para la emisión de los Cluster de desarrollo sustentable de la región.

Dentro de este contexto el concepto de Cluster y del cual es parte fundamental para el sustento de este trabajo de investigación puede definirse como una concentración de empresas, instituciones y demás agentes, relacionados entre sí por un mercado o producto, en una zona geográfica relativamente definida, de modo de conformar en sí misma un polo de conocimiento especializado con ventajas competitivas (Porter, Michael. La Ventaja Competitiva de las Naciones, 1990). Adicionalmente el concepto de Observatorio Empresarial también de suma importancia para el fundamento de este trabajo se define

como una instancia que abre un espacio de interacción y reflexión entre actores estratégicos, con el objetivo de ejecutar iniciativas o sustentar políticas" (Observatorio del Desarrollo, UCR, 2007). Estas conceptualizaciones han respondido a las expectativas de los diferentes sectores de países extranjeros, lo que conlleva a una acertada solución en regiones con un nivel bajo o nulo DS como en el caso de la ROEM.

En la actualidad los diferentes gobiernos que están en marcha en el país, han implementado una serie de planes y programas que promueven el desarrollo, crecimiento y supervivencia de las MIPYMES, desarrollados a través de los diferentes políticas públicas contenidas en los Planes de Desarrollo de cada gobierno y que son puntos clave para el funcionamiento de los Observatorios empresariales en este caso el PND 2005 – 2012 dentro de su objetivos hace alude a la creación de mecanismos que ayuden el crecimiento de las MIPYMES, el PED 2005-2011 hace hincapié dentro de sus diferentes vertientes al crecimiento de MIPYMES a través de capital semilla, con el objetivo de impulsar su desarrollo, y los PMD 2009- 2012 son apoyo a las estrategias emitidas por los planes anteriores, de esta manera denotando que los Planes de Desarrollo emitidos por los gobiernos son esenciales en el desarrollo de este trabajo de investigación.

Por otro lado las Instituciones de Educación Superior han tenido como objetivo fundamental, lograr la vinculación con la sociedad, específicamente con el sector productivo. Efectivamente han celebrado una cantidad convenios de colaboración y aunque han creado costosas estructuras administrativas encargadas de esta función y realizado foros y debates, no se han logrado resultado significativos (Campos, Sánchez Dasa, 2005), por tanto es el momento de establecer las relaciones de colaboración para poder desarrollar mecanismos que verdaderamente ayuden al crecimiento de los sectores productivos,

Y más, aunado la importancia que tienen los microempresarios de la ROEM como principales testigos y emisores de resultados de desequilibrio que se presenta la región, por tanto su participación es en quien cierra el vínculo efectivo para la creación de los mecanismos antes mencionados.

METODOLOGÍA

La metodología que se aplicara en este proyecto estará basada por un lado desde los apoyos metodológicos de los diferentes autores para el levantamiento de los datos y procesamiento de los mismos, y por otro lado, investigando fuentes bibliográficas, que le van a dar el sustento teórico a la investigación.
Desde el punto de vista del levantamiento y procesamiento de los datos, se utilizará con base en los diferentes tipos de investigación presentados por los diversos autores, necesarios para delimitar y entender la investigación que se lleva a cabo como son:

Un estudio observacional; en este estudio el observador sólo describe el fenómeno estudiado. No puede modificar a voluntad propia ninguno de los factores que intervienen en el proceso. La observación realizada es participativa, debido a que interactúa con los fenómenos observados. Es una técnica de medición no obstrusiva, en el sentido que el instrumento no estimula el comportamiento de los sujetos, por lo que acepta material no estructurado y puede trabajar con grandes volúmenes de datos (material).

Para el caso del proyecto, se analizaran las estructuras y la forma de operar de los diferentes Observatorios Empresariales, así como resultados de algún tipo de estudio llevado a cabo; el punto de vista de los empresarios, con la finalidad de establecer los lazos y las aportaciones que harán hacia el proyecto, para identificar las diferentes necesidades que presentan las MIPYMES de la ROEM; por parte de de las Instituciones de Educación Superior, el capital intelectual que poseen los investigadores y docentes de dichos institutos para entablar las relaciones de desarrollo para la ROEM; el contenido de las

diferentes políticas públicas emitidas por los gobiernos en marcha y el análisis de la cultura que se vive en la ROEM.

Un estudio retrospectivo parcial; el estudio cuenta con una parte de información; el resto está por obtenerse. Con la información proporcionada por los Observatorios Empresariales de los diferentes países, fuentes bibliográficas, PND, PED, PMD, resultados de encuestas realizadas por el INEGI en la ROEM, el aumento del índice de la tasa de desempleo y el poco DS de la región, en donde la información plantean la necesidad de tener una propuesta de estrategias, que determinen incrementar el nivel del DS a través de un Cluster de desarrollo sustentable de la región, para alcanzar un completo DS en la región que permita un adecuado crecimiento de la misma y se refleje en su participación en la economía del Estado.

Un estudio de investigación de campo; analiza un determinado límite para conocer su estructura y relaciones sociales. Por un lado, su principal característica consiste en que se realiza en un medio adecuado a la cercanía del cluster del sector servicios. La ventaja principal de esta investigación consiste en que los resultados se pueden generalizar al resto de las diferentes regiones que componen el Estado de México y en su efecto al País, por el otro lado, determinar si del cluster del sector servicio están satisfechos con los resultados que ellos generan.

Un estudio no experimental transversal; estudio en el cual se miden una sola vez las características de uno o más grupo de unidades en un momento dado. Su propósito es describir el comportamiento de la ROEM en función de las pertinencias del país en general, para identificar los fenómenos y eventos que están alterando el comportamiento y desempeño de la MIPYMES; analizar el papel que juegan los gobiernos, como interactúan y que función desempeñan en este proyecto.

Un estudio descriptivo; estudio que solo cuenta con una población la cual se pretende describir en función de otra regiones del país que muestran un comportamiento diferente al presentado en la ROEM
El objeto de este proyecto es descubrir y describir al fenómeno tal como se presenta en la realidad; con sus limitaciones y alcances físicos, la investigación es un soporte para estudios más estructurados y profundos; este estudio se empleara para estudiar la proporción que determinan el comportamiento de las PYMES de la ROEM y la importancia que tiene como centro de monitoreo en el desempeño de las MIPYMES del sector servicios, así como la integración y el punto de vista de los empresarios, el gobierno, las IES y determinar si se está cumpliendo con las expectativas de la ROEM y del Estado.
Desde el punto de vista del sustento teórico se plantea una revisión exhaustiva del CC, CS, SGOB, SE, CS y SES, los cuales va a permitir establecer con claridad dentro de la Estructura del Observatorio el funcionamiento y desempeño de cada una de las partes a integrar dicha estructura así como de qué manera van a interactuar para un eficaz y eficiente desempeño. Asimismo, se emplearán instrumentos que permitirán determinar las formas de cómo se evalúan las competencias de la ROEM de acuerdo a los indicadores de las variables correspondientes y de esa manera lograr el Desarrollo Sustentable deseado para la Región Oriente del Estado de México.

RESULTADOS

Los resultados son establecer una Estructura de Observatorio de Micro Pequeñas y Medianas Empresas para el Sector Servicios integrada de un Consejo Consultivo y una Comisión sectorial que permita la interacción de tres sectores diferentes del País como son el Gobierno, Sector Empresarial (Empresarios) y las Instituciones de Educación Superior con la misión de detectar los problemas generados en las MIPYMES de la Región Oriente del Estado de México; así como la detección de las diferentes políticas públicas emitidas por los gobiernos del país para fomentar el desarrollo de las MIPYMES, y de esta manera poder desarrollar las estrategias, planes, políticas, programas y clusters de desarrollo sustentable para la región.

CONCLUSIONES

Es conveniente destacar que el trabajo de investigación está en desarrollo y que la estructura de Observatorio de MIPYMES para la ROEM toma como base el funcionamiento de Observatorios Empresariales de diferentes países, pero desarrollado de acuerdo a las necesidades y problemas que presentan en este momento las MIPYMES de la ROEM, el Estado de México y el País en general, así mismo se enfatizará la importancia de los diferentes gobiernos en marcha en el sector productivo, mismos que a través de los PND, PED y los PMD serán el sustento del cluster regional de desarrollo sustentable.

Como conclusión, se puede decir que la vinculación e interacción de diferentes actores en el desarrollo de la economía en una región específica y del país en general son pilar fundamental en la actividad integradora y transformadora que forma parte del proceso de cambio para el desarrollo de la misma; fortaleciéndose a través de la existencia de un Observatorio de Micro, Pequeñas y Medianas Empresas para el Sector Servicios en la Región Oriente del Estado de México y de esta forma crear políticas públicas emitidas en forma de Clusters de Desarrollo Sustentable, así como el monitoreo del desempeño de los entes económicos para la región como mecanismo fundamental para el futuro de la misma. Ya que dicho Observatorio concentrará los actores económicos que por sus características están estrechamente ligados en el desarrollo del país.

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CAPITAL ESTRUCTURAL: ACTIVO INTANGIBLE PRIMORDIAL EN EL DESARROLLO DE LAS PYMES DE ALTA TECNOLOGÍA

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ABSTRACT

El Capital estructural como parte del Capital intelectual está formado por aquellos activos intangibles relacionados con la administración de altas tecnologías, este indicador permite a las empresas identificar de manera clara las aéreas de oportunidad susceptibles de ser mejoradas en las empresas dedicadas al desarrollo tecnológico.

INTRODUCCIÓN:

Es generalmente aceptado que el Capital Estructural (CE) es un activo intangible muy importante, porque contribuye al desarrollo de la competitividad de las empresas cuando es gestionado y desarrollado eficientemente, específicamente en las empresas que operan tecnologías de alto nivel, sin embargo, es complicado identificar el CE en las organizaciones y por consiguiente es más complicado lograr el desarrollo y su administración eficiente.

En la literatura hay diversos modelos y Metodologías que miden el Capital Intelectual, y por consiguiente al CE, como parte del Capital Intelectual dentro de las organizaciones, no obstante, no hay un método generalmente aceptado con aplicación en este tipo de empresas, por lo que es pertinente el desarrollo de modelos de aplicación más amplia.

Para estudiar este problema de medición se seleccionó el sector de maquinados industriales de Cd. Juárez, México, por ser la industria de capital nacional de mayor nivel de desarrollo tecnológico y por ello, mas adecuada para medir el CE, sobre todo porque ha tenido un desarrollo poco significativo, aunque cuentan con un alto contenido en activos fijos e intangibles, personal altamente calificado, con amplias competencias, habilidades y conocimientos técnicos, por lo que se considera necesario estudiar la administración de estos activos intangibles, mismos que no están visibles, no se identifican en los estados financieros y como consecuencia es difícil gestionarlos y desarrollarlos de manera que incrementen la competitividad.

Cuando se habla de Capital Intelectual, se trata del conjunto de activos intangibles que proporcionan un valor agregado a la organización, entre ellos el Capital humano, el Capital Relacional y el Capital Estructural, en este caso se hará referencia al ultimo elemento que es objeto de este estudio.

El Capital Estructural produce innovación y crecimiento, llamados activos de infraestructura. La función de los líderes es contener y retener el conocimiento para que se convierta en propiedad de la firma. Eso es el Capital Estructural (CE). Dicho en otras palabras más sencillas es conocimiento que no se va a casa cuando se termina el turno de trabajo o por la noche (Stewart, 1997, 167).

Estos activos de infraestructura son aquellas tecnologías, metodologías y procesos que hacen posible el funcionamiento de la organización; aquí puede incluirse la cultura corporativa, las metodologías para el cálculo de riesgos, los métodos de dirección de una fuerza de ventas, la estructura financiera, las bases de datos de información sobre mercado, los sistemas de comunicación, es decir básicamente los elementos que definen la forma de trabajo de la organización. Los activos de infraestructura son importantes porque aportan orden, seguridad, corrección y calidad a la organización (Brooking, 1996: 29).

Este elemento del Capital Intelectual facilita el ambiente de trabajo y permite que los trabajadores de la empresa desarrollen sus actividades e interactúen entre si a la vez que incrementa la productividad en la empresa (Broking, 1996: 29).

Esto significa que el uso de la tecnología es el medio utilizado en el proceso de generación de valor en las organizaciones ya que incrementa las posibilidades de acción de la compañía. Es difícil que las empresas sean rentables cuando no cuentan con tecnologías de información, hoy en día cualquier organización que no está conectada con el exterior, no estará dentro del mercado y no será creadora de valor, es por ello que actualmente se invierten grandes sumas de dinero en estos activos sean tangibles o intangibles (equipo de computo, software y desarrollo de sistemas).

Es importante mencionar que estas inversiones en tecnología deben hacerse con precaución y adquirirla de acuerdo a las necesidades de la compañía, así como tener en cuenta el personal que se requiere para operarlas, para que proporcione a la organización ventajas sobre sus competidores.
La idea principal no es "invertir más en tecnología", sino "invertir bien", de manera que la inversión que se realice permita agilizar y hacer más eficientes las actividades de la organización, y que ello se refleje en el aprovechamiento y rendimiento de los resultados operacionales de la empresa.
Algunos autores como Brooking y Kaplan y Norton lo clasifican de la siguiente manera:

Siguiendo a Annie Brooking (citada por Malgioglio, Cazaray y otros, 2001:7), dentro de estos "activos de infraestructura" se puede encontrar:

Filosofía de gestión, incluye todos los "valores" con los cuales ha sido concebida la organización, los cuales deben adecuarse a las necesidades del mercado.

Cultura corporativa o cultura organizacional, como el conjunto de valores compartidos por todos los integrantes de la empresa. Define el modo en que "se hacen las cosas" en la organización, habitualmente se crea en la alta dirección de la empresa, y suele reflejar los valores de sus fundadores. Este elemento constituye un activo para la empresa cuando el mismo apoya la concreción de los fines empresariales y refleja la filosofía de gestión. Una adecuada cultura corporativa genera en las empresas la capacidad de colaborar con otras para buscar y gestionar negocios, y esto debe ser considerado como un activo.

Procesos de gestión, comprenden todos los mecanismos que permiten poner en práctica la filosofía empresarial, estableciendo quien debe ocupar cada puesto dentro de la organización para poder cumplir con los fines planteados. A efectos de que este proceso no pierda validez, son fundamentales los mecanismos de retroalimentación, que permiten actualizar permanentemente la filosofía de gestión a las necesidades del mercado.

Sistemas de tecnologías de la información, son aquellos que proporcionan a las organizaciones los medios necesarios para implantar los más diversos procesos de gestión. Se relaciona con los equipos informáticos y el software, pero ellos serán activos por la forma en que los mismos sean utilizados, aportando soluciones a la empresa.

Sistemas de interconexión, abarca toda la infraestructura de comunicaciones de que disponga la empresa: uso de correo electrónico, acceso a Internet, redes internas, video conferencias, video teléfono, entre otros.

En este sentido, en los últimos años se ha incrementado la búsqueda de metodologías y modelos que contribuyan a mejorar la capacidad de gestión del CI, aunque con éxito relativo, debido sin duda a la propia naturaleza intangible de estos activos y, sobre todo a que cada negocio específico tiene su

combinación particular de conocimientos clave de éxito en función de los objetivos a conseguir y de la situación del mercado.

A continuación se citan algunos de estos esfuerzos o experimentos más representativos agrupándolos en tres categorías:

a. Los realizados por las empresas consultoras, como Ernest and Young que a través de su "*Center for Business Innovation* (CBI) y de su *"Center for Business Knowledge"* (CBK) ha sido pionera en impulsar, financiar y estimular la gestión del capital intelectual. El fruto más notable de estas iniciativas ha sido el desarrollo por parte de Kaplan y Norton del modelo denominado *"Balanced Scorecard".*

b. Los realizados por instituciones financieras y compañías de seguros.
Entre los esfuerzos realizados por instituciones financieras y compañías de seguros tiene un carácter relevante el realizado por SKANDIA, cuyo director de Capital Intelectual Leif Edvinson ha escrito conjuntamente con Michael Malone un libro titulado *"Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower"*. En este libro se describe la filosofía fundamental de Leif Edvinson respecto al Capital Intelectual y lo que es más importante se explica el modelo utilizado por SKANDIA para gestionar dicho Capital Intelectual. Dado que dicho modelo es el único que intenta vincular los indicadores de Capital Intelectual con los resultados financieros mediante un *"balanced scorecard"* que se entrega a los accionistas y al público en general.

c. Los realizados por empresas de alta tecnología.
Se refieren a las investigaciones realizadas por *Hewlett Packard, Dow Chemical, Hughes Space and Communication, Merck* y *Nova Care*. Todas ellas se centran básicamente en el CI de las funciones de Innovación e Investigación y Desarrollo, aunque con muchas variantes y diversos enfoques.
En resumen los conocimientos que generan valor o el Capital Intelectual son la clave del éxito de las empresas que compiten en el contexto económico, político, social y tecnológico de la época actual, y su papel en el futuro será con toda seguridad cada vez más relevante(José María Viedma Marti. URL: http://www.ictnet.es/conferencias/cap-int.htm).

INDUSTRIA DE MAQUINADOS INDUSTRIALES EN CD. JUÁREZ

Según el Instituto Nacional de Estadística y Geografía (INEGI) en México existen más de 800 empresas de la Industria de los Maquinados, concentradas en su mayoría en la frontera norte. Vera-Cruz, Dutrenit y Gil (2002), en su estudio sostienen que los primeros talleres de maquinados en Cd. Juárez, Chihuahua, surgen a inicios de los años 40s orientados a la producción de refacciones para diversos tipos de maquinaria empleada para la agricultura y la industria, las cuales no era posible comprar en el extranjero por las limitaciones que trajo consigo la guerra. Esos talleres eran considerados artesanales, donde el único empleado era el maestro tornero. Los dueños no ofrecían su trabajo, los clientes eran quienes acudían a ellos.

La integración de un mercado regular de maquinado y en consecuencia los talleres de maquinado del tipo industrial que hoy existen en la región surgen en la década de los años 70, como una respuesta a las necesidades de la Industria Maquiladora de Exportación (IME) arnesera por obtener herramientas y refacciones para la producción.

En un principio los talleres locales no tenían la capacidad para producir ese tipo de herramental debido a que requería del uso de máquinas-herramientas de control numérico y de control numérico computarizado (CNC). Así las plantas maquiladoras muchas veces tenían que fabricar su propio herramental.

Dado que en ese entonces las maquiladoras no estaban abiertas a contratar personal mexicano para ocupar

cargos de alto rango en las plantas, muchos de estos técnicos entrenados en los talleres de mantenimiento de las plantas maquiladoras optaron por montar sus propios talleres mecánicos, muchas veces con equipo usado que compraban a las plantas maquiladoras, convirtiéndose en proveedores independientes, y como la IME tenia conocimiento de su capacidad, comenzó a contratar sus servicios.

De esta forma, a partir de la relación que existía entre el nuevo dueño y su ex empleado, se inician las relaciones contractuales entre los talleres de maquinados y las empresas maquiladoras. Esto facilitó el crecimiento y la multiplicación de los talleres en Cd. Juárez en la década de los años 1970s.

Esta industria tuvo su mayor crecimiento en la década de los 90's, a la par con la industria maquiladora, y aunque hace más de medio siglo de que surge en esta Ciudad, su desarrollo no ha sido significativo, pues en su gran mayoría se identifican empresas micro y pequeñas (ver tabla 1), con estructura organizacional familiar, tecnología no innovadora, tampoco se da mucha importancia a cuestiones de certificación de proceso, siendo esto posiblemente consecuencia de que los encargados de dirigir dichas empresas tengan poco interés en generar cambios al interior de la organización.

Los activos tangibles de los talleres varían, desde aquellos que cuentan con activos en maquinaria y equipo de alrededor de 10 000 dólares hasta aquellos con inversiones de alrededor de 2, 000,000 dólares. Muchas de estos establecimientos tienen una antigüedad de 10 a 15 años, no más de cinco talleres son los que tienen una antigüedad de más de 20. En el caso de los activos intangibles, no se tienen plenamente identificados y la falta de conocimiento de los activos contenidos en las empresas, resta competitividad a las organizaciones.

Tabla 1. Clasificación de empresas industriales de acuerdo al número de empleados

Estrato	Industria	Comercio	Servicios
Micro	Hasta 30	Hasta 5	Hasta 20
Pequeña	De 31 a 100	De 6 a 20	De 21 a 50
Mediana	De 101 a 500	De 21 a 100	De 51 a 100
Grande	Más de 500	Más de 100	Más de 100

Fuente: Nafinsa Nuevos criterios autorizados por Nafinsa en la primera sesión ordinaria de su consejo directivo, efectuada el 29 de enero de 1999. http://www.nafin.com/portalnf/?action=glossary&entry=e Consultada el 3 de febrero del 2009

En el caso de las empresas de maquinados de la localidad estas empresas son en su mayoría micro y pequeñas empresas de administración familiar, sin embargo con inversiones en activos fijos hasta por 2,000,000 de dólares, dado el poco desarrollo que han tenido se elaboro un diagnostico de los activos intangibles referentes al CE.

METODOLOGÍA

El primer interés fue el analizar la gestión del CE y su impacto en la competitividad de las empresas de maquinados, así como las causas del porque estas empresas tienen nulo desarrollo de patentes, y en el intento de ubicar el tema de investigación en uno que aportara a la teoría, surgió el presente tema de investigación.

Una vez definidos el problema de estudio y los objetivos pertinentes se consideraron las especificaciones Hernández, Fernández y Baptista (2007) para determinar el tipo de investigación a seguir. Se utilizan cuatro criterios para la clasificación del estudio: de acuerdo con el periodo en que se capta la información, con la evolución del fenómeno estudiado, con la comparación de las poblaciones y con la interferencia del fenómeno estudiado.

Bajo este criterio, el presente estudio se define como una investigación de campo con enfoque mixto cualitativo y cuantitativo además de considerarse un trabajo prospectivo ya que toda la información se obtiene para los fines específicos del proyecto; transversal al medir las variables en un solo momento sin pretender evaluar su evolución, descriptiva al buscar asociaciones entre variables dentro de una misma población y observacional (no experimental) ya que no es posible modificar ninguno de los factores que intervienen en el proceso descrito.

Para comprobar científicamente este análisis, se creó y aplicó un instrumento de medición entre varias organizaciones de maquinados industriales mediante encuestas aplicadas entre enero y diciembre de 2008. Una vez obtenida esta información, se aplicó el análisis del indicador *Alpha Cronbach* para validar dicho instrumento. La validez del instrumento de medición, dio paso a la obtención de información aplicando la técnica estadística *Structural Equation Model* de donde se obtienen los resultados finales.

La encuesta se compone de 3 partes, una para datos generales y otra para el elemento del CE, así como de 3 preguntas abiertas en donde se identificaron comentarios.

Datos generales. En donde se recaban datos como el nombre de la empresa, origen del capital, número de socios, etc.

Indicadores de Capital Estructural. En este apartado se tienen 37 indicadores dado que es en donde se recoge información de las tecnologías que se emplean y la forma en que se administran.

Preguntas abiertas relacionadas con el tipo de clientes al que atienden y la competencia y posicionamiento en el mercado.

La recopilación de la información se llevó a cabo mediante la aplicación de la encuesta con preguntas cerradas tipo likert, a los gerentes de la industria de maquinados industriales.

El instrumento se aplico en dos partes, en la primera se aplico una prueba piloto a 2 empresas, en las que se somete a prueba no solo el instrumento sino las condiciones de aplicación y los procedimientos involucrados, de esta manera se analizó si las instrucciones se comprendían y que los ítems funcionaran de manera adecuada, también se evaluó el lenguaje y la redacción como lo recomiendan Hernández, Fernández y Baptista (2007:306). Mediante esta primera aplicación se le hicieron modificaciones de redacción y numero de ítems a la encuesta.
La segunda fue la aplicación formal del instrumento a 15 empresas, a las que primero se les contacto por teléfono para la presentación y cita de recolección de los datos.
Validación de la encuesta. La encuesta definitiva se valido mediante el coeficiente de confiabilidad *Alpha de Cronbach*, en donde se obtuvo un índice alto de .9644, siendo una elevada confiabilidad (Hernández, Fernández y Baptista, 2007:439).
La información se pondero de la siguiente manera:

Tabla 2. Ponderación de Capital Estructural

Capital Estructural			
Indicadores	**Escala Likert**	**Valoración**	**Porcentaje**
37	5	185	100%
37	4	148	80%
37	3	111	60%
37	2	74	40%
37	1	37	20%

Fuente: Elaboración propia

La escala likert esta dada por los valores de: 1, totalmente desacuerdo; 2, desacuerdo; 3, ni de acuerdo ni desacuerdo; 4, de acuerdo y 5, totalmente de acuerdo. Los valores de la columna de total representan los puntos totales que puede tener una empresa en cada una de las respuestas.

Los 37 indicadores están representados en 4 variables que intentan explicar al CE como son: Capital tecnológico (Ce_catec), Procesos (Ce_proc), Patentes (Ce_paten), Capital organizacional (Ce_caorg).
El *path diagram* propuesto por medio de ecuaciones estructurales esta representado en la figura 1el siguiente:
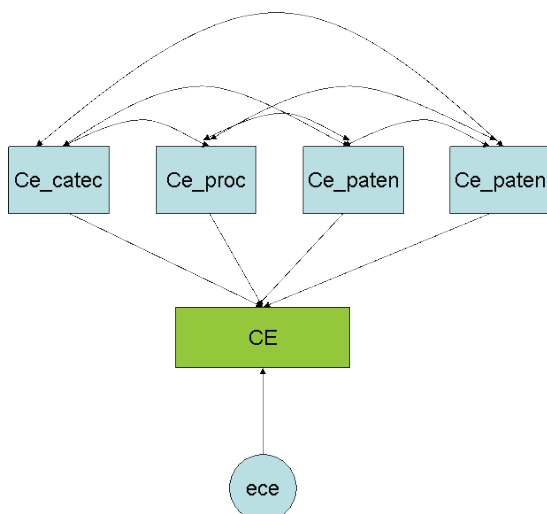

Figura 1: CE y sus variables. Elaboración propia

En el se representa la correlación que existe entre las cuatro variables así como la explicación que se espera de ellas en un 100% hacia el CE, el que también es explicado por un error o variable latente llamado (ece).

RESULTADOS

Una vez que se analizan los datos mediante el software AMOS 17.0 para modelado por ecuaciones estructurales, se obtiene que las variables que explican al CE no se correlacionan entre si, pero explican en su totalidad al CE como se muestra en la Figura 2 de acuerdo al ajuste del modelo.
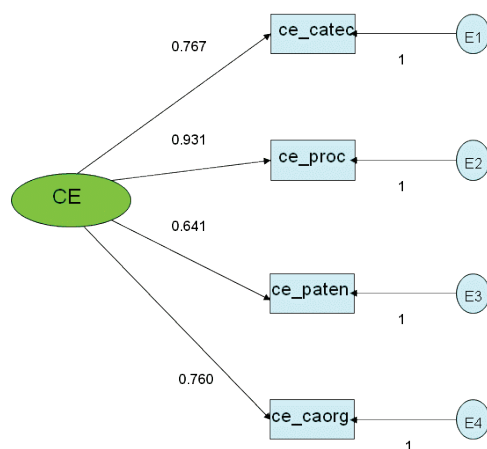
Figura 2: CE y los resultados con la aplicación del modelado por ecuaciones estructurales

Como se observa existen diferencias entre lo propuesto y lo obtenido;

Las variables no se correlacionan entre si
Cada variable cuenta con su error latente (errores del 1 al 4)
Los pesos explicativos de las variables son altos, con excepción de la variable de patentes (ce_paten).

Los índices de ajuste son:

Tabla 3. Índices de ajuste del modelo

Model	RMR	GFI	AGFI	PGFI
Default model	,041	,965	,827	,193
Saturated model	,000	1,000		
Independence model	,453	,474	,123	,284

Los índices que evalúan la bondad de ajuste del modelo son:
Good Fitness Index (GFI) cuyo resultado de buen ajuste debe tender a 1
Root Mean Square Residual (RMR) el que debe tender a 0
Como se observa en la tabla estos índices están muy próximos a sus valores de ajuste, por lo que el modelo de medición de CE ajusta muy bien.

CONCLUSIONES

En la actualidad la localización y explotación del capital intelectual permite el éxito de las empresas, no se puede olvidar que la riqueza es fundamentalmente producto del conocimiento, el cual es considerado junto con la información la materia prima fundamental de la economía y sus productos.

En ese sentido se ha constatado, que el uso del conocimiento se ha intensificando. "El conocimiento por sí solo no genera ninguna ventaja competitiva, ya que esta surge a través del uso que la empresa haga del mismo, fundamentalmente aquellas aplicaciones al campo de la innovación".
Las organizaciones tienen potencial para proporcionar conocimiento que agregue valor, esto se comprobó en el caso de las empresas de maquinados industriales ya que contratan personal poco especializado y sin estudios y dentro de la organización le dan las habilidades y capacitación que requiere, de esta forma condicionan la calidad en el servicio que ofrece la empresa así como el grado en que utiliza el recurso inmaterial para fabricar bienes o servicios.

También se ha incrementado la cantidad de organizaciones que basan su competitividad en tecnología de alto nivel. Esto permite la argumentar que la competitividad depende de la capacidad para innovar y mejorar, además de la productividad y de la eficiencia productiva de las organizaciones. Sin embargo, últimamente se ha cuestionado si el tener instalaciones con tecnología de punta garantiza a las organizaciones una posición competitiva en los mercados, el caso de la Industria de Maquinados en Juárez es un claro ejemplo ya que cuenta con tecnología de alto nivel, pero no genera patentes ni tiene gasto en Investigación y Desarrollo, y es que con personal sin especializar o sin estudios de ingeniería poco puede hacer al respecto.

Tampoco se debe olvidar que estas organizaciones requieren personal altamente calificado, con amplias competencias, habilidades y conocimientos técnicos, no obstante, también se observa de forma continua, que estos recursos, por demás importantes, son administrados con bajos niveles de efectividad.

Se comprobó que el Capital Estructural de las empresas de maquinados es explicado por el capital tecnológico, el de procesos y el organizativo, en el caso de las patentes la explicación es baja debido a que las empresas no cuentan con patentes registradas, a pesar de que son empresas que deben tener desarrollo de nuevas tecnologías no tienen registro de nuevos productos, su participación dentro del mercado es básicamente en la fabricación de herramental para la Industria maquiladora de Exportación.

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ANALISIS DE LA PRESIÓN SOCIAL (MOBBING) EN EL HOSPITAL GENERAL DE TECOMÁN, COLIMA MÉXICO

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RESUMEN

Se realizó un estudio sobre la presencia del Acoso Social (Mobbing), En el Hospital General dependiente de la Secretaría de Salud. Se realizó un muestreo en la cuál se observó que el 4.6 % de los trabajadores se sienten afectados con un acoso social. Ya sea por el jefe o algunos de sus subalternos. Se uso el cuestionario de 44 preguntas del barómetro de CISNEROS realizado por la Universidad de Alcalá de Henares , se analizaron 9 que presentaban el mayor grado de confiabilidad (mas de 0.60). Se realizó análisis de tablas cruzadas y pruebas de correlación. En la mayoría de las correlaciones establecidas se consideraron negativas, esto hace ver que hay otros factores que inducen a ese estado. Es decir, se necesitan otros elementos además de las relaciones inter personales para realizar un conflicto social en el trabajo. En la última pregunta del cuestionario se cuestiono a nivel general si se había sentido acosado por lo menos una vez ala semana en los últimos seis meses, se obtuvo que el 53 % si sentía que había sentido alguna agresión. Esto hace necesario realizar estudios más profundos en relación a la percepción que tiene el trabajador sobre el trato que se le da en su trabajo.

PALABRAS CLAVE: Acoso social, Mobbing, Barómetro de Cisneros, Sector Salud, Tecomán.

ABSTRACT

In this study, Social Harrying (Mobbing) is studied. The study was conducted at The General Hospital (from Health Sector a Federal Secretary), of Tecomán City, State of has made a sample over 4.6 % of workers has sense affected by social harrying. By Chief or employee. It has to use questionnaire about 44 questions of CISNEROS barometer made from Alcalá de Henares University, only has to analyze 9 principal questions whose represents the high grade of reliability (more to 0.6). Made crosstabs and correlation analysis. On mayor of correlations results negative, this has to demonstrate exits others factors has to induce this responses. For that, is need others factors, more to personal interrelations, to induct a social harrying over the work. And the last question of questionnaire has to reference if the person on last six months has felt one time harassed, the result has to 53 % has felt someone aggression. These results demonstrate we need to make more deep analyses, over the relation on perception the worker about the treatment on work site.

KEYS WORDS: Social harrying, Mobbing, Cisneros Barometer, Health Sector, Tecoman.

INTRODUCCION

Actualmente ya se habla sobre la enfermedad del siglo XXI: el mobbing o acoso moral en el trabajo, el cual se interpreta como una modalidad de la conducta agresiva o un conjunto de ellas, cuya frecuencia en la actualidad parece estar alcanzo cifras verdaderamente preocupantes. El mobbing no hace distinción de raza, género, color o edad. Cualquier tipo de empresa sea micro, pequeña, grande, macro, familiar, comercial, industrial, puede ser objeto del acoso que propicia este fenómeno. Investigaciones recientes

han descubierto una forma esquemática que afectan las relaciones laborales entre patrones y empleados, denominado como acoso moral o presión social en el trabajo o Mobbing. No se trata de un nuevo fenómeno, sin embargo es por demás de preocuparse. Los trabajadores que constantemente padecen este acoso moral, se hacen así mismos una serie de preguntas en pro de encontrar una respuesta:

¿Es parte de la jornada laboral los insultos, amenazas, actos de sabotaje, el ridiculizar, las críticas, obligar a realizar labores que lastimen la autoestima, atacar la libertad laboral y personal?

Los comportamientos planteados en la pregunta anterior, son algunos identificados por el profesor Heinz Leymann, en su obra titulada "Mobbing" (Leyman H. , 1996), nos explica que este fenómeno es un proceso de destrucción del trabajador, compuesto por una serie de actuaciones hostiles que, tomadas de forma aislada, podrían parecer superficiales pero cuya repetición constante tiene efectos perniciosos.
Aunque el término mobbing carece de traducción al Español; sabemos que el sustantivo mob procede del idioma inglés, y "significa algo así como gentuza, cuadrilla, chusma. El verbo to mob puede traducirse por arremeter o lanzarse sobre alguien, injuriar groseramente" (Ausfelder, 2002).
Este fenómeno ha cobrado fuerza importante en diversos países como son: España, Holanda, Suecia, Alemania, Estados Unidos

En nuestro país no existen estudios formales por instituciones gubernamentales que hayan realizado una investigación documental sobre la existencia de este fenómeno en centros laborales del país. Por lo que nos resulta fundamental, para poder comprenderlo, llevar acabo una propuesta de análisis sobre el acoso moral o presión social en el trabajo en este caso en relación al hospital General de Tecomán, Colima.

REVISION LITERARIA

"El mobbing causa enormes sufrimientos a las personas que lo padecen y merma la competitividad potencial de las organizaciones en las que se produce. No menos del 12 % de los trabajadores en activo encuestados se muestra totalmente de acuerdo con la afirmación de que "en mi lugar de trabajo el acoso laboral generalizado reduce mucho la eficacia". Los datos del barómetro Cisneros realizado por la Universidad de Alcalá que se presentan a continuación indican que más del 16 % de los trabajadores en activo encuestados (la extrapolación señala a más de 2,3 Millones de trabajadores en España) manifiesta ser objeto de hostigamiento psicológico o mobbing en su trabajo en los últimos 6 meses." (Anónimo, 2007)
"Leymann insiste que, 6 de cada 15 suicidios que llegan a 1,800 al año en Suecia, están causados por problemas en el sitio de trabajo." (Anónimo, 2006)

Historia del Mobbing en Mexico

En México, el investigador Manuel Pando Moreno, del departamento de salud laboral, del centro universitario de ciencias de la salud (CUCS) de la Universidad de Guadalajara (UdeG) asegura "que de momento han encontrado que la violencia psicológica y maltrato generalizado llega a tasas de 75 a 80 por ciento de los empleados". (Anónimo, usuarioslaycos.es, 2007)

"*cuando el trabajo nos castiga*" Debates sobre el Mobbing en México" Este es el primer libro sobre mobbing que se publica en México, fenómeno que no es sino una expresión en los espacios laborales de la violencia que caracteriza a las sociedades complejas. Este libro, conformado por quince capítulos escritos por diecinueve autores, reúne las contribuciones de la inmensa mayoría de quienes actualmente investigan este fenómeno en el país." (Anónimo, Acoso moral organización, 2007)

El mobbing, además, deteriora todo el entramado de las relaciones laborales y las sociales de solidaridad y cooperación en las organizaciones donde es prevalente, enrareciendo el ambiente global y afectando su

productividad y sus posibilidades de desarrollo, así, es producto y productor de "toxicidad laboral". Por tanto, incluso organismos internacionales como la Organización Internacional del Trabajo lo consideran ya un problema social y de salud que debe ser reconocido, atendido y legislado. Sin embargo, en México, apenas comienza a ser visibilizado.

Con estos datos nos damos cuenta de que el mobbing es un problema social laboral, sin embargo todos los casos se encuentran registrados en la unión europea. En nuestro país existen pocos registros sobre este fenómeno, por eso la importancia de analizar, buscar y dar una solución a esta problemática registrando los casos que se investiguen. "Las organizaciones son sistemas diseñados para lograr metas y objetivos por medio de los recursos humanos y de otro tipo. Están compuestas por subsistemas interrelacionados que cumplen funciones especializadas" (Anónimo, 2007). Con esta definición nos podemos dar cuenta de que lo más importante para nuestro estudio es conocer el funcionamiento de las organizaciones, ya que estas se componen de personas; además que trabajan en conjunto bajo una serie de políticas establecidas por la organización.

"Existen dos tipos de Mobbing:" (Anónimo, 2007): acoso vertical y acoso horizontal.
Acoso Vertical: Descendente: Presión ejercido por un superior sobre uno o más subordinados (bossing)
Acoso Vertical Ascendente: Presión ejercida por un trabajador o un grupo de trabajadores sobre un superior jerárquico.
Acoso Horizontal: Presión ejercida por un trabajador o grupo de trabajadores sobre uno de sus compañeros.

El mobbing se manifiesta de las siguientes maneras: Primero: manipulación de la comunicación: no informando a la persona sobre su trabajo, no dirigiéndole la palabra, no haciéndole caso, amenazándola, criticándola tanto con relación a temas laborales como de su vida privada. Segundo: manipulación de la reputación: comentarios injuriosos, ridiculizándole o burlándose de é/ella, propagando comentarios negativos acerca de su persona o la formulación repetida de críticas en su contra. Tercero, manipulación del trabajo: proporcionándole trabajos en exceso, monótonos, repetitivos, o bien sin ninguna utilidad, así como trabajos que están por encima o por debajo de su nivel de calificación". (Anónimo, 2007)

Aunque el término mobbing carece de traducción al Español; sabemos que el sustantivo mob procede del idioma inglés, y "significa algo así como gentuza, cuadrilla, chusma. El verbo to mob puede traducirse por arremeter o lanzarse sobre alguien, injuriar groseramente" (Ausfelder, 2002). Definición de Heinz Leymann : " El psicoterror o mobbing en la vida laboral comporta una comunicación hostil y desprovista de ética que es administrada de manera sistemática por uno o unos pocos individuos, principalmente contra un único individuo, quien, a consecuencia de esto, es lanzado a una situación de soledad e indefensión prolongada, a base de acciones de fustigamiento frecuentes y persistentes (por lo menos una vez por semana) y a lo largo de un prolongado periodo (al menos durante seis meses) ".

Definición de la U.E.: "Comportamiento negativo entre compañeros o entre superiores o inferiores jerárquicos, a causa del cual el afectado es objeto de acoso y ataque sistemático durante mucho tiempo, de manera directa o indirecta, de parte de una o más personas, con el objetivo y/o efecto de hacerle el vacío"
El mobbing está definido como «toda conducta no deseada que atente contra la dignidad de una persona y cree un entorno intimidatorio, humillante u ofensivo», según fue aprobado por el Congreso de los Diputados el 24 de diciembre del 2003, cuando modificó algunos artículos de la Ley del Estatuto de los Trabajadores y de la Ley de Infracciones y Sanciones en el Orden Social.

Concepto jurídico de mobbing o acoso moral : " Presión laboral tendenciosa encaminada a la auto-eliminación de la víctima" por el Magistrado R. Gimeno Lahoz en la 1ª Jornada sobre Mobbing en Girona.

Conjunto de comportamientos, acciones o conductas ejercidas por una o diversas personas de forma sistemática y a lo largo del tiempo, destinadas a dañar la integridad física y psicológica de una o más personas, con un desequilibrio de fuerzas, con el objetivo de destruir su reputación y sus redes de comunicación y perturbar el ejercicio de sus funciones aprovechando las deficiencias en el sistema organizativo.   El Acoso psicológico en el trabajo tiene el objetivo de destruir la estabilidad psicológica de un ser humano, a través del descrédito y la rumorología. Se practica acosando grupalmente de tal manera que la víctima "estigmatizada" no pueda defenderse, que no pueda hablar o que su palabra ya no tenga ningún valor. La indefensión de la víctima proviene de la pasividad de los testigos de la violencia, que permiten la destrucción de otro ser humano de manera indignamente cobarde.

Acoso Mediático: " Este término se hace servir para identificar situaciones en que una persona o un grupo de personas ejercen un conjunto de comportamientos caracterizados por una violencia psicológica, aplicada de forma sistemática durante un tiempo sobre otra persona tendente a provocar el desprestigio de la misma, utilizando para ello cualquier medio de comunicación de masas" Definición de Marina Parés Soliva, "En 1999, la psiquiatra M. F. Hirigoyen señaló que todo comportamiento abusivo (gesto, palabras, comportamientos, actitudes…) que atenta por su repetición y sistematicidad a la dignidad o a la integridad psíquica o física de una persona, poniendo en peligro su empleo o degradando el clima de trabajo, supone un comportamiento de acoso psicológico (moral). "(Anónimo, 2007)

METODOLOGÌA

Objetivo General: Identificar la presencia del mobbing en el hospital General de Tecomán, Colima, así como proponer una prevención y atención a dicho fenómeno.

Hipotesis: La presencia del mobbing en el hospital General de Tecomán provoca problemas laborales, emocionales y de salud.
Objetivos Especificos: Primero, determinar el porcentaje de personas afectadas por el mobbing correspondiente al segundo trimestre del año 2009. Segundo, determinar que actos son los de mayor causa del mobbing en el segundo trimestre del 2009.
Diseño y Metodos: El diseño de la investigación es no experimental y de carácter cuantitativo ya que en esta se utiliza la recolección y análisis de datos para dar respuesta a las preguntas planteadas y resolver una hipótesis.
Tipo De Diseño: Para obtener un resultado efectivo utilizamos el muestreo estratificado.
Poblacion De Estudio: Se aplicó cuestionarios para obtener resultados en esta investigación a todo el personal del hospital general de Tecomán.

Descripción

EL Hospital General Tecomán dependiente de la secretaria de salud y bienestar social del gobierno del Estado de Colima está Ubicado en la calle prolongación Pedro Torres Ortiz S/N de la calle Benito Juárez del municipio de Tecomán, Colima. El 18 de noviembre de 1994 fue inaugurado por el C. Dr. J Jesús Kumate Rodriguez en compañía del C. Lic. Carlos De La Madrid Virgen gobernador del estado de Colima, así como personalidades y trabajadores de la secretaria de salud y no fue hasta el 16 de diciembre del mismo año cuando el hospital abriera las puertas al público en general.

> ➢ Proporciona atención de segundo nivel a pacientes agudos, crónicos, y de corta estancia.
> ➢ Su construcción es horizontal cuenta con un piso solamente sus camas censables son 45, y no censables, para adulto 29 para Pediatría 15.
> ➢ Dispone de las 4 especialidades básicas como son: *Medicina Interna, Cirugia General, Gineco Obstetricia, Pediatria*

Metodo de Recogida de Datos

Como primer paso se solicitará una lista de los empleados del Hospital, que contengan el puesto y nombre de los empleados.
Las encuestas fueron realizadas al capital humano dispuesto en la fase de aplicación de las mismas, mediante investigadores y personal de confianza ayudaron en su aplicación.
El tipo de encuesta que aplicó es el "Cuestionario de la Escala de Cisneros" (Anónimo, 2007) ya que este cuestionario maneja para la medición del mobbing, además que incluye el método cuantitativo y cualitativo.

Variable independiente

El mobbing en el centro laboral junto con la falta de normas claras dentro de la organización. Ya que se puede entender como mobbing "como el miedo o terror de un trabajador hacia su lugar laboral." (Anónimo, 2007) Así también podemos definir como norma laboral como una serie de reglas, directrices o características para actividades las actividades realizadas por empleados o sus resultados, con el fin de conseguir un grado óptimo de orden en un contexto dado por un organismo reconocido. (Anónimo, 2007)

Variables dependientes

Ambiente de trabajo, se entiende por la forma, clima y lugar en donde se llevan a cabo las actividades laborales.
Percepción del trabajador a cerca de sus labores dentro de la organización ya que esta nos permite observar la forma en que éste ve sus obligaciones como empleado y de qué forma las lleva a cabo con respecto a la autoridad de un nivel jerárquico superior.
Aplicabilidad de las normas laborales en los centros de trabajo, son las que nos indican que "tienden a conseguir el equilibrio y la justicia social en las relaciones entre los trabajadores y patrones." (Anónimo, 2007)

Marco Contextual Ubicación Geográfica

El Hospital General de Tecomán se encuentra ubicado en Prolongación Pedro Torres Ortiz s/n, en la Colonia Benito Juárez, Tecomán, Colima, México. Colima, es un estado se ubica en la costa oeste del territorio nacional y limita al norte con el estado de Jalisco, al sur con el estado de Michoacán y al oeste con el Océano Pacífico. Políticamente se divide en diez municipios: Armería, Colima, Comala, Coquimatlán, Cuauhtémoc, Ixtlahuacán, Manzanillo, Minatitlán, Tecomán y Villa de Álvarez

El Municipio de Tecomán se Localiza en la Porción Sureste del Estado entre las Coordenadas 103º 59' a 103º 73' de Longitud Oeste del Meridiano de Greenwich y 18º 41' 20" a 19º 06' de latitud norte. Limita al Norte con los municipios de Coquimatlán y Colima, al Sur con el Océano Pacífico, al Este con el Municipio de Ixtlahuacán, al Oeste con el de Armería y al Sureste con el Estado de Michoacán. Está situado a 33 Metros sobre el nivel del mar. Ocupa una extensión territorial de 834.77 kilómetros Cuadrados que corresponden al 15 por Ciento de la superficie estatal. La población del Municipio asciende a 98 mil 150 habitantes. Habitantes, el 18.3% de la Población Estatal. Hombres 50.0%.(http://www.municipiotecoman.gob.mx obtenida el 13 Mayo 2009)

 Evolución Demográfica La mayor concentración de la población se encuentra en la ciudad de Tecomán y los poblados de Cerro de Ortega, Madrid, Tecolapa, Caleras, Cofradía de Morelos y Nuevo Caxitlán. La población joven constituye el 37.7 de la población total con una distribución proporcional entre ambos sexos. El mayor porcentaje de habitantes lo forma la población urbana. (http://www.municipiotecoman.gob.mx obtenida el 13 Mayo 2009)

RESULTADOS

En este apartado se presentan las cifras más representativas que se tuvieron durante la investigación y la recolección de datos. Todas estas fueron analizadas conforme a los objetivos de la investigación. Se aplicaron un total de 44 encuestas, todas por medio de la encuesta de la escala de *Cisneros* para la valoración del mobbing, esta encuesta cuenta con una frecuencia de tiempo la cual es representada de la siguiente manera (Tabla 1)

Tabla 1: Frecuencia de Tiempo

0	1	2	3	4	5	6
Nunca	Pocas veces al año o menos	Una vez al mes o menos	Algunas veces al mes	Una vez a la semana	Varias veces a la semana	Todos los días

En el cual las respuestas 4, 5 y 6 representan el grado de mobbing que han sufrido los encuestados en cada uno de los reactivos. En esta investigación se presentaron 2 casos de acoso moral o mobbing el cual equivale al 4.6 % del total de encuestados (ver figura 1). Debemos tomar en cuenta que el mobbing necesita de varios elementos para que se produzca éste fenómeno los cuales se mencionaron el capítulo dos de este documento. Con todo esto nos percatamos de que un trabajador en lo individual, puede ser víctima uno o varios actos que ocasionan de mobbing a la vez con las mismas y/o diferentes frecuencias de tiempo. Debido a las numerosas preguntas realizadas, solamente se aplicará el análisis a las preguntas (Tabla 2)

Tabla 2: Relación Entre el Ser Ignorado y los Autores del Hostigamiento

2 –Me ignoran, me excluyen o me hacen el vacío, fingen no verme o me hacen invisible.
8-Me asignan tareas o trabajos por debajo de mi capacidad profesional o mis competencias.
9- Me asignan tareas rutinarias o sin valor o interés alguno.
16-Me acusan injustificadamente de incumplimientos, errores, fallos, inconcretos y difusos
18- Se amplifican y dramatizan de manera injustificada errores pequeños o intranscendentes.
24- Me menosprecian personal o profesionalmente.
36- Recibo una presión indebida para sacar adelante el trabajo.
39- Desvaloran continuamente mi esfuerzo personal.
43-Me lanzan insinuaciones o proposiciones sexuales directas o indirectas

Nota: De las preguntas 2 a la 39 fueron las preguntas que poseían en un inicio (análisis de Confiabilidad realizados por Ángel Fidalgo e Iñaky Piñuel, 2004:615) más de 0.60. Y la pregunta 43 es importante en su contexto mismo.

Debido a la complejidad de Relacionar los diferentes autores del mobbing con las diferentes frecuencias, no se ilustran de manera gráfica, sino una relación de tablas cruzadas. En la Tabla 2 se muestra como más del 50 % de los encuestados contesto que nunca se siente Ignorado y solamente el 4.6 % (2) se consideran que varias veces a la semana es ignorado, ya sea por su jefe o sus compañeros.

En relación a la Tabla 3, como se puede observar surge la misma situación anterior, es casi nula la rebaja de la capacidad de operación por parte de los trabajadores. Tabla 4 Se indica nuevamente que solamente dos individuos, están dentro de la categoría de frecuencia de alguna vez por semana y alguna vez por mes, nuevamente se refleja que la gran mayoría de los trabajadores no se siente esta acusación. Para la Tabla 5 en la que se expresa que solamente 4 trabajadores (10.75 %), manifestaron que algunas veces al mes, son recriminados por pequeños actos o acciones que son intrascendentes.

Tabla 3: Relación Entre los Autores del Hostigamiento y las Asignación de Tareas por Debajo de su Capacidad de Trabajo

		Me asignan tareas o trabajos por debajo de mi capacidad profesional o mis competencias (auto)			
		A) Jefes o superiores	B) Compañeros de trabajo	C) Subordinados	No contesto
		Recuento	Recuento	Recuento	Recuento
Me asignan tareas o trabajos por debajo de mi capacidad profesional o mis competencias	No contesto	0	0	0	0
	Nunca	2	0	0	32
	Pocas veces al año o menos	2	1	0	0
	Algunas veces al mes	4	0	0	0
	Una vez a la semana	1	0	0	0
	Varias veces a la semana	0	0	0	0
	Todos los días	0	1	0	0

Tabla 4: Relación Entre los Autores del Hostigamiento y la Injustificación de Incumplimientos

		Me acusan injustificadamente de incumplimientos, errores, fallos, inconcretos y difusos (auto)			
		A) Jefes o superiores	B) Compañeros de trabajo	C) Subordinados	No contesto
		Recuento	Recuento	Recuento	Recuento
Me acusan injustificadamente de incumplimientos, errores, fallos, inconcretos y difusos	No contesto	0	0	0	0
	Nunca	2	2	0	28
	Pocas veces al año o menos	4	3	2	0
	Algunas veces al mes	1	0	0	0
	Una vez a la semana	0	1	0	0
	Varias veces a la semana	0	0	0	0
	Todos los días	0	0	0	0

Tabla 5: Relación Entre Los Autores del Hostigamiento y la Dramatización de Manera Injustificada de los Pequeños Errores

		Se amplifican y dramatizan de manera injustificada errores pequeños o intrascendentes (auto)			
		A) Jefes o superiores	B) Compañeros de trabajo	C) Subordinados	No contesto
		Recuento	Recuento	Recuento	Recuento
Se amplifican y dramatizan de manera injustificada errores pequeños o intrascendentes	No contesto	0	0	0	0
	Nunca	3	0	0	26
	Pocas veces al año o menos	4	5	1	0
	Algunas veces al mes	1	2	1	0
	Una vez a la semana	0	0	0	0
	Varias veces a la semana	0	0	0	0
	Todos los días	0	0	0	0

Tabla 6: Relación Entre los Autores del Hostigamiento y Menospreciarían Laboral

|		Me menosprecian personal o profesionalmente (auto)			
		A) Jefes o superiores	B) Compañeros de trabajo	C) Subordinados	No contesto
		Recuento	Recuento	Recuento	Recuento
Me menosprecian personal o profesionalmente	No contesto	0	0	0	0
	Nunca	2	0	0	28
	Pocas veces al año o menos	4	5	0	0
	Algunas veces al mes	0	1	0	0
	Una vez a la semana	1	0	0	1
	Varias veces a la semana	0	1	0	0
	Todos los días	0	0	0	0

Como se observa en la Tabla 6**,** Se vuelve a observar la misma relación de trabajadores de la Tabla (5) anterior, teniendo con ello una agrupación específica que se considera con un cierto de hostigamiento en el trabajo.

Tabla7: Relación Entre los Autores del Hostigamiento y Presión en Exceso para Terminar los Trabajos

		Recibo una presión indebida para sacar adelante el trabajo (auto)			
		A) Jefes o superiores	B) Compañeros de trabajo	C) Subordinados	No contesto
		Recuento	Recuento	Recuento	Recuento
Recibo una presión indebida para sacar adelante el trabajo	No contesto	0	0	0	0
	Nunca	1	1	0	31
	Pocas veces al año o menos	6	1	0	0
	Algunas veces al mes	2	0	0	0
	Una vez a la semana	1	0	0	0
	Varias veces a la semana	0	0	0	0
	Todos los días	0	0	0	0

En la Tabla 7**,** el jefe ocupa la mayoría de la presión hacia sus subordinados con un 6.9 % de los trabajadores, de manera semanal y con un 14 % en alguna vez al año.

Figura 1: Si ha Ocurrido Maltrato psicológico en los Últimos 6 meses
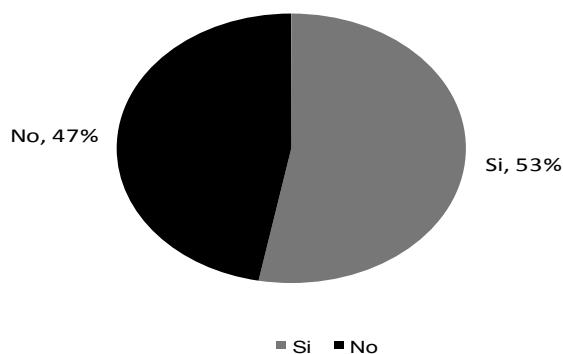
Este último ítem (¿Si en los últimos 6 meses ha sido acosado de maltrato psicológico [más de una vez por semana]), se obtuvo lo siguiente:

En la Figura 1 se muestra la última pregunta, que se puede decir que es un resumen de todos los ítems anteriores. Se percibe que el 47 % de los trabajadores, ha tenido por lo menos una acción de maltrato psicológico. Hay que recordar que el Test de la Escala de CISNEROS, consta de 43 Ítems y un ítem extra que se refiere a esta figura. Además de las tablas cruzadas, se realizaron correlaciones entre las preguntas. En la tabla 8 se observa que hay una correlación negativa, lo que hace indicar que a mayor grado de superioridad habrá menor maltrato psicológico. Como se observa en la correlación de la tabla 9, También muestra una correlación a la inversa, es decir que el acoso puede llegar a ser menor en proporción al grado de conocimientos que puede llegar a tener el jefe o el subalterno. Observando la Tabla 10 en relación a la correlación que es nuevamente significativamente a la inversa, nos dice que es posible que el grado de acoso y el grado de incumplimiento se vayan decrementando conforme hay un aumento jerárquico del puesto.

Tabla 8: Correlación Acoso vs Restricción de Comunicación del Trabajador

		mi superior restringe mis posibilidades de comunicarme, hablar o reunirme con el	En el transcurso de los últimos6 meses ¿ha sido Ud. Victima de por lo menos alguna de las anteriores formas de maltrato psicológico de manera constante
mi superior restringe mis posibilidades de comunicarme, hablar o reunirme con el	Correlación de Pearson	1	-.321(*)
	Sig. (bilateral)		.036
	N	43	43
En el transcurso de los últimos6 meses ¿ha sido Ud. Victima de por lo menos alguna de las anteriores formas de maltrato psicológico de manera constante?	Correlación de Pearson	-.321(*)	1
	Sig. (bilateral)	.036	
	N	43	43

* La correlación es significante al nivel 0,05 (bilateral).

Tabla 9: Correlación de Acoso vs Asignación por Bajo de Mis capacidades

		En el transcurso de los últimos6 meses ¿ha sido Ud. Victima de por lo menos alguna de las anteriores formas de maltrato psicológico de manera constante.	Me asignan tareas o trabajos por debajo de mi capacidad profesional o mis competencias
En el transcurso de los últimos6 meses ¿ha sido Ud. Victima de por lo menos alguna de las anteriores formas de maltrato psicológico de manera constante	Correlación de Pearson	1	-.176
	Sig. (bilateral)		.260
	N	43	43
Me asignan tareas o trabajos por debajo de mi capacidad profesional o mis competencias	Correlación de Pearson	-.176	1
	Sig. (bilateral)	.260	
	N	43	43

Tabla 10: Correlación Entre el Acoso y la Acusación Injustificada

		En el transcurso de los últimos6 meses ¿ha sido Ud. Victima de por lo menos alguna de las anteriores formas de maltrato psicológico de manera constante?	Me acusan injustificadamente de incumplimientos, errores, fallos, inconcretos y difusos
En el transcurso de los últimos6 meses ¿ha sido Ud. Victima de por lo menos alguna de las anteriores formas de maltrato psicológico de manera constante?	Correlación de Pearson	1	-.477(**)
	Sig. (bilateral)		.001
	N	43	43
Me acusan injustificadamente de incumplimientos, errores, fallos, inconcretos y difusos	Correlación de Pearson	-.477(**)	1
	Sig. (bilateral)	.001	
	N	43	43

** La correlación es significativa al nivel 0,01 (bilateral).

Tabla 11: Correlación entre el acoso y el menosprecio injustificado

		En el transcurso de los últimos6 meses ¿ha sido Ud. Victima de por lo menos alguna de las anteriores formas de maltrato psicológico de manera constante(con una frecuencia de una vez por semana)?	Me menosprecian personal o profesionalmente
En el transcurso de los últimos6 meses ¿ha sido Ud. Victima de por lo menos alguna de las anteriores formas de maltrato psicológico de manera constante(con una frecuencia de una vez por semana)?	Correlación de Pearson	1	-.442(**)
	Sig. (bilateral)		.003
	N	43	43
Me menosprecian personal o profesionalmente	Correlación de Pearson	-.442(**)	1
	Sig. (bilateral)	.003	
	N	43	43

*** La correlación es significativa al nivel 0,01 (bilateral).*

CONCLUCIONES

Ya se explicó ampliamente que es el mobbing y cuáles son las causas que le dan origen. Podemos concluir de acuerdo a los objetivos de nuestra investigación (ver Tabla 12)

Tabla 12: Objetivos y Resultados de la Investigación

Objetivos De La Investigacion	Resultados
▪ Determinar el porcentaje de personas afectadas por el mobbing correspondiente al segundo trimestre del año 2009.	Este objetivo fue alcanzado en la gráfica 1
▪ Determinar que actos son los de mayor causa del mobbing en el segundo trimestre del 2009.	Este objetivo fue alcanzado en la tabla 3.

Aun cuando las ubicaciones geográficas que nos separan de los países desarrollados que tienen un gran problema de presión social en sus trabajadores, no nos deja exentos a padecerlo ya que este fenómeno no discrimina entre raza, color, nacionalidad o sexo y afecta por igual al ambiente laboral de cualquier país.
La presión social o mobbing, puede ser ocasionado por cualquier circunstancia dada en un momento normal de trabajo y una vez provocado, su propagación no es fácilmente detenida ya que el ambiente laboral es su hábitat de propagación, generando actos negativos importantes tanto en los trabajadores como en la misma entidad económica. Se recomendaría la realización de pruebas psicológicas más específicas hacia los individuos con el fin de determinar si existe realmente una presión social. Creemos que es necesario que el gerente y la persona encargada del recurso humano en función de la administración, tomen conciencia del problema que es el mobbing así como la magnitud que puede alcanzar. Proponiendo lugares de trabajo libres de acoso o de cualquier otro fenómeno que afecte directamente a cualquier elemento de la empresa, cumpliendo así con sus responsabilidades como organización.

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COMERCIO ELECTRÓNICO COMO ESTRATEGIA IMPULSORA DE LAS EXPORTACIONES EN MÉXICO

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RESUMEN

Debido a la creciente incursión de los medios electrónicos en el ámbito comercial, y a la necesidad de información pronta y oportuna que permitan tomar decisiones, así como eficientar los tiempos y recursos; se han desarrollado nuevos modelos de negocios en Internet. El presente trabajo consiste en la recopilación de datos respecto al e-commerce B2C de 30 empresas establecidas en la República Mexicana, en cuanto al importe de ventas por Internet, los resultados de ventas por sector, la distribución geográfica en Internet de las venta, con la finalidad de analizar la rentabilidad de invertir en el e-commerce como estrategia impulsora de exportaciones en México; ya que si bien es sabido, los medios electrónicos están repuntando las ventas de las organizaciones al extranjero. La investigación arrojó resultados denotando que las ventas por Internet tanto para el mercado interno como para el extranjero están incrementándose, nuevos mercados están surgiendo, y la confianza del mercado mexicano está consolidándose, trayendo como consecuencia, una mejora en el desarrollo y crecimiento económico derivado de la inyección de ingresos al país.

(**PALABRAS CLAVE:** comercio electrónico, Internet, exportaciones, tecnologías de información y comunicación)

INTRODUCCIÓN

La incursión de la Internet al sector empresarial ha transformado el rumbo en las relaciones comerciales de México con el mundo, ya que las Tecnologías de Información y Comunicación representan una herramienta para la compra y venta de bienes y/o servicios que vencen las barreras geográficas, de tiempo, de accesibilidad de la información de manera pronta y oportuna; además de propiciar las relaciones con proveedores, clientes, inversionistas e inclusive con los mismos competidores.

PROBLEMA

Ante la crisis económica mundial, México se enfrenta a diferentes problemáticas, entre ellas, que la actividad económica se ha visto disminuida debido al cese de actividades de compra y venta de bienes y servicios. Según el Resumen de Indicadores de la Secretaría de Hacienda y Crédito Público (2009), para los primeros seis meses del 2009, la balanza comercial registró un déficit acumulado de 1,207 millones de dólares, por lo que el valor de las exportaciones de mercancías fue de 19,364 millones de dólares en junio del presente año, es decir, un 26.6% inferior al observado el año pasado.

JUSTIFICACIÓN

Con la llegada de la actual crisis económica, la lucha por lograr una ventaja competitiva ante los demás, se vuelve cada vez más difícil, los clientes y consumidores tienen la libertad de elegir el proveedor más satisfactorio, ya que algunos de los factores para ser exitosos en este difícil mercado global, es tener productos de calidad, ofrecer menor tiempo de respuesta y precio competitivo.
Las organizaciones buscan aprovechar las Tecnologías de Información y Comunicación (TIC´s), hacer transacciones vía Internet resulta ser más económico que hacerlas por vías tradicionales; es por ello que el e-commerce por este medio, la PROFECO (2006) le considera como una alternativa de reducción de

costos y una herramienta fundamental en el crecimiento de las ventas para el país que fomentarán las actividades económicas hacia un crecimiento y desarrollo económico que haga frente a la crisis mundial.

REVISIÓN LITERARIA

LA EXPORTACIÓN

De acuerdo a la Ley Aduanera (2009), la Exportación es el envío legal de mercancías nacionales o nacionalizadas para su uso o consumo en el extranjero.

- Incremento de ingresos a las compañías mexicanas.
- Expansión de mercados.
- Generación de empleo y por ende incremento del poder adquisitivo familiar.
- Mejorar la competitividad y consolidación de las empresas.
- Se inyectan ingresos a la economía mexicana.
- Incremento de cartera de clientes.

EL COMERCIO ELECTRONICO (E-COMMERCE)

Jeffrey Rayport (2005) definió el término de e-commerce como los "intercambios mediados por la tecnología entre diversas partes (individuos, organizaciones, o ambos), así como las actividades electrónicas dentro y entre organizaciones que facilitan esos intercambios"

La institución encargada de lograr la protección del consumidor en el contexto del comercio electrónico es el Consejo de la Organización para la Cooperación y Desarrollo Económico, también conocido como OCDE, que también trata de evitar las prácticas comerciales transfronterizas que sean fraudulentas y engañosas.

De igual manera, se cuenta con una ley y organismo en México que regula al comercio electrónico, La Ley Federal de Protección al Consumidor fue publicada en el Diario Oficial de la Federación, el día 24 de diciembre de 1992, siendo presidente de México en ese momento Carlos Salinas de Gortari. La creación de esta Ley tiene como finalidad el promover y proteger los derechos y cultura del consumidor y procurar la equidad, certeza y seguridad jurídica en las relaciones entre proveedores y consumidores. El organismo que se encarga de vigilar el cumplimiento de dicha ley es la Procuraduría Federal del Consumidor.

B2C (Business to consumer).- Esta modalidad de negocio a consumidor, se refiere al intercambio entre empresas y consumidores finales, es decir, el comercio tradicional a través de medios electrónicos. Esta modalidad fue la de mayor desarrollo inicial, en la cual se utiliza el correo electrónico para sustituir la venta por catálogo, por lo que hay una reducción de costos, ya que el vendedor se ahorra el costo de producir, imprimir y enviar sus catálogos. Hay dos razones principales para que se dé un éxito en estas ventas: una es la reducción de costos, y otra es que toda persona que tenga computadora con acceso a Internet, pueda ser tentado a realizar compras. Hay mayores posibilidades en que se realicen compras de software, video, fotos, y música.

METODOLOGÍA

Los tipos de investigación que se llevarán a cabo en este apartado son la aplicada, la exploratoria y la concluyente. La primera se realiza debido a que se podrán determinar preguntas específicas acerca del problema. En la segunda, se llevará a cabo una investigación exploratoria en Internet con el objeto de encontrar solución de los supuestos planteados acerca de la problemática. Esta investigación permite

conocer por medio de cuestionarios aplicados a 30 empresas mexicanas que tienen su sitio web para vender por Internet, sus resultados de ventas por Internet, participación de ventas por Internet, categorías de productos y servicios. Los datos que a continuación se presentan, fueron extraídos de investigación exploratoria en Internet, Estudio de Comercio Electrónico en México basado en Internet, el cual fue elaborado por AMIPCI (2009), institución que fue fundada en 1999, y está integrada por las empresas que representan una verdadera influencia en el desarrollo de la Industria de Internet en México, su misión es potenciar la economía del Internet en México. Entre las empresas mexicanas participantes para dicho estudio se encuentran:

- Aeroméxico
- Click Hoteles
- Despegar
- Interjet
- Lan Chile
- Mexicana
- Posadas
- Volaris
- Abugaber
- Bebebet
- Cibernética Iintegral
- Cosmetix
- Decompras
- Dinero Mail
- Cosmetix
- Forever Living
- Intelcompras
- Liverpool
- Mercado Libre
- Mixup
- Palacio de Hierro
- Plaza Vip
- Sanborns
- Seguros S
- Sony
- Telmex
- Tododecómputo
- Tuner

RESULTADOS OBTENIDOS

Ventas Totales

El importe de las ventas de comercio electrónico basado en Internet son:
2007 - $955 millones de dólares.
2008 - $1,768 millones de dólares.

Lo que representa un incremento del 75% del 2006 al 2007 y del 85% del 2007 al 2008.

Ventas por Zonas
    a) 2007.
El 5% de las ventas por Internet fueron internacionales.
El 44% de las ventas se llevaron a cabo por gente que radicaba en el interior de la república.
El 51% de las ventas son del área metropolitana.
    b) 2008
El 14% de las ventas por Internet fueron internacionales.
El 50% de las ventas se llevaron a cabo por gente que radicaba en el interior de la república.
El 36% de las ventas son del área metropolitana.

Ventas consumo vs. turismo

Las ventas por bienes de consumo están representadas por celulares, productos de electrónica y audio, mascotas, vehículos, ropa, relojes, lentes, boletos, computación y accesorios, etc. Las ventas por turismo incluyen lo que son boletos de avión, noches de hotel, paquetes de viaje, entre otros.
    a) 2007.
Se obtuvo un monto de $267 millones de dólares en ventas con motivo de bienes de consumo.
Las ventas por concepto de turismo fueron de $688 millones de dólares.
    b) 2008.
Se obtuvo un monto de $389 millones de dólares en ventas con motivo de bienes de consumo.
Las ventas por concepto de turismo fueron de $1,379 millones de dólares.

Confianza de la gente al comprar on-line.

Según una investigación de AMIPCI (2009), el nivel de confianza de la gente es positivo, ya que el 55% manifiesta tener mucha confianza, mientras que el 39% se muestra indiferente, es decir, ni confía ni desconfía; el 6% tiene mucha o bastante desconfianza.

CONCLUSIONES

Los sitios interactivos destinados a las transacciones comerciales que proporciona Internet, son de suma importancia para el desarrollo y crecimiento de las organizaciones en este mundo globalizado, donde el flujo de información se efectúa de manera más rápida y efectiva, por lo que las transacciones comerciales se realizan con mayor frecuencia, repuntando así al e-commerce como una de las principales TIC´s con una importancia como promotora de las ventas internacionales por medio de nuevos modelos de negocios en Internet. Las ventas internacionales por Internet van en incremento, abarcando nuevos mercados y nuevos territorios, dirigidas a la obtención de utilidades para la organización y sobre todo un incremento de ingresos para el mejoramiento para la economía mexicana. Las áreas que tienen mayores ventas es el sector turístico como lo son los viajes, donde la venta de boletos de avión resulta predominante; en el rubro de los artículos de consumo, las ventas son por artículos para computadoras. El mercado tanto nacional como internacional va adquiriendo mayor confianza respecto a las compras por Internet, por lo que se va alcanzando gran potencial de manera sólida.Como conclusión se recomienda a las organizaciones de cualquier índole, exportar mediante el comercio electrónico, ya que además de resultar rentable, ayuda al incremento de exportaciones y al desarrollo de la organización y su cartera de negocios y a México.

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LA TRANSFERENCIA DE CONOCIMIENTO TÁCITO COMO BASE FUNDAMENTAL DE LA VENTAJA COMPETITIVA SOSTENIBLE

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RESUMEN

El éxito de una organización tiene una relación directa con la estrategia empresarial delimitada, aplicada y sostenida. En la búsqueda de la ventaja competitiva, los recursos organizacionales tangibles fueron durante décadas los más utilizados; dicha tendencia ha cambiado para tomar en la actualidad, como base fundamental, al conocimiento organizacional. El capital humano de una empresa es un conglomerado de recursos únicos, inimitables, raros y valiosos, que tienen la posibilidad de incidir en la ventaja competitiva de una organización. La transferencia de conocimiento, como una de las actividades prioritarias de la gestión del conocimiento, da soporte a las actividades encaminadas al logro y sostenimiento de la ventaja competitiva, al ser el medio a través del cual es posible transmitir y compartir dicho activo intangible. Transferir exitosamente conocimiento tácito, comparativamente con el conocimiento explícito, conlleva una mayor complejidad. A la fecha no ha sido posible delimitar a cabalidad los factores o estrategias relevantes que optimicen el proceso de transferencia de conocimiento.

INTRODUCCIÓN

En la actualidad, las organizaciones se desarrollan en un mundo cada vez más globalizado y cambiante (Berends, Vanhaverbeke, & Kirschbaum, 2007). En virtud de lo anterior, la competencia a la que se enfrentan es cada más fuerte, motivo por el cual las empresas deben afrontar la necesidad de ser más eficientes en su gestión de recursos humanos, tecnológicos, materiales y económicos; asimismo, y teniendo en mente cumplir con la misión y visión enunciadas, deben desarrollar y mantener la ventaja competitiva sostenible, que les permita diferenciarse del resto de las entidades.

De acuerdo a Lee y Choi (2003) existe la idea de que las empresas que sean capaces de capturar su conocimiento intrínseco podrían ser dueñas de su futuro; para estos autores, la economía industrial ha cambiado, dejando de tomar como base a los activos naturales, para considerar ahora a los activos intelectuales, por lo que los gerentes y directivos de las organizaciones han proclamado una era de gestión del conocimiento.

El éxito organizacional tiene una relación directa y positiva con la ventaja competitiva sostenible delimitada e implementada por la firma a través de su estrategia de negocios. El tipo y naturaleza de la competencia de las organizaciones, así como las fuentes de ventaja competitiva de muchas industrias han cambiado, poniendo ahora un cuidado especial en los recursos basados en el conocimiento (Watson & Hewett, 2006).

En el desarrollo de las actividades empresariales cotidianas se presentan problemas que deben solucionarse utilizando los recursos y habilidades con los que se cuenta; como resultado de dichos procesos, se generan aprendizaje y conocimiento que les permiten a los individuos y a la organización, irse dotando de una mayor capacidad para alcanzar sus objetivos. El conocimiento organizacional es un activo intangible socialmente construido, producto de la interacción de los individuos, grupos, procesos, estructuras organizacionales, rutinas, metodologías y técnicas que se desarrollan de manera cotidiana

dentro una empresa. De acuerdo a investigaciones previas (Liyanage, et al., 2009) el conocimiento se visualiza como el recurso económico más crítico, principalmente por el miedo a perderlo.

Grant (1996) comenta que la tarea primaria de las organizaciones es la utilización de su conocimiento, y una de las formas de hacerlo es la transferencia y re-uso de éste entre los individuos y grupos que las integran (Watson & Hewett, 2006). Kane, Argote y Levine (2005) afirman que conforme las organizaciones se han convertido en globales y han utilizado grupos para llevar a cabo sus tareas, se ha incrementado la importancia de la transferencia de conocimiento entre los grupos, derivado de los efectos directos de esta actividad en el desempeño de las empresas, específicamente elevando su competitividad.

Sin embargo, y aunque se reconoce que el conocimiento es un activo que es una base fundamental para la creación y mantenimiento de la ventaja competitiva, es relativamente común que éste se pierda cuando las personas, por razones como procesos de *downsizing*, jubilaciones, renuncias o fallecimientos, abandonan la empresa (Hua & Platts, 2004; Malone, 2002). Investigaciones empíricas afirman que en el clima de negocios actual, las empresas enfrentan siempre un riesgo constante de perder a su gente clave, y con ella, el conocimiento esencial para el negocio (Hafeez & Abdelmeguid, 2003).

En la búsqueda de soluciones a esta problemática, y teniendo como objetivo aprovechar este valioso activo intangible, en las décadas recientes se creó un campo de estudio emergente y relativamente nuevo denominado "Gestión del conocimiento" (Herschel & Nemati, 2000; Moffett, McAdam, & Parkinson, 2002; Wong & Aspinwall, 2005). La Gestión del conocimiento tiene por objeto crear, capturar, transmitir y utilizar el conocimiento organizacional. Este campo académico busca identificar y comunicar el conocimiento tácito y explícito existente en los procesos, personas, productos y servicios (Bollinger & Smith, 2001).

Dentro de las áreas que integran este campo de estudio, destaca la transferencia de conocimiento. Para Argote e Ingram (2000) la transferencia de conocimiento es un proceso a través del cual una unidad organizacional es afectada por la experiencia de otra, y que aunque la transferencia de conocimiento se lleva a cabo entre personas, existen implicaciones organizacionales mayores, consecuencia de los grupos involucrados en la misma.

VENTAJA COMPETITIVA, TRANSFERENCIA DE CONOCIMIENTO Y CONOCIMIENTO TÁCITO

Porter (1996) afirma que el posicionamiento estratégico tiene por objeto alcanzar la ventaja competitiva sostenible, mediante la preservación de aquello que distingue a la organización. Una empresa tiene ventaja competitiva cuando cuenta con una estrategia de creación de valor que no está siendo implementada por ningún competidor actual o potencial; para lograr que la ventaja competitiva sea sostenible, deberá caracterizarse por la imposibilidad de copiarla o imitarla (Barney, 1991).

El conocimiento organizacional es un activo intangible que refleja la cultura de una empresa; se acumula con el paso del tiempo, y faculta a las firmas para lograr niveles más profundos de entendimiento y percepción, permitiéndoles actuar con mayor sabiduría organizacional (Bollinger & Smith, 2001). El capital humano organizacional está constituido por un conglomerado de recursos únicos, inimitables, raros y valiosos, que inciden en la ventaja competitiva de una organización (Hsu, 2008).

El conocimiento organizacional es difícil de transferir, replicar o imitar, consecuencia de su naturaleza colectiva, situada y tácita, por lo cual se convierte en una fuente sostenible de ventaja competitiva (Berends et al., 2007). La transferencia de conocimiento involucra un proceso en el cual la fuente de conocimiento utiliza su pensamiento o sabiduría personal, para guiar a un tercer individuo, a fin de que éste sea capaz de visualizar su propia situación de una mejor forma (McDermott, 1999); en ese proceso,

una unidad organizacional es afectada por la experiencia de otra, y aun cuando esta actividad se lleva a cabo entre personas, existen implicaciones organizacionales mayores, consecuencia de los grupos involucrados en la misma (Argote & Ingram, 2000).

Szulanski (1996) utiliza el término transferencia de conocimiento, para enfatizar que el movimiento de conocimiento dentro de una organización es una experiencia distinta, y no únicamente un proceso gradual de diseminación, el cuál depende de las características de cada una de las personas involucradas. Adquirir conocimiento implica una modificación en las estructuras cognitivas del individuo (Gray & Meister, 2004). Transferir conocimiento y tener información disponible para las personas, son procesos diferentes; para convertirse en conocimiento, la información debe ser utilizada por el receptor y provocar un cambio en el comportamiento de éste (Brachos, Kostopoulos, Soderquist, & Prastacos, 2007).

Aún cuando existen varias alternativas para identificar distintos tipos de conocimiento, una de las más conocidas y utilizadas es la que lo clasifica como tácito o explícito. El conocimiento tácito, a diferencia del explícito, se caracteriza por la dificultad para replicarlo, ya que reside dentro de la mente de los individuos, lo cual dificulta su externalización de forma escrita o verbal. A manera de ejemplo puede citarse el caso de las actividades denominadas "artes u oficios", donde por lo general el mentor ejecuta una tarea o actividad y el receptor desarrolla su proceso de aprendizaje a través de la observación, ejecución, prueba y error, actividades que despliega conforme visualiza la forma en la que el mentor desarrolla dicha tarea.

De acuerdo a (Polanyi, 1958) el aprendiz asimila inconscientemente las reglas del arte, incluso aquellas que son desconocidas para el maestro. Sin embargo, Nonaka y Takeuchi (1995, p. 70) indican que "a menos que el conocimiento compartido se vuelva explícito, no puede ser fácilmente utilizado como palanca por la organización".

Al llevar a cabo una investigación en dos empresas europeas de distinto giro, una dedicada a actividades comerciales minoristas y otra manufacturera, Jonson y Kalling (2007) encontraron que los empleados más experimentados y expertos jugaron un papel relevante en la transferencia de conocimiento tácito, al migrar internamente en la organización; cabe señalar que dichos investigadores detectaron que gran parte del conocimiento requerido para manejar la maquinaria industrial fue considerado tácito, basado de forma primaria en la experiencia.

Por su parte Peansupap y Walker (2009), al explorar los factores que influencian el aprendizaje en la práctica del diseño para la construcción, detectaron que el aprendizaje efectivo requiere adaptabilidad del aprendizaje, y que el conocimiento sea transmitido por el emisor de forma apropiada; estos autores afirman que el emisor debe tener un nivel de conocimiento suficiente para transmitir nuevas prácticas de diseño al receptor, así como también apreciar el nivel y etapa en la cual se encuentra el aprendiz, para evitar presionarlo o hacerlo sujeto de expectativas superiores a su capacidad para internalizar los mensajes que recibe.

Liyanage et al., (2009) puntualizan la importancia de tener claro y contextualizar la forma en la cuál el conocimiento será utilizado por el receptor, ya que éste llevará a cabo un proceso de transformación del conocimiento, pudiendo llegar a utilizar o implementar este activo intangible de una forma totalmente diferente a aquélla en la que lo utiliza su origen.

FACTORES QUE INCIDEN EN LA TRANSFERENCIA DE CONOCIMIENTO

A fin de que las prácticas organizacionales de compartir conocimiento sean efectivas, deben entenderse los factores influyentes que ocurren dentro de la organización (Hsu, 2008). No obstante a que se han estudiado y analizado diferentes tipos de factores, en lo que respecta específicamente a la transferencia de

conocimiento, no se conocen a cabalidad los factores, estrategias y atributos necesarios que garanticen que ésta se dé de forma exitosa y eficiente (Joshi, Sarker, & Sarker, 2007).

A pesar de que se han realizado buenos esfuerzos, la mayoría de los estudios no han investigado la forma en la que las empresas pueden mejorar su desempeño, utilizando como punto de apoyo al conocimiento organizacional (Lee & Choi, 2003). Entre los factores que han sido estudiados se encuentran la tecnología, las relaciones personales y la cultura, por lo que a continuación se presentan algunos resultados presentados en las investigaciones desarrolladas recientemente.

En lo que respecta al rol de la tecnología, Bollinger y Smith (2001) comentan que ésta es una herramienta para capturar y organizar el conocimiento, lo cual permite la colaboración entre personas que no podrían discutir sus ideas y problemas, si no contaran con este tipo de infraestructura. Para Rhodes et al., (2008) las tecnologías de la información, como parte de un grupo de factores de tipo organizacional, tienen una relación positiva y significativa tanto con la transferencia de conocimiento como con la capacidad para innovar. No obstante lo antes expresado, otros investigadores (Matsuo & Easterby-Smith, 2008) indican que los sistemas electrónicos para compartir conocimiento, pueden interactuar tanto positiva como negativamente con el aprendizaje que proviene de la experiencia, en virtud de que compartir conocimiento de forma electrónica conlleva el riesgo de que los empleados realicen sus tareas descansando en el conocimiento de otros, lo cual disminuye la probabilidad de que aprendan de su propia experiencia; lo anterior, puede inhibir en el largo plazo, la creación de conocimiento organizacional.

Por otra parte Wong y Aspinwall (2005) apuntan que es imposible visualizar a la tecnología como una respuesta absoluta a las actividades de gestión del conocimiento, en virtud de ser sólo una herramienta en el desarrollo de dichas tareas; sin embargo también puntualizan que aunque teóricamente se indica que no es indispensable contar con infraestructura tecnológica para el desarrollo de las actividades de gestión del conocimiento, la evidencia empresarial muestra que las iniciativas implementadas se han generado en esta vertiente. Aun cuando existen investigaciones que destacan a la cultura y a la estrategia como factores críticos de éxito en la adopción de la gestión del conocimiento, existe evidencia empírica que indica que dichos factores no han sido ampliamente implementados (Wong & Aspinwall, 2005). Lucas y Ogilvie (2006) encontraron que la cultura y la reputación tienen efectos positivos en la transferencia de conocimiento; y no obstante a que en su estudio habían propuesto una relación entre la transferencia de conocimiento y los incentivos, su estudio no encontró soporte para dicho planteamiento.

De acuerdo a Peansupap y Walter (2009) el soporte organizacional es una base fundamental para lograr el aprendizaje efectivo, y la transferencia de conocimiento es un proceso que, a través de la absorción cultural, relaciona el aprendizaje de las personas en lo individual con el reconocimiento grupal y con el aprendizaje implícito dentro de la empresa. Wong y Aspinwall (2005) indican que los factores críticos de éxito percibidos en el desarrollo de actividades de gestión del conocimiento en pequeñas y medianas empresas, son liderazgo y apoyo gerencial, cultura propicia para el desarrollo de actividades relacionadas con la gestión del conocimiento y existencia de una estrategia y propósitos claros.

En una investigación desarrollada por Sun y Scoutt (2005) respecto de las barreras para transferir conocimiento en diferentes niveles organizacionales (individual, grupal, intergrupal e inter-organizacional), se detectó que entre éstas se encuentran las generados por conflictos entre los valores y la cultura de las partes involucradas, y en el caso particular del nivel inter-organizacional se puntualizó la inexistencia de objetivos comunes entre organizaciones.

Por otra parte, y en lo que a factores individuales se refiere, Rhodes et al, (2008) comentan que las redes sociales y los mecanismos de control son importantes para afianzar e incrementar la transferencia de conocimiento tácito de forma personal. De acuerdo a su análisis, Sun y Scout (2005) indican que entre las barreras para transferir conocimiento se encuentran la falta de confianza de los individuos en los equipos

y la falta de acuerdo de éstos con las decisiones tomadas por el grupo, en virtud de que la honestidad e integridad grupal son cuestionables; dichos investigadores también comentan que en ocasiones existe indisposición para transferir información, al constituir ésta un componente importante del trabajo personal

Para Brachos et al. (2007) la efectividad en la transferencia de conocimiento es dependiente de la utilidad percibida por parte de los actores en el proceso, es decir de que tan significativo, relevante, orientado a la acción e innovador sea el conocimiento a transferir. De acuerdo a Perrin, Rolland y Stanley (2007) muchos factores influencian y dan forma al conocimiento, e inclusive, pueden llegar a bloquear la transferencia de prácticas; entre éstos puede citarse la necesidad de los individuos de utilizar su creatividad, sentirse dueños de algo, y controlar.

CONCLUSIONES

En virtud de ser que el conocimiento tácito intra-organizacional es un activo valioso, único, inimitable y raro, tiene la posibilidad intrínseca de convertirse en una fuente de ventaja competitiva sostenible. Considerar dentro de la estrategia empresarial el despliegue de recursos y la generación de procesos para lograr la transferencia de este activo intelectual puede llegar a producir beneficios de alto valor para las organizaciones, por lo cual es necesario e importante investigar, identificar, conocer y examinar las estrategias, atributos y factores que inciden en dicho proceso (Hsu, 2008; Wong & Aspinwall, 2005).

Es de vital relevancia trabajar en la identificación de los medios para inducir la transmisión de los activos intelectuales organizacionales, así sus factores críticos de éxito; lo anterior considerando la importancia de obtener una solución de gestión del conocimiento funcional y posiblemente generalizable a diferentes firmas e industrias (Malone, 2002).

Para Crossan e Inkpen (1994) la investigación que se ha desarrollado en la búsqueda de información del proceso de transferencia de conocimiento y de las barreras para lograr un aprendizaje intra-organizacional exitoso, es relativamente limitada. Otros investigadores (Joshi et al., 2007) indican que es relativamente poca la investigación que se ha realizado para entender los factores que afectan la transferencia de conocimiento. Identificar la forma en que las organizaciones pueden alentar y facilitar el que se comparta el conocimiento para mejorar el desempeño, sigue siendo un tema de investigación importante (Hsu, 2008).

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EL SENTIDO DE PERTENENCIA DE LOS ALUMNOS DE LA UNIVERSIDAD AUTÓNOMA DE BAJA CALIFORNIA Y LA INFLUENCIA EN SU FORMACIÓN INTEGRAL

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ABSTRACT

El objetivo del trabajo de investigación realizado fue elaborar un diagnóstico sobre el sentido de pertenencia de los estudiantes de la unidad central de la Universidad Autónoma de Baja California, Campus Mexicali y en base a los resultados obtenidos presentar una propuesta para fomentar dicho sentido de pertenencia y fortalecer su formación integral. El estudio realizado fue de tipo descriptivo aplicado a 385 alumnos de las distintas unidades académicas. Dentro de los principales hallazgos se tiene que, aún cuando los alumnos se sienten orgullosos de esta Universidad por sus programas acreditados y la calidad de sus profesores, no tienen arraigado el sentido de pertenencia, debido a que no se sienten escuchados por las autoridades en la toma de decisiones y por la falta de difusión interna. En base a esta investigación se propone que los directivos asuman el compromiso de tomar acciones que fortalezcan el sentido de pertenencia de los alumnos, aseguren la permanencia de los programas y que exista una compartida responsabilidad en todos los niveles, coadyuvando además a fomentar la formación integral en los alumnos de la Universidad.

INTRODUCCIÓN

Las universidades públicas como la Universidad Autónoma de Baja California (UABC) tienen como principales fines el impartir educación, fomentar la investigación y extender los beneficios de la cultura (LOUABC, 1957). Para lograr esto deben buscar una formación integral del alumno con actitudes de liderazgo, honradez, sentido crítico y responsabilidad social. (UABC, 2003). Ante las fuertes desigualdades económicas y regionales que se traducen en inequidad social, la UABC asume el reto de alcanzar una mayor cobertura y transformarse en una comunidad de aprendizaje y de mejoramiento constante, compromiso social de toda institución de educación pública. La magnitud de tan grandes retos quizás han provocado que la necesidad de fomentar en los alumnos su identificación y apego a su institución y de promover las actividades extracurriculares, sea considerado como un área de oportunidad para éstas instituciones educativas. En este sentido, cabe formular una interrogante: ¿Un arraigado sentido de identidad y pertenencia del alumno facilitaría el logro de alcanzar una formación integral en ellos?

La Vicerrectoría de la UABC del campus Mexicali, elaboró su Programa de Desarrollo (UABC, 2003) en el cual el fortalecimiento de los programas educativos, uno de los proyectos estratégicos podría incidir positivamente en la promoción de la pertenencia de la comunidad universitaria, principalmente en los estudiantes, pues pretende la consolidación de los programas educativos, entre los que se incluye la integración curricular de la formación de valores, la actividad cultural, física y el deporte en el alumnado. Con esto se ha pretendido fortalecer la imagen de la Universidad ante la sociedad en general y fomentar el sentido de pertenencia de su comunidad universitaria, como punto de partida para su participación en programas de beneficio social. Los programas sociales arrojan resultados a mediano y largo plazo (Pérez, 2004), por lo cual el impacto de la labor social y la modificación de actitudes y comportamiento social se debe cuantificar de manera periódica, sin embargo por la naturaleza fundamental de la misión de la UABC, la institución no debe escatimar esfuerzos ni recursos para alcanzarla. Dados los antecedentes anteriores es de total importancia reconocer que identificar el grado de pertenencia del alumno de la UABC hacia su institución, podrá servir de fundamento para la toma de decisiones de la universidad que tiendan a generar,

fomentar y consolidar el sentido de pertenencia de sus estudiantes, así como su involucramiento en las acciones institucionales.

OBJETIVOS

Objetivo General

El objetivo general de esta investigación es identificar el grado de pertenencia de los alumnos de la Universidad Autónoma de Baja California, Campus Mexicali, Unidad Central, hacia su institución y proponer alternativas que logren incrementarlo para que participe activamente en las acciones formativas como el servicio social, las actividades culturales y deportivas.

Objetivos Específicos

Del objetivo general de este estudio se derivan tres objetivos específicos:
1. Identificar las variables que determinan el sentido de pertenencia de los alumnos de la UABC, tanto en actividades curriculares como extracurriculares.
2. Conocer la opinión de los alumnos sobre los factores que fortalecen la pertenencia hacia su institución.
3. Sugerir algunas alternativas para incrementar el sentido de pertenencia de los alumnos de la UABC y su participación en las actividades institucionales de la Universidad.

IMPORTANCIA DEL ESTUDIO

Dada la falta de bibliografía en temas de identidad y pertenencia en las instituciones de educación superior del país, así como la escasez de estudios que aborden con seriedad los factores que inciden en estos dos aspectos, la investigación que se desarrolló coadyuva a obtener un acercamiento concreto hacia la identidad y pertenencia de los alumnos universitarios. Siguiendo a Ibáñez Brambila (2000) se puede percibir que el estudio es relevante porque ayudó a llenar una ausencia de información existente en el tema. Disponer de los resultados de este estudio representa la oportunidad de tener accesible información actualizada de la opinión de los estudiantes de nivel superior acerca de los servicios e infraestructura de la UABC. Además representa una retroalimentación para autoridades universitarias de poder conocer la evaluación de los alumnos acerca de las decisiones universitarias recientemente tomadas al interior de la misma.

LIMITACIONES DEL ESTUDIO

Como se pretendía recolectar datos que muestren un evento, un fenómeno, hecho o situación que ocurre, en este estudio se utilizó el método descriptivo (Hernández, Fernández, Baptista, 1991). Esta investigación se aplicó a una muestra representativa de la población estudiantil, exclusivamente de las unidades académicas que integran la unidad central del campus Mexicali de la Universidad Autónoma de Baja California. Los resultados de la investigación sólo son válidos para la Universidad Autónoma de Baja California, unidad central del campus Mexicali y se realizó con fines exclusivamente académicos.

MARCO TEÓRICO

Contexto Latinoamericano

Algunas instituciones de educación en Latinoamérica como la Universidad Nacional de Loja (UNL) de Ecuador contemplan en su normatividad una valoración cualitativa y cuantitativa en los miembros de su comunidad universitaria de algunos elementos de valores, entre los que se incluyen la iniciativa, el espíritu de superación y pertenencia, la cual es considerada como un factor de rendimiento sujeto a evaluación de

sus miembros, ya que se le identifica como el "sentirse posicionado, vinculado, motivado e influido por el quehacer institucional". (UNL, 2006)

En Venezuela, se realizó un estudio en la Escuela de Comunicación Social de la Universidad del Zulia, en el cual se comprobó que el sentido de pertenencia, un elemento subjetivo, influye en el comportamiento de sus miembros a través de ideas consolidadas que traspasan la realidad y que condicionan los niveles de rendimiento estudiantil. En esta investigación se reconocen como factores que inciden en la falta de sentido de pertenencia de los alumnos la estructura física, los equipos técnicos, la comunicación interna y el personal docente. (González, 2005)

La Universidad del Salvador (Evalua-Acción, 2001) fue más allá al incluir las actividades extracurriculares en talleres obligatorios con actividades sujetas a evaluación con valor curricular y reconocer en aquéllas una instancia de compromiso y de afirmación en el sentido de pertenencia hacia la universidad y una fuente significativa de satisfacciones personales.

También para Ana Vargas, del Centro Provincial de Cultura Comunitaria de La Habana, Cuba (1997) el sentido de pertenencia es un elemento primario de arraigo e identificación personal y colectiva. Es expresión concreta de adhesión a rasgos específicos y característicos de la cultura que sintetizan perfiles particularmente sentidos de identidad cultural; por lo que resulta importante en las estrategias promotoras para el desarrollo protagónico. Como puede observarse, las diversas instituciones latinoamericanas, abordan de manera distinta la pertenencia y la identidad de los alumnos, existiendo posiciones inclusive contradictorias al otorgar o no reconocimiento a la importancia de las mismas.

Contexto Nacional

En México, la Asociación Nacional de Universidades e Instituciones de Educación Superior, un organismo independiente, elaboró el documento "La educación superior en el siglo XXI, líneas estratégicas de desarrollo, una propuesta de la ANUIES" (ANUIES, 2002) en el que se contempla que el apoyo que las instituciones deben de proporcionar al alumno universitario, debe permanecer a lo largo de los estudios superiores.Este estudio enfatiza la conveniencia de reiterar la necesidad de que las instituciones de educación superior fomenten la integración de sus alumnos a la vida social y cultural de la institución, incluyendo en este aspecto los programas deportivos y culturales, el servicio social y actividades similares.

Sin embargo, en el ámbito de los valores ante la vida (Zorrilla, 1995), los resultados de un estudio en la Universidad Autónoma de Querétaro revela que en este terreno es muy poco lo que la universidad les agrega a sus estudiantes, pareciendo que la institución universitaria no se concibe en la operación como una instancia formadora y las cuestiones de valores no son explícitamente atendidas, limitándose a atenderlas sólo a través de sus programas formativos.De los resultados de otro estudio realizado en la misma universidad se encontró que sólo un 54% de sus egresados se sienten muy unidos a la institución que los formó y de éstos solo un 57% consideró que su sentido de pertenencia se había incrementado (Barranco, 1995).

Instituciones de nivel medio superior del país aceptan que aún hacen falta acciones institucionales, al reconocer que el sentido de pertenencia en la Escuela Nacional Preparatoria "Antonio Caso" de la UNAM (Sánchez, 2004) se debe fortalecer para inculcar en los alumnos el respeto y solidaridad con sus compañeros y para que al sentirse identificados y como propia su escuela, la conserven y respeten.

El sentido de pertenencia a una institución, a una disciplina, en definitiva, a una comunidad, está íntimamente ligado a la capacidad individual y colectiva para ser miembro del grupo social en el que participan los jóvenes. Este autor realizó un estudio en el año 2000 en universidades públicas y privadas e institutos tecnológicos en las ciudades de Monterrey, Oaxaca, Mérida, Tijuana, Colima, Veracruz, Pachuca

y México, D. F. De los 9,811 alumnos encuestados se obtuvieron elementos muy valiosos. De este ejercicio los alumnos concluyeron que los profesores cumplen un papel relevante, ya que pueden contribuir a que los estudiantes enfrenten la tarea educativa como una práctica en la que no están solos, a través del fomento de actividades múltiples que favorezcan la cooperación y solidaridad entre los jóvenes y que más del 50% de los maestros promueven además la asistencia a eventos culturales y el desarrollo de la creatividad entre sus alumnos. (De Garay, 2001)

En este tenor, aquel profesor que sirve y se emociona con lo que hace, aquel que se entrega apasionadamente ha encontrado la dimensión humana viviendo los valores en las acciones (Cruz, 1996). Para este autor el efecto pigmalión o teoría de la realización personal debe aplicarse en el aula escolar, del estudiante al maestro y sus consecuencias en la administración serán muy profundas, al fomentar la motivación, la comunicación y la productividad.

Contexto UABC

Respecto a los valores, la Universidad Autónoma de Baja California en su página principal (UABC-l, 2006) manifiesta que el conjunto de actividades que realiza, sitúa al alumno como actor central a quien se dedica la mayor parte de los esfuerzos institucionales. En él se promueve una formación integral que considera elementos teóricos, prácticos, éticos y de responsabilidad social con el fin de fomentar actitudes de liderazgo, perseverancia, autodisciplina, honradez, creatividad y espíritu emprendedor, además de proporcionarle las herramientas metodológicas que le permitan un aprendizaje permanente. En este sentido la misión de la UABC se identifica con el contribuir al logro de una sociedad y un mundo más justo, democrático, equitativo y respetuoso de su medio ambiente, lo cual se busca alcanzar a través de sus once políticas institucionales del Plan de Desarrollo.

La administración universitaria 1999-2002   realizó una investigación para conocer más a detalle el posicionamiento de la UABC hacia el interior y en su entorno externo; este estudio permitió a la universidad conocer la magnitud de la situación que se vivía y fue así que como consecuencia de las recomendaciones de este trabajo, recientemente se dió inicio a los ejercicios posteriores de evaluación en el 2004 y 2005.

Por otro lado, la investigación desarrollada por Alcántar (1998) sobre vinculación universitaria en la UABC considera que la calidad académica de sus maestros y la imagen institucional de la universidad sirve para posicionar a ésta al interior de su comunidad y que la labor del docente de promoción de la filosofía, valores y cultura institucional hacia el alumno juegan un papel importante en la consolidación de su identidad.

En la encuesta organizacional del 2005 en las preguntas relativas a su participación y atención por el personal al alumnado en las actividades culturales y deportivas, rubros que no se contemplaban en la encuesta del 2004, en ninguno de los conceptos la respuesta favorable alcanzó el 50%. (UABC, EAAO, 2005) hecho que cuestiona su identidad con la institución. Asimismo en lo que se refiere a la participación de estudiantes universitarios en los procesos de elección de los consejeros universitarios, consejeros técnicos y mesas directivas de las sociedades de alumnos, el porcentaje de participación varió entre el 16.9% y 39.5%, obteniendo la elección de las sociedades de alumnos este último porcentaje, situación que se comprende en virtud de que para estos procesos electorales realizan campañas de proselitismo. En el área de participación y toma de decisiones, apenas por encima de la media, el 53.8% de los estudiantes opina que existen espacios para que expresen su opinión o inconformidades, el 42% de los alumnos encuestados confían en las decisiones de sus autoridades y solo el 25.3% de ellos cree que influye en las decisiones de su unidad académica. Además solo el 56.3 de los estudiantes considera que su unidad académica está bien administrada; en cuanto a la misión y filosofía de la UABC se encontró que el 63.6% la conocía. Esta información recolectada en la más reciente encuesta de evaluación anual de ambiente organizacional refleja

aspectos sumamente valiosos, en los que se percibe un porcentaje bajo de participación en actividades institucionales y de confianza en las autoridades universitarias.

METODOLOGÍA

La parte inicial del presente trabajo de investigación consistió en demarcar los límites de la observación sobre los cuales se llevarían a cabo los posteriores análisis de algunos rasgos de los estudiantes universitarios, ya que no hubiera sido posible incluir aspectos que comprendieran algún tipo de imposibilidad técnica para hacerlo. Debido a los objetivos del estudio, este proyecto tiene un carácter eminentemente descriptivo, llevando a cabo un estudio de caso en el cual se seleccionaron las Facultades de Arquitectura, Ciencias Sociales y Políticas, Contabilidad y Administración, Derecho, Idiomas, Ingeniería, Pedagogía y la Escuela de Deportes, las cuales se encuentran ubicadas todas en la unidad central del campus Mexicali y cuentan con una matrícula de 10,301 alumnos de licenciatura, siendo estos el objeto de estudio de esta investigación. Estas unidades académicas seleccionadas representan el 70.26% de la población estudiantil, de un total de 14,660 alumnos del campus Mexicali.(UABC-g)

Tabla 1: Alumnos inscritos en unidades académicas ubicadas en la Unidad Central del Campus Mexicali de la Universidad Autónoma de Baja California

Unidad Académica	Población de alumnos
Arquitectura	587
Ciencias Sociales y Políticas	799
Contabilidad y Administración	3,242
Deportes	224
Derecho	1,384
Idiomas	354
Ingeniería	3,430
Pedagogía	281
TOTAL	**10,301**

Variables De Investigación

En este apartado se presenta la estructura de los cuestionarios que se aplicaron a los alumnos objeto de estudio, con ello se busca identificar diversas variables y así poder facilitar el análisis de sus resultados. Las principales variables analizadas a través de estos instrumentos son:

a) Factores socio-académicos.- Con el objetivo de caracterizar la población de estudio.
b) Factores de participación con UABC.- Para conocer el grado de conocimiento y participación en diversas acciones oficiales de la UABC como institución y si se acude a los eventos institucionales.
c) Factores de compromiso con UABC.- Con el fin de explorar el grado de compromiso del alumno respecto de su institución y determinar qué tan profunda es su convicción de involucrarse.
d) Factores de identidad con unidad académica.- Para determinar si el alumno se encuentra identificado con su unidad académica o con la universidad y en cual de ellas se encuentra más identificado.

Procedimiento

Inicialmente se realizó una investigación de trabajos en otras instituciones y de la misma UABC para analizar los factores relevantes a este tema de estudio. Posteriormente se hizo una segunda revisión de la literatura complementaria de la institución para tratar de localizar elementos adicionales que sirvieran de apoyo al estudio. Con los elementos encontrados se elaboró el instrumento que se aplicó a los estudiantes de la UABC, mismo que fue sometido a una prueba piloto para determinar su validez, con esta validación se hicieron los ajustes pertinentes a los reactivos.

Determinación De Tamaño De La Muestra

El tamaño de la muestra se determinó de acuerdo a los siguientes criterios:
1) Un nivel de confianza de 95%, que conduce al multiplicador igual a 1.96;
2) Se considera un coeficiente de variación de 0.5;
3) Se acepta un margen relativo de error sobre la media de 5%.

De acuerdo a lo anterior se tomará una muestra según la siguiente fórmula (Rojas, 2002)

$$n = \frac{z^2 \ CV^2}{\varepsilon^2}$$

Donde: n es el tamaño de muestra
z es el multiplicador de confianza para 95%
CV es el coeficiente de variación previsto
ε es el error relativo máximo tolerado

Sustituyendo

$$n = \frac{(1.96)^2 \ (0.5)^2}{(0.05)} = 384$$

Tabla 2: Determinación del tamaño de la muestra

disp\error	0.02	0.04	0.05	0.06	0.08	0.1	10301	**384**		**Total**
0.1	96	24	15	11	6	4	3421	**128**		**Ingenieria**
										Cs. Admtvas
0.2	384	96	61	43	24	15	3321	**124**		**MXL**
0.3	864	216	138	96	54	35	1400	**52**		**Derecho**
0.4	1537	384	246	171	96	61	801	**30**		**FCSP**
0.5	2401	600	**384**	267	150	96	577	**22**		**Arquitectura**
0.6	3457	864	553	384	216	138	273	**10**		**Idiomas**
0.7	4706	1176	753	523	294	188	281	**10**		**Pedagogia**
0.8	6147	1537	983	683	384	246	227	**8**		**Deportes**
						99%				
Determinación del Tamaño de la Muestra						*con.*				

RESULTADOS

Al concluir con la aplicación de la encuesta, el paso siguiente fue la captura de la información utilizando el programa estadístico SPSS, versión 12 para su posterior análisis obteniendo los siguientes resultados principalmente:

Variable De Participación
1. Participación en procesos de elección de representantes estudiantiles
2. Asistencia a eventos académicos
3. Asistencia a ferias del libro, exposiciones culturales, encuentros de arte.
4. Asistencia a actividades deportivas
5. Conocimiento de símbolos universitarios

Figura1: Frecuencia comparativa de porcentajes de alumnos que nunca participan en elección de representantes estudiantiles


La participación en la elección de representantes estudiantiles (si se suma el porcentaje de los que pocas veces participan, esos porcentajes se elevan a más del 85%. (Figura 2).

Figura 2: Frecuencias de respuestas más altas en actividades deportivas
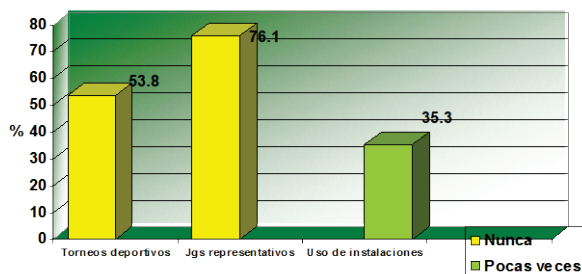
Actividades deportivas la siguiente gráfica presenta un concentrado en el que también se muestra un alto porcentaje de alumnos que nunca o pocas veces se involucran en ellas.

Figura 3: Frecuencias de comparación de alumnos que nunca participan en actividades culturales
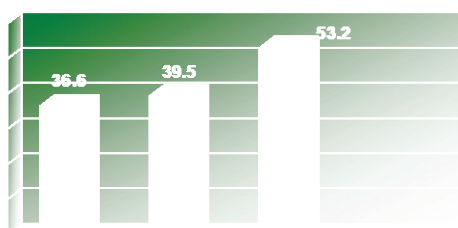
Asistencia a eventos de aniversario, culturales y de arte. (se muestra en la gráfica 3.10 un comparativo de la baja participación de alumnos en esas actividades.)

En la figura 4 los resultados manifiestan que un alto porcentaje de alumnos universitarios sí conocen los símbolos universitarios.

Figura 4. Frecuencia de conocimiento de símbolos universitarios
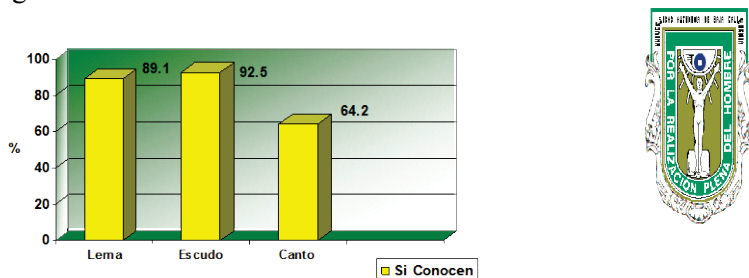
Variables De Compromiso
1. Organización de eventos deportivos, culturales o académicos
2. Participación en servicio social 1ra. Etapa en la UABC
3. Participación en servicio social 2da. Etapa en la UABC
4. Disfrutar alguno de los programas de becas
5. Participar en jornadas comunitarias (sin horas de servicio social)

Las dos terceras partes de los alumnos encuestados nunca participan en la organización de actividades deportivas.

Figura 5: Frecuencias de organización de actividades deportivas
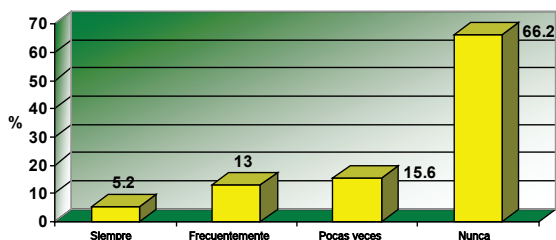

Razones para prestar el servicio social 1ra. y 2da. Etapa. (además de percibirse una muy baja prestación del servicio social en la UABC, se observa que aún más bajo es el porcentaje de los que lo prestan porque se identifican con ella) Los alumnos que participan en algún programa universitario de becas, según la gráfica siguiente, representan sólo el 14.5% de los encuestados.

Figura 6: Participación en Becas y Servicio Social

Comparativo de frecuencias de   razón principal de realizar servicio social 1ra. y 2da. etapa
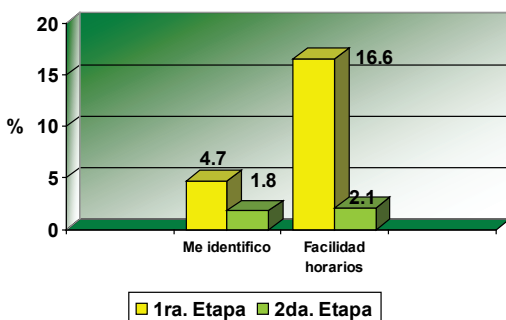
Frecuencias de participación en Becas
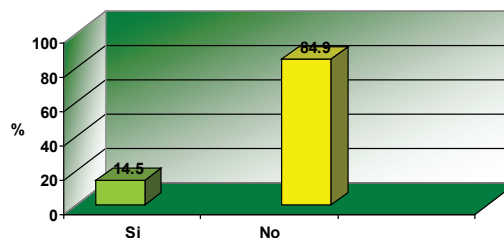

 Variables De Identidad

1.   Nivel académico profesor en general y en clase
2.   Disponibilidad y accesibilidad profesor en apoyar alumnos
3.   Acreditación de programas
4.   Sentirse tomado en cuenta en decisiones de la unidad académica
5.   Evaluación de los servicios de la Unidad Académica
6.   Factores que promueven la pertenencia

Figura 7: Comparación entre nivel académico y de calidad del profesor
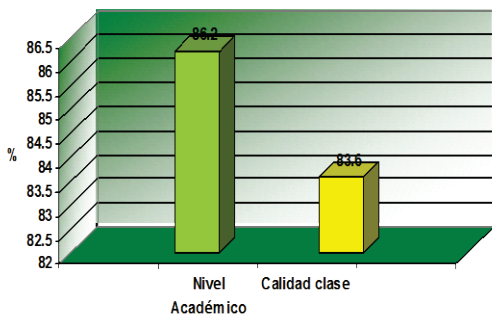
*En la figura comparativa que se presenta enseguida, se refleja la opinión de los alumnos de los que piensan que el **nivel académico y su calidad** en clase del profesor es bueno o excelente y estos conceptos varían entre el 83.6 y el 86.2%.*

Figura 8 Comparación de servicios que prestan las unidades académicas que resultan "buenos" y Población estudiantil que sí opinó sobre factores que fomentan la pertenencia.
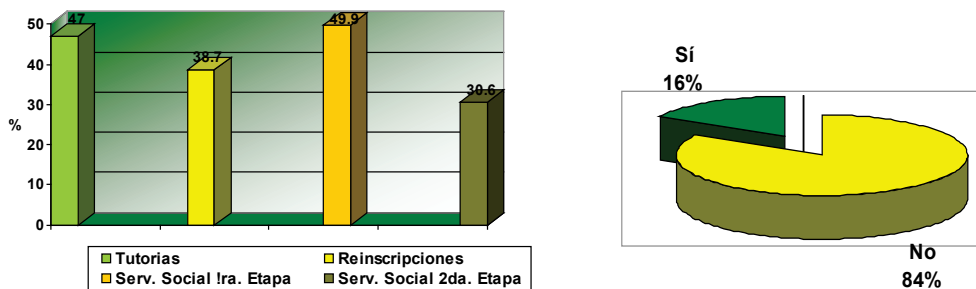
Se muestran las barras de los conceptos que resultaron más altos en la evaluación de los servicios de las unidades académicas y en todos resultó ser "bueno".

El 84% de los 385 alumnos encuestados no contestó y solamente 63 alumnos sí respondieron.

Figura 9: Disponibilidad de profesores para apoyar alumnos y Opinión de alumnos sobre si se sienten tomados en cuenta en las decisiones de la unidad académica.
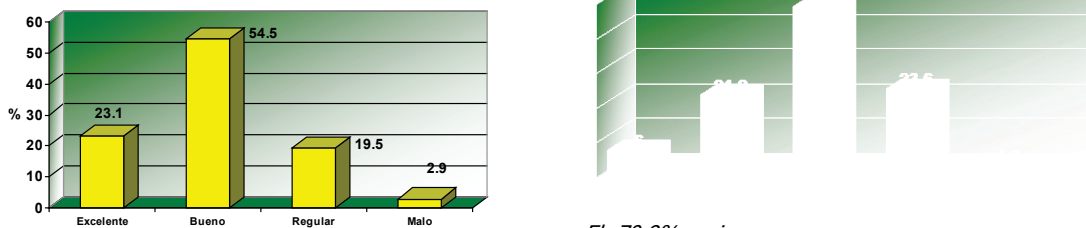
Más de las ¾ partes (77.6%) consideran que su disposición varía entre buena y excelente.

El 70.9% opina que pocas veces o nunca se sienten tomados en cuenta.

FIGURA 10: Resultados de opinión de alumnos sobre actividades que pueden mejorar la pertenencia y el compromiso con la UABC.
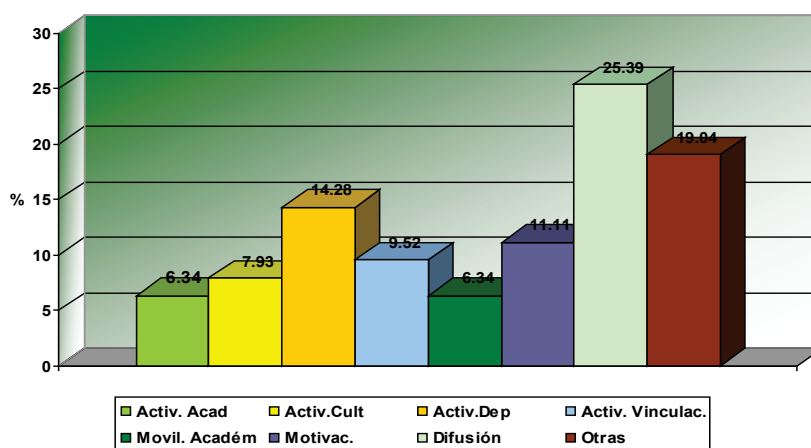
En la figura 10 se muestra que el 25% de los alumnos señalan que la difusión interna serviría para fomentar el sentido de pertenencia, y el deporte y la cultura como actividades extracurriculares representan el 22.21% y con el 11.11% los alumnos opinan que debería haber mayor motivación.

Figura 11: Comparativo de los 3 factores más mencionados por el alumno, por los cuales se siente orgulloso de ser parte de la UABC y Menciones de "imagen y prestigio" como factor de orgullo


Imagen y prestigio ☐ **Prog. Acredit.** ■ **Niv.Academ.Prof**

☐ **1er lugar** ☐ **2o. Lugar** ■ **No Contesto**

Menciones de "imagen y prestigio" como factor de orgullo

Factores mayormente mencionados que ha hecho a los alumnos sentir especialmente orgullosos de formar parte de la UABC Comparativo de los 3 factores más mencionados por el alumno, por los cuales se siente orgulloso de ser parte de la UABC
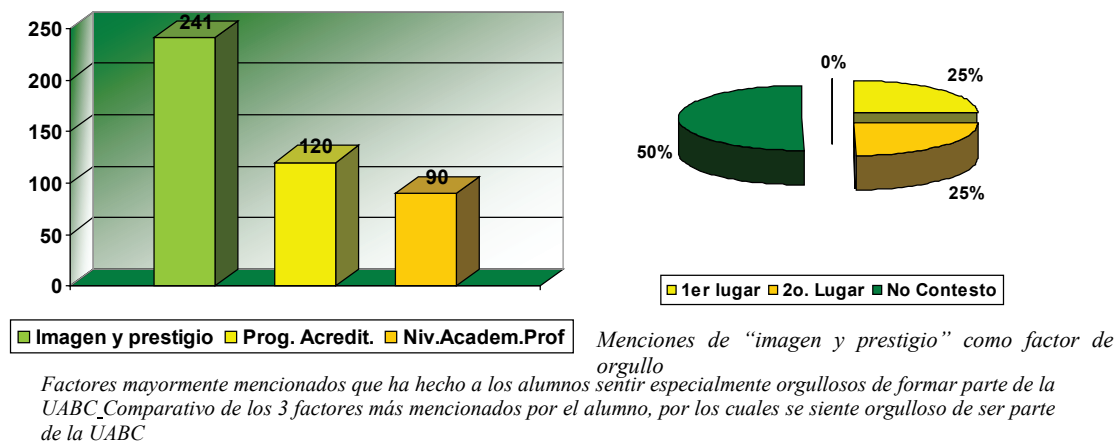
Figura 12: Menciones de "programas acreditados" como factor de orgullo y Frecuencia de menciones de "nivel académico del profesor" como factor de orgullo

Menciones de "programas acreditados" como factor de orgullo

Frecuencia de menciones de "nivel académico del profesor" como factor de orgullo

☐ **1er lugar** ☐ **2o. Lugar** ■ **No Contesto**

☐ **1er. Lugar** ☐ **2o. Lugar** ☐ **3r lugar** ■ **NoContesto**
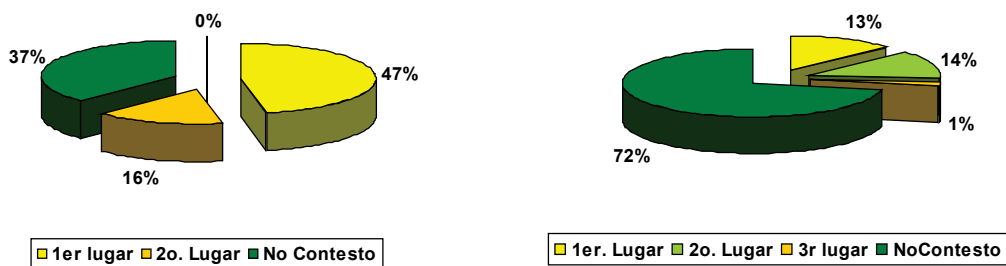
CONCLUSIONES

En base a los resultados obtenidos se presentan las siguientes conclusiones y recomendaciones de esta investigación:

- Se comprobó que los alumnos no tienen arraigado el sentido de pertenencia.
- Las actividades deportivas y culturales fomentarían la pertenencia de los alumnos.
- El apoyo del profesor al alumno juega un papel relevante en la formación integral.
- De todos los factores que influyen en el sentido de pertenencia el que exista una mayor difusión interna hacia el alumnado, sería el que más favorecería este aspecto.
- Se comprobó que existe apatía para participar en actividades formativas como las actividades comunitarias, culturales y deportivas.
- Los alumnos se sienten orgullosos de la UABC por sus programas acreditados, por la calidad académica de los profesores y por su disposición a apoyar al alumno.
- El estudiantado no se siente escuchado por las autoridades en la toma de decisiones y reconocen que la falta de difusión afecta el sentido de pertenencia del alumno.
- Los alumnos esperan un mayor esfuerzo de las autoridades para atender sus inquietudes.

COMENTARIOS FINALES

Los directivos universitarios deben asumir el compromiso de tomar acciones que inculquen, fomenten y fortalezcan el sentido de pertenencia de los alumnos. No basta con el compromiso de los directivos, es necesario que se asuma por todos los miembros   de la comunidad universitaria. Además deben crearse mecanismos que aseguren la permanencia de los programas en las siguientes administraciones y es fundamental la convicción de los profesores de la importancia de su participación en estas tareas para involucrar a los alumnos en las actividades universitarias formativas, debiendo existir una fuerte responsabilidad compartida en todos los niveles de fomentar el sentido de pertenencia para inicialmente identificarse con la Universidad y en una segunda etapa lograr que se involucren en las actividades eminentemente formativas como las acciones comunitarias, culturales y deportivas, para alcanzar una verdadera formación integral.

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EL SISTEMA DE GESTION DE LA CALIDAD EN EL PROCESO DE TITULACIÓN DE LA FACULTAD DE CONTADURÍA PÚBLICA

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ABSTRACT

El Sistema de Gestión de la calidad, es una forma de trabajar, mediante la cual una organización asegura la satisfacción de las necesidades de sus clientes. Para lo cual planifica, mantiene y mejora continuamente el desempeño de sus procesos, bajo un esquema de eficiencia y eficacia que le permite lograr ventajas competitivas. En este trabajo se desarrolló un Sistema de gestión de la Calidad en el proceso de titulación por tesis en la Facultad de Contaduría Pública (FCP) de la Benemérita Universidad Autónoma de Puebla BUAP.

INTRODUCCION

En la actualidad es importante para cualquier organización y por supuesto para las instituciones de educación superior mantener estándares de calidad, en el caso de la Facultad de Contaduría Pública de la Benemérita Universidad Autónoma de Puebla, su filosofía es mantener un alto estándar de calidad en la administración de los procesos, así como la calidad del servicio ofrecido. En este contexto, con los procesos de modernización, todas las organizaciones, se han visto comprometidas a certificarse nacional e internacionalmente. Sabiendo que la mejor forma de operar en una organización es hacer correctamente, a la primera, y con el menor consumo de recursos, las actividades necesarias para satisfacer cada vez mejor a los clientes, internos y externos. En eso consiste precisamente un proceso de Gestión Integral o Total de la Calidad. Se trata de mejorar continuamente cada una de las tareas que se llevan a cabo en una organización y, de este modo, lograr que sea cada vez más competitiva.

Para lo cual es necesario obtener la Certificación de Calidad que consiste en que un Organismo competente, acreditado, asegure por escrito que un producto, proceso y/o servicio, debidamente identificado, cumple los requisitos especificados previamente para el mismo, siguiendo la norma ISO 9001:2008.En este orden de ideas, es a través del liderazgo y sus acciones, como la Dirección de la FCP deberá crear un ambiente en el que el personal se encuentre completamente involucrado y en el cual un Sistema de Gestión de la Calidad pueda operar eficazmente. El objetivo del presente trabajo es desarrollar un Sistema de Gestión de la Calidad en el proceso de titulación por tesis en la FCP de la BUAP
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EMPRESA

La empresa, es un organismo social integrado por elementos humanos, técnicos y materiales cuyo objetivo principal es la obtención de utilidades, o bien, la prestación deservicios a la comunidad, coordinados por un administrador que toma decisiones en forma oportuna para la consecución de los objetivos para los que fueron creadas (Méndez,2001)

La empresa es la institución o agente económico que toma las decisiones sobre la utilización de factores para obtener los bienes y servicios que se ofrecen en el mercado (Kepner, 1989).

Clasificación de las empresas

Mercado expresa que existen numerosas diferencias entre unas empresas y otras. Sin embargo, según en qué aspecto nos fijemos, podemos clasificarlas de varias formas. Dichas empresas, además cuentan con funciones, funcionarios y aspectos disímiles, a continuación se presentan los tipos de empresas según sus ámbitos (Mercado H. Salvador, 1995, p 4-8) Según la actividad o giro**:** Industriales, Extractivas, Manufactureras, Comerciales y de Servicio Según la forma jurídica**:** Empresas individuales, Empresas societarias o sociedades y las cooperativas u otras organizaciones de economía social
Según su dimensión**:** Microempresa, Pequeña empresa, Mediana empresa y Gran empresa
Según su ámbito de actuación**:** Empresas locales, Regionales, Nacionales, Multinacionales, Transnacionales y Mundial.

Según la titularidad del capital 1) Empresa privada: si el capital está en manos de particulares, 2.) Empresa pública: si el capital y el control está en manos del Estado 3.) Empresa mixta: si la propiedad es compartida 4.) Empresa de autogestión: si el capital está en manos de los trabajadores

CONCEPTOS DE CALIDAD

Existen numerosas definiciones del término calidad las cuales han sido propuestas por los principales expertos en el estudio de esta materia, entre las cuales se encuentran ver tabla 1, la cual muestra los exponentes más representativos que han tratado el tema de calidad.

Tabla 1. Conceptos de calidad

Autor	Definición
Crosby (1985)	Cumplimiento de unas especificaciones dadas.
Deming (1989)	La calidad reside en la satisfacción del cliente o de sus necesidades de consumo, en estas necesidades se incluyen las características del producto en sí mismo, su disponibilidad en el mercado y el precio
Feigenbaum (1994)	Como la resultante total de las características del producto en cuanto a su mercadotecnia, ingeniería, fabricación y mantenimiento, por medio de las cuales el producto o servicio en uso satisfacen las expectativas del cliente.
Ishikawa (1994)	Como lo que las personas comprarán con satisfacción.
Juran (1995)	La calidad es la adecuación para el uso

Esta tabla muestra algunos conceptos de calidad de Crosby, Deming, Feigenbaum , Ishikawa y Juran

Con el transcurso del tiempo la calidad ha evolucionado con relación a los niveles organizacionales y a sus procesos Barba Antonio (2002) en las primeras cuatro décadas del siglo XX, la propuesta de control de calidad se orientaba a resolver los problemas de calidad en el nivel operativo. En la década de los cuarentas, se generaliza la aplicación de la propuesta del control estadístico de la calidad, más adelante en la década de los sesenta se desarrolla el concepto de aseguramiento de la calidad que se enfoca a vigilar la calidad en términos integrales en los procesos de producción.

Así en la década de los 80's aparece el concepto de calidad total que es el término que en la actualidad es utilizado en las organizaciones. La calidad total considera Davila y Sastre (2007) a la empresa como una cadena de relaciones, suministrador cliente; de esta forma cada individuo es cliente de la persona que le suministra información o material para realizar su trabajo y suministrador a la persona que entrega el trabajo realizad. La calidad es total porque comprende todos y cada uno, de los aspectos en la organización, porque involucra y compromete al total del personal en la misma. La calidad tradicional trataba de arreglar la calidad después de cometer errores. Pero la Calidad Total se centra en conseguir que las cosas se hagan bien a la primera. Uno de los términos que se utiliza en la actualidad en este contexto es el de Gestión de la Calidad. Se entiende por gestión de la calidad según ISO 9001-2000 como el conjunto de actividades coordinadas para dirigir y controlar una organización en lo relativo a la calidad. Generalmente incluye el establecimiento de la política de la calidad y los objetivos de la calidad, así como la planificación, el control, el aseguramiento y la mejora de la calidad. Por lo tanto un sistema de gestión

de la calidad es la forma en la que una empresa o institución dirige y controla todas las actividades que están asociadas a la calidad.

Los Procesos en la Actualidad

En su forma más simple según, Scherkenbach William (1994) un proceso es la transformación de insumos en salidas o productos" Para la norma ISO un proceso es un conjunto de actividades mutuamente relacionadas o que interactúan, las cuales transforman elementos de entrada en resultados con un valor añadido (expresa lo que hay que hacer y para quién). De tal forma que existen 5 recursos genéricos comunes en cualquier organización, que lo mismo pueden ser insumos que productos como se ven en la figura 1:

Figura 1. Definición del proceso
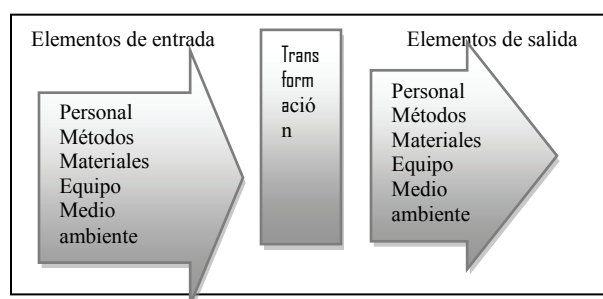
Esta figura muestra los elementos de entrada y de salida del proceso

Al ver el modelo del proceso figura 2, con especial atención, se puede percibir que las transacciones entre clientes y proveedores se establecen mediante dos fuentes de comunicación "una voz, la del consumidor, y la otra, del proceso en sí. Crosby Phillip (1992) la llama la *voz del cliente* y la *voz del proceso.* Como cualquier voz puede ser activa o pasiva.

Figura 2. Las dos voces
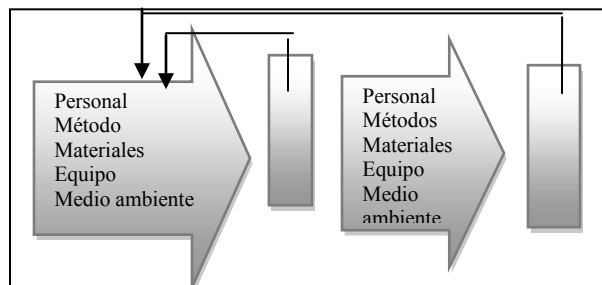
*Esta figura muestra la voz del cliente y la voz del proceso*

En este sentido la voz del cliente es el que le comunica al productor, los deseos y necesidades de sus clientes como percibe los productos y/o servicio.

EL CICLO DE LA MEJORA CONTINUA Y LA NORMA ISO 9001; 2008

A partir del año 1950, y en repetidas oportunidades durante las dos décadas siguientes, Deming empleó el Ciclo Planificar, Hacer, Verificar y Actuar (PHVA) ver figura 3, como introducción a todas y cada una de las capacitaciones que brindó a la alta dirección de las empresas japonesas. La Norma Mexicana IMNC, Norma ISO 9001:2008 ha sido desarrollada con el fin de introducir aclaraciones a los requisitos

existentes de la Norma ISO 9001:2000. "Ésta Norma pone énfasis en el Ciclo PHVA en el esquema de la Mejora Continua (MC) del Sistema de Gestión de la Calidad.

Figura 3, Ciclo Deming
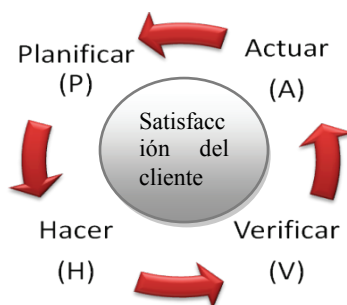
La figura muestra el proceso planificar, hacer, verificar y actuar

1. Planificar, según la Norma ISO 9001:2008, se encuentra en el punto 6 de la norma que habla de la gestión de los recursos y consiste en: Involucrar a la gente correcta; recopilar los datos disponibles, comprender las necesidades de los clientes, estudiar exhaustivamente el/los procesos involucrados. desarrollar el plan y entrenar al personal

2. Hacer, tomando la norma ISO 9001:2008 se encuentra en el punto 7 de la misma, trata el diseño y desarrollo e implementación de la mejora/verificar las causas de los problemas. Así como de recopilar los datos apropiados

3. Verificar, la encontramos en el punto 8 que trata de la medición, análisis y mejora, de la Norma ISO 9001:2008, consiste en Analizar y desplegar los datos ¿Se han alcanzado los resultados deseados?. Comprender y documentar las diferencias Revisar los problemas y errores ¿Qué se aprendió?¿Qué queda aún por resolver?

4. Actuar, según la norma ISO 9001:2008, se encuentra en el punto 5 que trata de la responsabilidad de la dirección. Incorporar la mejora al proceso. Comunicar la mejora a todos los integrantes de la empresa. Identificar nuevos proyectos/problemas. Repetir el paso 1, luego el 2 y así una y otra vez y siempre.
Como se ve los pasos del Ciclo PHVA requieren recopilar y analizar una cantidad sustancial de datos. Para cumplir el objetivo de mejora se deben realizar correctamente las mediciones necesarias y alcanzar consenso tanto en la definición de los objetivos/problemas como de los indicadores apropiados. La norma internacional ISO 9001 especifica los requisitos para los Sistemas de Gestión de la Calidad, genéricos y aplicables a organizaciones de cualquier sector económico e industrial con independencia de la categoría del producto/servicio. Son complementarios a los requisitos del producto y/o servicio, que pueden ser especificados por los clientes, por la propia organización o por disposiciones reglamentarias.

LA SATISFACCION DEL CLIENTE

En la actualidad, lograr la plena satisfacción del cliente es un requisito indispensable para ganarse un lugar en la mente de los clientes y por ende, en el mercado meta. A fines de la década de los 70's el Dr. Noriaki Kano de la Universidad Rika de Tokio, enuncio su modelo para la calidad, en donde basado en su estudio de la Teoría de la Higiene-Motivación de Herzberg, redefine la noción de calidad. Anteriormente la mayoría de la definiciones de calidad eran lineales y en una sola dimensión por ejemplo: buena o mala, peor o mejor, pequeña o grande en función de la pérdida que representa para la sociedad, el Dr. Kano

integra la calidad en dos dimensiones que son: a) El grado en el cual el producto o servicio se desempeña; b) El grado en el cual la intención de uso se satisface.

La relación de las dimensiones de la calidad del desempeño y la satisfacción al cliente se podría representar en una gráfica de dos ejes. Por lo cual, el Modelo de Kano nos conduce a un nivel, que no está disponible en el modelo de calidad en una dimensión, "este modelo establece que los diferentes tipos de necesidades y expectativas de los clientes, causan diferentes respuestas de donde se puede clasificar la calidad en tres diferentes tipos que son: *la Calidad Básica, la Calidad en el Desempeño y la Calidad Excitante.*

METODOLOGIA-CASO

El siguiente caso es un ejemplo de aplicación de la norma ISO 9001:2008 en el Departamento de Titulación y Educación Continúa de la FCP de la BUAP en el proceso de titulación por tesis.

Título

Implementación de un Sistema de Gestión de la Calidad en el Proceso de Titulación por Tesis de la Facultad de Contaduría Pública de la BUAP

Breve descripción del área de estudio

El departamento de Exámenes Profesionales y Educación Continúa de la Facultad de Contaduría Pública de la Benemérita Universidad Autónoma de Puebla, en este departamento se realiza el proceso mediante el cual el egresado de la Licenciatura en Contaduría puede optar entre las diversas formas de Titulación. Así como realiza la programación de los cursos que oferta la Institución relacionados con Educación Continúa. Reporta en forma directa a la Dirección de la Facultad de Contaduría y tiene relación funcional con la Dirección de Administración Escolar.

Breve descripción del proceso

Proceso de titulación por tesis, consiste en una investigación básica o aplicada, en la que el alumno plantee y busque la solución teórica y técnica de un problema del campo de alguna de las áreas propias de la disciplina, en la figura 4 se muestra el mapa del proceso de titulación por tesis.

Figura 4. Proceso de Titulación por Tesis
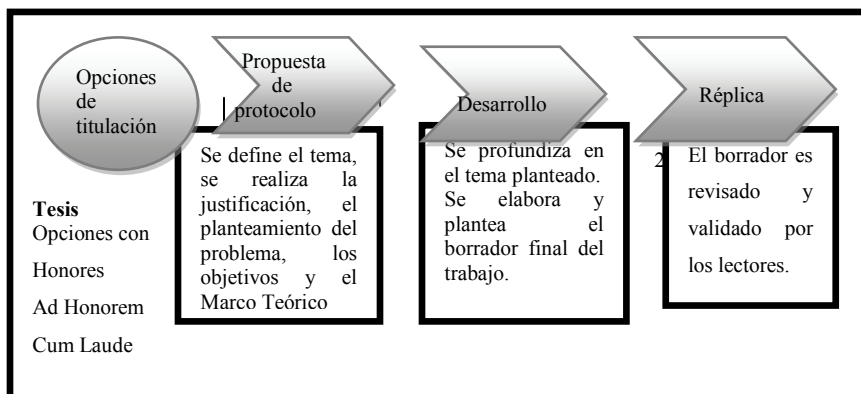
Descripción.

Entrada: Alumno-Asesor-Requisitos. Expediente del alumno
Proceso: El alumno inicia el proceso de titulación buscando un tema de tesis, definiendo un proyecto en torno al mismo y elaborando una propuesta formal para su desarrollo. El alumno desarrolla el proyecto, bajo la supervisión de su asesor y genera su protocolo de tesis. Documento de propuesta de protocolo de tesis validado por el asesor y el Responsable del Departamento
*Entregable:* Tesis revisada y avalada por dos lectores y por el responsable del Departamento. Fecha de examen profesional.

RESULTADOS APLICACIÓN DEL MODELO DE GESTIÓN ORGANIZACIONAL.

Diagnóstico:

Comunicación Organizacional.-La finalidad de la comunicación organizacional es conocer la efectividad que tiene la organización para transferir información entre sus miembros, los resultados obtenidos en el diagnóstico en el Departamento Exámenes Profesionales y Educación Continúa de la FCP de la BUAP, este factor se muestra en la figura 5, como se observa la mayoría de los rubros alcanza el 100% en las respuesta y son tres rubros que alcanzan un 75% de respuesta como es la confianza que tiene con su superior para comunicarse, si recibe la información para el desarrollo de su trabajo y las instrucciones son claras , en promedio las respuestas favorables a este factor alcanza el 90%.

Figura 5. Comunicación organizacional
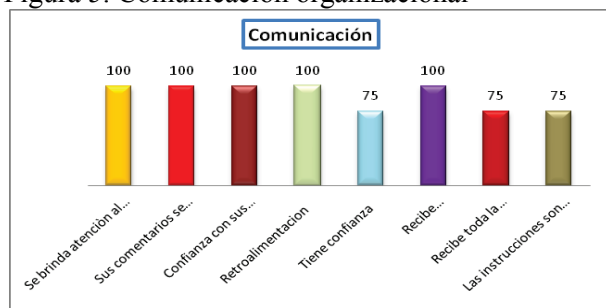
Trabajo en Equipo.- Esté factor se refiere a la disposición de la organización para facilitar el cumplimiento de los objetivos del grupo de personas organizadas para un servicio determinado. Como se ve en la figura 6, la mayor parte de las respuestas alcanzaron el 100% en cuanto al trabajo en equipo, sólo dos tuvieron un 75% de respuesta que sí existe evidencia del trabajo en equipo y sí se aplican técnicas de trabajo en equipo, este factor alcanzo un promedio de respuestas de 94%.

Figura 6: Trabajo en equipo
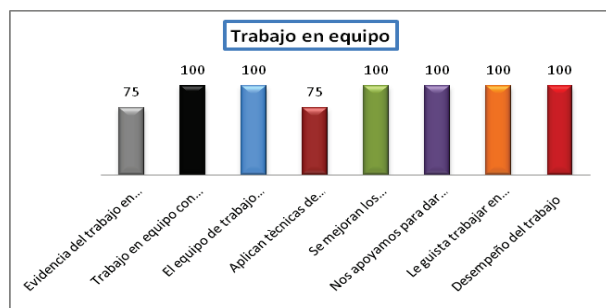
*Capacitación*.- En este factor se establece un proceso metodológico y continuo cuyo objetivo es mejorar y desarrollar la calidad de los conocimientos, habilidades y talentos de los empleados, fortaleciendo la estructura de crecimiento de la institución. La figura 7, muestra que en este factor existe una variación en las respuestas ya que el preguntar sí se cuenta con un diagnóstico organizacional, se obtuvo un resultado del 25%, en contraste con un 100% en donde se considera importante la capacitación como parte del proceso, alcanzando un promedio de todas las respuestas de 67%.

Figura 7. Capacitación
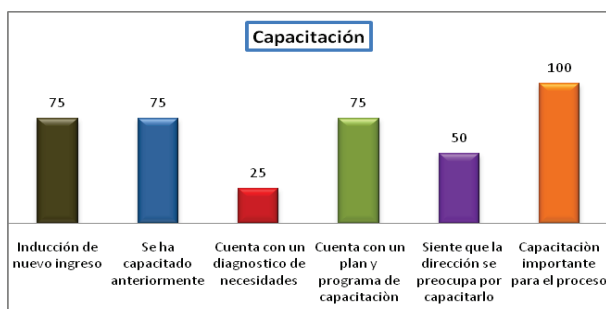
Procesos.- Un proceso se define como un conjunto de tareas, actividades o acciones interrelacionadas entre sí que, a partir de una o varias entradas de información, de materiales así como de salidas de otros procesos, dan lugar a una o varias salidas también de materiales (productos) y/o información con un valor añadido. Como se ve en la figura 8, las diferentes preguntas tienen diversos porcentajes de respuesta, que es: sí se trabaja por resultados tiene un de 56% de respuesta y el más alto es 76% cuando se preguntó ¿si determina usted los requisitos? este rubro alcanzó un promedio de respuesta de 67%.

Figura 8. Procesos
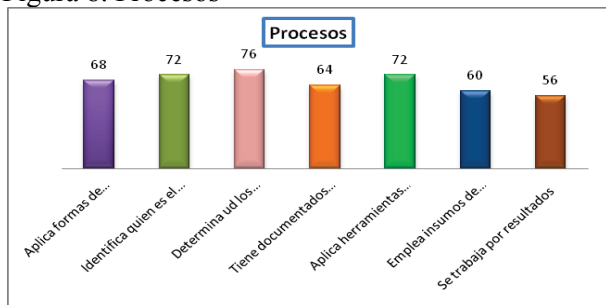
Disciplina.- un clima y un conjunto de actitudes que suponga colaboración voluntaria y activa entre el empresario y sus trabajadores, a la vez que subordinación ver figura 9, en donde el 96% conoce las normas de convivencia, el 98% sabe que existe un reglamento de trabajo, el 98 % sabe que existen sanciones el 96% existen premios por el desempeño de su trabajo.

Figura 9. Disciplina
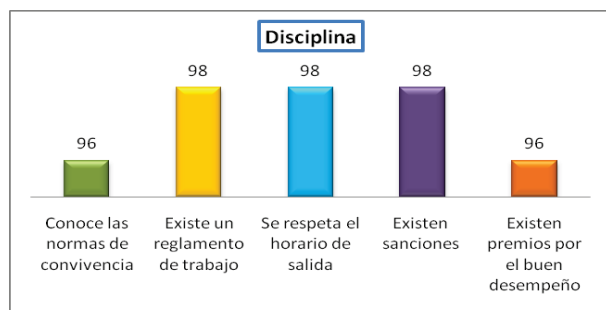
Indicadores.- Los indicadores pueden medir el proceso, los resultados y la repercusión. Miden los elementos esenciales para llevar adelante las actividades, el grado y la calidad de esas actividades y los resultados. La gráfica 7 la opción de titulación por tesis es del 1%, la de posgrado del 2%, la de titulación por seminarios es del 31%, la de titulación por CENEVAL del 25% y titulación automática del 41%.

Figura 10. Opciones de titulación
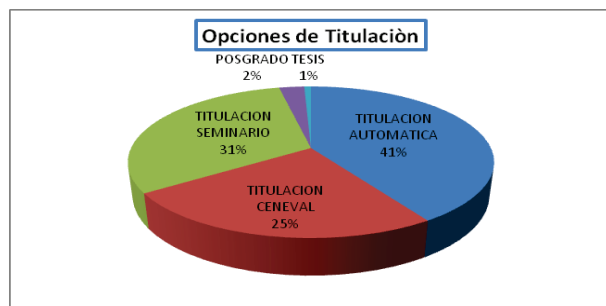
La finalidad del diagnóstico fue la identificación de los aspectos críticos y los puntos fuerte que tiene el Departamento de Titulación y Educación Continua, entre los puntos fuertes tenemos el trabaja en equipo resaltando que se encuentran trabajando en forma adecuada y la disciplina. Entre los puntos críticos, se encontró la capacitación y los procesos, además de que la forma de titulación con menor indicador es la de Tesis.

El Plan de Negocio

Con base en el diagnóstico se presenta el plan de negocios en donde se detallan los elementos de entrada del proceso, el titulo del proceso y el entregable.

Tabla 2.El Plan de Negocios

Elementos de entrada	Titulo: Proceso de Titulación por tesis	Entregable
	SC: MC:	
• Alumno • Asesor • Requisito	• Tema de tesis, • Definiendo un proyecto • Elaborando una propuesta formal para su desarrollo. • Desarrollo del proyecto, bajo la supervisión de su asesor y genera su protocolo de tesis. • Documento de propuesta de protocolo de tesis validado por el asesor. y el responsable del Departamento	1. Tesis revisada y avalada por dos lectores y por el responsable del Departamento. 2. Fecha de examen profesional

CD	Descripción	Responsable	características de calidad	Registro	Método
P L A N I F I C A R	Forma de titulación	Auxiliar administrativo	Certificado del servicio social Recibo de libro donado	Lista de profesores Lista de libros donados	Excel
	Asignar maestros asesores Recursos • Papelería • computadora	Coordinador del Departamento	Cumplir con los requisitos del protocolo	Bitácora de asesoría	Excel
CD	Descripción	Responsable	Características de calidad	Registro	Método
H A C E R	Revisión y aprobación de termino de tesis Asignar jurados de examen Autorizar la impresión	Coordinadora del Depto. de Titulación y Educación Continua	Carta de autorización de impresión ficha de depósito del pago	Control de registro de asesorías	Excel
CD	Descripción	Responsable	Características de calidad	Registro	Método
V E R I F I I	Certificado de licenciatura, preparatoria y secundaria Certificado del servicio social Réplica	Auxiliar administrativo Jurado del examen	Ficha de registro de Egreso Tesis impresa	Lista de formas de titulación Acta de examen profesional	Excel Word

Esta tabla muestra el plan de negocio nos muestra la descripción de la actividad (Ciclo Deming) que se realiza en el proceso de titulación por tesis en el Departamento de Titulación, el responsable, la característica de calidad, la forma en cómo se lleva el registro y el método utilizado como se muestra en esta tabla..

Diseño y elaboración de la Política de calidad

Tomando como base el diagnóstico realizado se desarrollo la política de calidad que va orientar la acción de implantación de la calidad, con base a la misión y visión.

Misión: Administrar el proceso de titulación con el fin de proporcionar información y servicios que cumplan con los requisitos de los usuarios desde la elección de la alternativa hasta la titulación (examen profesional).

*Visió**n:*** Ser un departamento líder en la prestación de servicios dentro de la Facultad de Contaduría Pública.

*Valores***:** *Honestidad.-* que hace posible el compromiso en el trabajo individual, colectivo, y la confianza en la actuación cotidiana.*Vocación de servicio.-* implicaría la utilización de nuestra capacidad, esfuerzo e inteligencia para poner en evidencia esa propensión a ayudar a otros *Respeto y tolerancia.-* respeto a las ideas, creencias o prácticas cuando son diferentes o contrarias a las propias, fortaleciendo la esencia universitaria de la unidad en la diversidad *.Ética.-* Actuar con valores morales de manera que se pueda diferenciar entre lo que es bueno.

Política de la Calidad

Los servicios administrativos que ofrece el Departamento de Examen Profesional de la FCP de la BUAP, deberá tener como prioridad satisfacer las necesidades de alumnos y del personal, deberá sustentarse en la implementación de un sistema administrativo de calidad conforme a la norma ISO 9001-2008 que promueva el desarrollo de nuestro personal y su participación activa en la mejora continua en los procesos administrativos.

Objetivos estratégicos de calidad: Implementar el Sistema Administrativo de Calidad en el Departamento de Exámenes Profesionales y Educación Continúa e Incrementar la satisfacción de los usuarios cuatrimestral en la misma. Certificar los procesos estratégicos del Departamento de Exámenes Profesionales y Educación Continúa, conforme a la norma ISO 9001:2008 al año 2010.

Despliegue De La Función De La Política De Calidad

El despliegue de la función de la política de calidad consiste en la interpretación de las directrices que marca la política de calidad, responderán a la pregunta ¿para qué? Se pueda medir respondiendo ¿qué? Y el elemento de soporte ¿Cómo? En la tabla 3, se muestra el despliegue de la función de la política de calidad para el proceso de titulación en la FCP, el cual contiene dos directrices que son: a) la satisfacción del cliente y b) la mejora continua. Así como se mide la satisfacción del cliente, se establece un plazo de entrega de de 6 a 8 meses y la mejora continua que se tenga un incremento en la titulación por tesis de un 10%, de los cuales el 3% tengan mención. Los elementos de soporte, son las revisiones que se realizarán por dos asesores.

Tabla 3. Interpretación de la política.

Palabra directriz	Medible	Elemento de soporte	Elemento de control
Satisfacción del cliente	Tiempo de entrega 6-8 meses	Revisión de tesis ▽	Checar lista de asesoría Cumpla con los requisitos
Mejora continúa	Lograr que un incremento a 10% los titulados por tesis y 3% con mención.	Revisión con asesor metodológico y Revisión asesor de contenido ▽	Revisión por dos lectores

El análisis del modo de producirse y el efecto del fallo (AMEF). Es una técnica preventiva que estudia las causas y efectos de los fallos antes de que ocurran e inclusive antes de terminar un diseño ver tabla 4. Esta metodología permite conocer los efectos de un modo de falla antes de que este actúe en deterioro de un equipo, dando la información indispensable para hacer los procedimientos de reparación, liberación, instrucción de operación, inspección, seguridad.

Tabla 4. Análisis de modo y efecto de falla

Descripción	P	C	Detección	Prevención
Recepción del protocolo de tesis	≠		Cotejo checar lista	Informar de los requisitos del protocolo
Acta de examen		▼	Supervisión de docto	Checar firmas de sinodales

La tabla muestra en el proceso de titulación la AMEF que se ejemplifica en la recepción del protocolo de tesis puede afectar el proceso, una medida de detección es cotejar con la lista y una medida de prevención es informar a los egresados y al asesor de los requisitos mínimos que debe cumplir el protocolo de tesis. En el acta de examen puede afectar al egresado forma de detección supervisando el documento, la prevención es checar firma de sinodales.

Diseño y desarrollo enfoque a procesos

El enfoque orientado hacia los procesos, permite una rápida y sencilla identificación de los problemas. Así como la rápida resolución de los mismos. Sin la necesidad de mejorar el resto de elementos que funcionan de manera correcta. La aplicación de un sistema de procesos dentro de la organización, junto con la identificación e interacciones de estos procesos, así como su gestión para producir el resultado deseado, puede denominarse como enfoque basado en procesos. De acuerdo al ciclo PHVA el Departamento de Titulación y Educación Continua, se sitúa en la parte del *Hacer* como se muestra en la figura 11, con base a la norma ISO 9001:2008 el punto 7, se refiere a la realización del producto, en 7.1 planificación de la realización del producto, 7.2 procesos relacionados con el cliente, 7.3 Diseño y desarrollo.

Figura 11. Ciclo PHVA
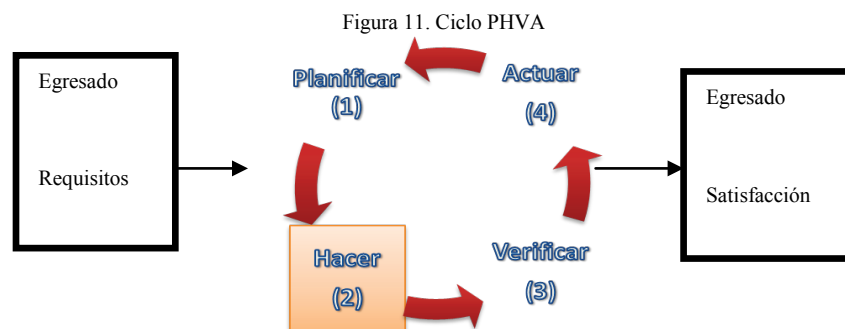
Esta figura muestra que el departamento de titulación se encuentra en el Hacer

Mapeo de procesos

El mapeo de procesos representa la situación particular o propia de la organización, donde se identifiquen las interrelaciones de los procesos como mecanismo para mejorar las comunicaciones al interior, que son normalmente deficientes por no conocer qué productos y requisitos requieren los clientes internos y más grave aún, cuando se desconocen las necesidades de los clientes externos, que son los que pagan por los servicios y productos ver Figura 12 se muestra el proceso por medio del ciclo de gestión, de cómo se recibe la información de las diferentes instancias que están relacionadas. El planificar (P) que lo realiza el departamento de Administración Escolar (DAE), el Departamento de Titulación y Educación Continua que realiza el hacer (H), Contraloría que haría el verificar (V) y La Dirección de la FCP que estaría en el actuar (A). Se puede decir que un sistema de información (SI) es un conjunto organizado de elementos, que interactúan entre sí para procesar los datos y la información para distribuirla de la manera más adecuada, en una determinada organización en función de sus objetivos.

Figura 12.Ciclo de Gestión
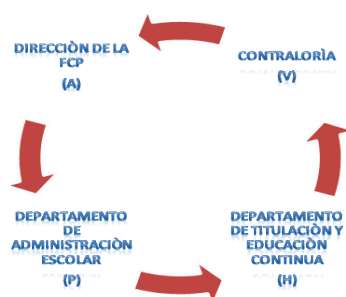
La figura 13, muestra la interrelación de la gestión   con los diferentes actores, la Dirección de la FCP, elabora el Plan de desarrollo de la misma, establece las directrices de calidad y dicta la política de calidad. El departamento de administración escolar planifica, emitiendo actas de examen y certificados de licenciatura. El Departamento de Titulación y Educación Continua, entrega actas de exámenes firmados por los sinodales e indicadores y Contraloría verifica que los procesos se lleven a cabo en forma adecuada, entregando a la dirección Indicadores de opciones de titulación y resultados de las auditorias repitiéndose el ciclo.

Figura 13. Interrelación de la gestión
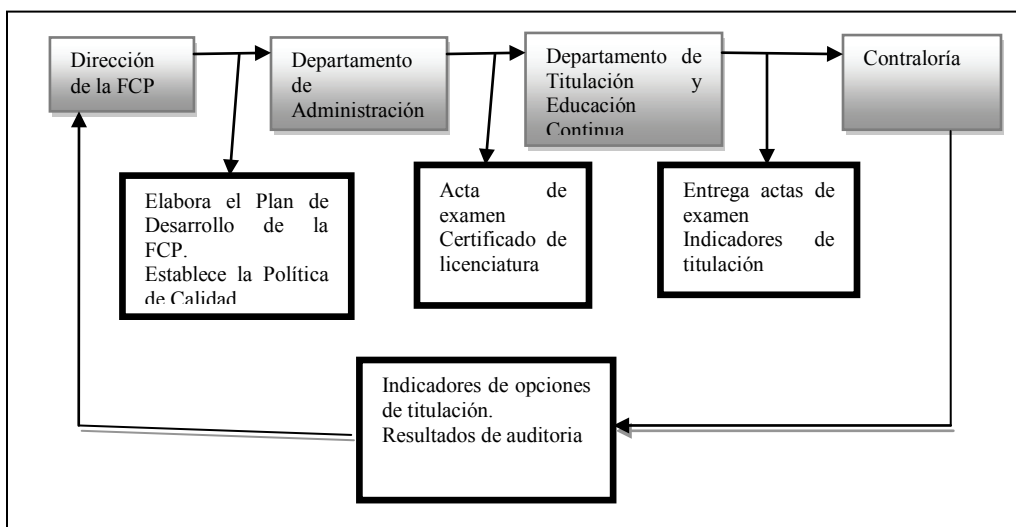
La organización debe validar los procesos de prestación del servicio en los que el resultado no pueda verificarse mediante actividades de seguimiento o medición posteriores. Esto incluye cualquier proceso en el que las deficiencias se hagan aparentes únicamente después de que se haya prestado el servicio. La validación debe demostrar la capacidad de estos procesos para alcanzar los resultados planificados.

En la tabla 5 se muestra el formulario para análisis de modo y efecto de falla para el proceso de titulación por tesis, en el cual se identifican los modos de falla potencial relacionados al servicio como puede ser un reproceso por falta de asesoría en la tesis que no cumpla con los requisitos que se establecieron y se evalúan los efectos potenciales de la fallas en los clientes de un NRP que se tenía originalmente de 96 se pasa a un NRP 48.

Tabla 5. Formulario para la validación de modo y efecto de falla

Efecto de la falla	S	Causa de la falla	O	Control actual	D	Controles actuales (recomendaciones)	NRP	Recomendaciones	S	O	D	NRP
Hay un reproceso por falta de la asesoría de tesis	8	Descuido al revisar el protocolo	3	Revisión	4	Segunda revisión	96	Formulario de requisitos	8	2	3	48

Medición de la satisfacción de los procesos

La satisfacción de los procesos se va a evaluar por medio de un cuestionario tomando escala de likert basado en del Modelo de Noriaki Kano de satisfacción del cliente en las siguientes dimensiones, ver tabla 6 en donde se muestra el tipo de preguntas que se van a realizar para medir la satisfacción del cliente, tomando las dimensiones básicas, desempeño y Corrección cada pregunta tendrá como opciones las siguientes respuestas: a) totalmente de acuerdo, b) de acuerdo, c) indiferente, d) En desacuerdo, e) totalmente en desacuerdo.

Tabla 6. Cuestionario de satisfacción del cliente

Básicas	Desempeño	Corrección
1.-¿El auxiliar administrativo que lo atendió le dio la información necesaria de las opciones de titulación? 2.- Le informaron que al titularse por medio de tesis tendría una mención, si reunía ciertos requisitos?	Se cumplió en tiempo y forma en el plazo de titulación? 2.- Se cumplió en tiempo y forma con las asesorías para el desarrollo de la tesis 3.- Su asesor de tesis reunió las competencias necesarias para el desarrollo de las asesorías?	1.-¿Su asesor de tesis le dio al inicio los requisitos que debe tener un protocolo de tesis? 2.- ¿Usted y su asesor diseñaron un diagrama de Gantt para ver el desarrollo de su trabajo? 3.-¿Recomendaría a sus compañeros de generación esta forma de titulación por tesis?

CONCLUSIÓN

A manera de conclusión se puede decir que la posibilidad de alinear un departamento bajo los parámetros de gestión propuestos por la Norma ISO 9001:2008 se debe considerar como una decisión estratégica a nivel institucional. Mediante un Sistemas de Gestión de la Calidad no solo se obtienen beneficios en la administración, sino que se logran conocer aspectos que no se conocían o no se tenían en cuenta durante el funcionamiento normal. La implementación de un Sistema de Gestión de Calidad implica coordinación y dedicación en el logro de objetivos propuestos, los cuales se podrán alcanzar atendiendo a las distintas oportunidades de desarrollo que se detecten a lo largo del proceso en que se está trabajando.

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PROCESO DE RECLUTAMIENTO Y SELECCIÓN DE PERSONAL EN MICROS Y PEQUEÑAS EMPRESAS DEDICADAS A LA CONSULTORÍA CONTABLE ESTABLECIDAS EN MEXICALI, B.C.

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ABSTRACT

La presente investigación tiene como objetivo identificar la existencia de procesos de Reclutamiento y Selección en las micro y pequeñas empresas del sector servicios, del giro de consultoría contable en el municipio de Mexicali, B.C, Esto se logrará identificando los medios que utilizan para el reclutamiento, los instrumentos que emplean para realizar la selección, así como los resultados que han obtenido al usarlos. Para lograr el objetivo antes mencionado, se aplicaron cuestionarios a una muestra de 30 despachos que se encuentran dedicados al giro de la consultoría contable. La información obtenida fue analizada e interpretada por medio de la elaboración de gráficas en el programa SPSS. De acuerdo al análisis de la información, se encontró que las micro y pequeñas empresas del giro dedicado a la asesoría contable, sí tienen establecidos, aunque de manera informal, procesos para realizar el Reclutamiento y Selección de personal. Fuentes de Reclutamiento tales como información verbal y avisos clasificados, son utilizados por estas empresas, además de técnicas e instrumentos para la Selección, por citar algunas: entrevista, solicitud de empleo, entre otras. Por lo anterior, se puede concluir que las micro y pequeñas empresas del giro de consultoría contable conoce y utiliza fuentes, técnicas e instrumentos de Reclutamiento y Selección, para la contratación de personal.

INTRODUCCIÓN

En los últimos años diversos autores ha hecho un especial énfasis en lo que se refiere a las Micro, Pequeñas y Medianas empresas, ya que como han hecho referencia diversos autores de distintas partes del mundo este tipo de empresas son las que sustentan la economía de muchos países.

Debido a las crisis económicas que se han presentado en México, así como a las cifras de desempleo, el número de este tipo de empresas aumenta, ya que son generadoras de empleo y se han convertido en parte importante de la economía del país. Sin embargo, a pesar de que las micro, pequeñas y medianas empresas son parte importante de la economía, no es fácil su desarrollo y crecimiento, ya que se enfrentan con diversos problemas, siendo uno de ellos la excesiva competencia que tienen que enfrentar contra los estándares de calidad tanto en productos como servicios que ofrecen empresas extranjeras o grandes empresas. Es por ello que las micro, pequeñas y medianas empresas, deben empezar a hacer uso de herramientas administrativas que apoyen su crecimiento de una manera consolidada, de otra manera puede llegar a morir. Problemas de control, organización y planeación, deben ser atendidos si la empresa desea llegar a ser exitosa.

El caso de la ciudad de Mexicali, Baja California, no es la excepción. Las micro, pequeñas y medianas empresas también son importantes en la economía tanto municipal como estatal. Sin embargo, al igual que en el resto del país, la supervivencia de estas empresas no es fácil ya que carecen de elementos que precisamente son los que permiten a las grandes empresas consolidarse, aspectos tales como cultura empresarial, planeación, administración, controles internos, entre otros.

Se han creado diversos programas para dar asesoría a aquellos empresarios que poseen micro, pequeñas y medianas empresas, sin embargo, debido a que no cuentan con una cultura empresarial y a que no se enteran de la existencia de dichos programas, éstos no pueden cumplir su objetivo de informar y apoyar a los empresarios al desarrollo de dichas empresas.

Esto nos lleva a la conclusión de que para que éstas empresas sobrevivan en el contexto que se está viviendo en este momento, es necesario que se fortalezcan y desarrollen ventajas competitivas, que hagan frente a compañías de giros semejantes. Cuestiones como calidad, costo y buen servicio, son esenciales para que una empresa pueda desarrollarse y crecer, logrando así contribuir con el crecimiento y fortalecimiento de la economía de nuestro estado y nuestro país.

Planteamiento del Problema

Aun cuando la mayor parte de las empresas que existen tanto en México como en Mexicali son micro, pequeñas y medianas, y dan empleo a una parte importante de la población, así como contribuyen al Producto Interno Bruto, la tasa de mortandad de las mismas es muy elevada. De acuerdo a autores como Rodríguez Valencia, Pedro del Parque y Salvador Mercado entre otros, uno de los principales problemas que enfrentan estas empresas es la deficiente Administración del Recurso Humano. Esto puede ser crucial, en el sentido de que el personal es quien finalmente da vida a una empresa, al producir o comercializar un bien o servicio; por tanto sin personal adecuado y satisfecho resulta difícil que la empresa logre sus objetivos.

Anzóla establece como uno de los principales problemas "la falta de personal calificado que realice sus labores, ya que normalmente se contrata gente sin experiencia en el área, que aprende su labor una vez que comienza a trabajar, sucediendo con frecuencia que una vez aprendido el oficio, lo abandona especialmente debido al pirateo común que existe" Debido a lo anterior y a que el universo para esta investigación pudiera resultar muy amplio, esta investigación se enfocará en investigar la existencia de procesos de Reclutamiento y Selección en las micro y pequeñas empresas del sector servicios del giro de consultoría contable.

Objetivos

El objetivo de esta investigación es determinar si las micro y pequeñas empresas del sector servicios del giro de asesoría contable, en el municipio de Mexicali, B.C. tienen procesos o métodos establecidos para reclutar y seleccionar a su personal. Los objetivos específicos que se obtendrían por medio de esta investigación serían:

- Identificar si existe algún tipo de proceso formal de Reclutamiento y Selección de personal.
- Conocer cómo se lleva a cabo el proceso de Reclutamiento y Selección.
- Identificar los canales de Reclutamiento y técnicas de Selección de personal utilizadas para realizar estas actividades.
- Verificar si dichas técnicas responden a las necesidades de personal que tienen las micro y pequeñas empresas.

Hipótesis

Las micro y pequeñas empresas del giro de consultoría contable no cuentan con procesos de Reclutamiento y Selección formales.

Hipótesis Nula

Las micro y pequeñas empresas del giro de consultoría contable cuentan con procesos de Reclutamiento y Selección formales.
Las variables que se desean investigar son las siguientes:
Fuentes utilizadas de Reclutamiento de Personal. (Identificar las fuentes más utilizadas para el Reclutamiento y definir para una propuesta si son las más indicadas).
Técnicas utilizadas de Selección de Personal. (Identificar las fuentes más utilizadas para la Selección y definir para una propuesta si son las más indicadas).
Responsable del proceso de Reclutamiento y Selección. (Determinar si el responsable del proceso cuenta con los conocimientos para realizar dicho proceso).
Conocimiento del perfil de los puestos solicitados. (Determinar si en el proceso de reclutamiento y selección se conocen los requisitos del puesto a ocupar).
Inversión en capacitación, incluyendo la de persona a persona (Montos aproximados utilizados para capacitación y horas aproximadas utilizadas para que el personal de nuevo ingreso conozca su función).
Requerimiento de personal calificado (si con las fuentes de reclutamiento y técnicas de selección utilizadas se obtiene el personal que cuenta con los conocimientos necesarios para ocupar el puesto).

REVISIÓN LITERARIA

Definición de micro y pequeña empresa del sector servicios   La "empresa" se define como una organización económica que produce o distribuye bienes o servicios para el mercado, con el propósito de obtener beneficios para sus titulares o dueños (Mercado 2004:p3). Esta investigación, como se planteó desde un inicio, solo comprenderá el estudio de las micro y pequeñas empresas del sector servicios dedicadas a proporcionar asesoría contable. De acuerdo a lo anterior, podemos definir una empresa del sector servicios, como "... aquéllas que, con el esfuerzo del hombre, producen un servicio para la mayoría de una colectividad en determinada región sin que el producto objeto del servicio tenga naturaleza corpórea" (Rodríguez:1996:82). Por otra parte para determinar el tamaño de una micro empresa aquella que cuenta con 1 a 10 empleados y una pequeña empresa como aquella que tiene de 11 a 50 empleados, de acuerdo a los publicado en la Ley para el Desarrollo de la competitividad de la Micro, Pequeña y Mediana Empresa, que fue publicada en el Diario Oficial de la Federación publicado el 30 de diciembre del 2002. En resumen se puede decir que una micro y pequeña empresa del sector servicios es aquella que provee un producto de naturaleza no corpórea, producido por el esfuerzo del hombre y que tiene de 1 a 50 empleados.

Las micro y pequeñas empresas comparte características en común, a continuación se exponen algunas de ellas. Primero, las micro y pequeñas empresas son organizaciones con propietarios y administración independientes, que no dominan el sector en el cual operan y cuentan con una estructura organizacional muy sencilla. Las funciones de planeación financiera, producción, administración de personal y comercialización se llevan a cabo por una sola persona con poca especialización y, en la mayoría de los casos, esta persona no está capacitada para llevar a cabo su función como administrador, asimismo tienen falta de acceso al capital y manejo de manera conservadora y empírica sus operaciones normales, ya que la mayoría son empresas son típicamente familiares, tienen contacto personal estrecho con quienes intervienen en la empresa y posición poco dominante en el mercado así como una íntima relación con la comunidad local, además el capital es aportado principalmente por el dueño y crecen principalmente a través de la reinversión de utilidades o por aportaciones del dueño o familiares y predomina el personal no calificado. (Anzola 2002: p11).

Principales Problemas Que Enfrentan las Micro y Pequeñas Empresas y Su Situación

Problemas generales: En México existen 2.9 millones de establecimientos, de los cuales el 99% corresponden a micro, pequeñas y medianas empresas (2.85 millones). (cici.gob:p3)

En un artículo Pedro del Parque establece que según un estudio de Fundes México (Fundación para el Desarrollo Sustentable, el cual es un organismo privado que promueve la creación y desarrollo sostenible de las Pequeñas y Medianas Empresas) la falta de conocimientos en administración y finanzas, así como la desorganización del empresario mexicano, son los principales factores que inciden en el fracaso de las unidades de negocio de menor tamaño en México (www.entrepreneur:2001).

"El Financiero" establece en un artículo que el Banco Interamericano de Desarrollo (BID) que los nuevos empresarios mexicanos son poco competitivos en el mundo, debido a que han concentrado su estrategia de negocios en ofrecer productos baratos y no les importa innovar para que sus mercancías sean diferentes a las que comercializa su competidor.

Por su parte Joaquín Rodríguez Valencia en su libro "Cómo administrar pequeñas y medianas empresas" establece que los micro y pequeños empresarios representan el eslabón más débil de la cadena productiva y de servicios, debido principalmente a que carecen, por lo general, de sistemas de planeación, organización, administración y control eficientes, así como de tecnologías propias para la gestión y desarrollo de sus actividades productivas. (Rodriguez:1996).

Problemas relacionados a la Administración de Recursos Humanos: Según estudios realizados en la pequeñas empresas latinoamericanas el área de Recursos Humanos es la más descuidada. De acuerdo a estos estudios, solo el 27% tiene algún programa de contratación de personal. Normalmente las contrataciones las realiza el dueño por el medio del que dispone en el momento en que requiere del personal, puede ser por amigos, competencia, recomendaciones, entre otros, sin seguir algún proceso previo que asegure el éxito de la contratación. Este factor y la piratería de personal que existe entre las empresas inciden fuertemente en la alta rotación del personal.

Otro gran problema es la falta de personal calificado que realice sus labores, ya que normalmente se contrata gente sin experiencia en el área, que aprende su labor una vez que comienza a trabajar, sucediendo con frecuencia que una vez aprendido el oficio, lo abandona especialmente debido al pirateo común que existe.

La capacitación se brinda ya ubicada la persona en el puesto de trabajo y mediante el proceso o método que el dueño de la empresa señale. Una situación que se presentó en casi 50% de los casos es el enfoque de dirección autocrático a veces demasiado rígido, dictatorial del pequeño empresario. Sólo se hace lo que el dueño dice.

La supervisión del personal es principalmente a través de la observación directa del dueño de la empresa o por un familiar de rango superior, quien a la vez realiza labores normales en la empresa. La función de control del personal es irregular, pues se carece de algún patrón o estándar formal escrito. No se encontraron registros de lo realizado por la gente para revisar sus logros, todo se hace a través del criterio del pequeño empresario. Aunque la supervisión de personal es informal, 93% de las empresas latinoamericanas estudiadas sí la llevan a cabo. El trabajo en equipo lo consideran esencial, pero no lo practican. (Anzola 2002:p20)

Administración de Recursos Humanos: La Administración de Recursos Humanos es la planeación, organización, dirección y control de los procesos de dotación, remuneración, capacitación, evaluación del desempeño, negociación del contrato colectivo (en donde aplique) y guía de los recursos humanos idóneos para cada departamento, a fin de satisfacer los intereses de quienes reciben el servicio y satisfacer, también, las necesidades del personal (Rodríguez:2002).

El papel de la Administración de Recursos Humanos dentro de la empresa: El principal objetivo de la Administración de Recursos Humanos dentro de cualquier empresa, es el lograr el mejoramiento de las organizaciones haciéndolas más eficientes y eficaces mediante la correcta administración del recurso humano con el que cuenta la empresa. Los recursos humanos determinan el grado de éxito de una empresa. Mejorar las contribuciones que efectúa el personal a la empresa constituye una de las principales metas de la Administración de Recursos Humanos. A pesar de que la Administración de Recursos Humanos no ejerce control directo en cuestiones tales como la estrategia de la empresa, materia prima, producción y ventas, que se pueden considerar muy importantes dentro de la empresa, tiene la tarea de que el recursos humano se encuentre en las condiciones adecuadas para realizar las tareas necesarias para el éxito de la empresa.

Proceso de descripción y valuación de puestos: Ahora bien, una vez realizada la Planeación de Recursos Humanos y determinadas las necesidades de la empresa, es importante determinar los requisitos que debe cumplir el personal que se integre a ésta, con el objetivo de que tanto para la persona que se integre, como para la empresa, resulte benéfica esta acción. Para ello es necesario realizar la descripción y valuación de puestos. El proceso de descripción de puestos se divide en dos partes:

- Descripción del puesto: Es el proceso mediante el cual se enumeran las tareas o funciones que lo conforman y que, por lo tanto, diferencian de otros puestos. También enumera la periodicidad, los instrumentos y los objetivos. Fija deberes y responsabilidades.
- Especificación del puesto. Está referida a las aptitudes del personal y a la definición de las características sumadas a la experiencia que debe tener una persona para desempeñarse correctamente en la posición.

El proceso de valuación de puesto, nos permite determinar el valor de un puesto, y por lo tanto su compensación, de acuerdo a las características que requiere el candidato para ocupar un puesto.

Una vez que se cuenta tanto con la descripción como la valuación de un puesto, se está en posibilidad de reclutar y seleccionar candidatos, ya que se cuenta con la información necesaria para tomar una decisión.

Proceso de Reclutamiento: El reclutamiento es el conjunto de herramientas para atraer y hacer que la gente que cuenta con habilidades, aptitudes y aspiraciones para trabajar, busque el trabajo más apropiado a sus capacidades, y que de igual manera la empresa que lo busque logre encontrarlo. Éste es el punto inicial y clave para el buen funcionamiento de cualquier actividad empresarial. Existen muchas formas de buscar y atraer gente para un determinado puesto. Se puede solicitar la información del candidato fuera de la empresa (fuente externa: bolsas de trabajo, instituciones educativas, agencias de empleo) o dentro de ella (fuente interna). (Anzola 2002:p271).

Proceso de Reclutamiento y Selección en las micro y pequeñas empresas: De acuerdo a la revisión bibliográfica de las diferentes textos y documentos analizados se encontró, que ninguno de los proceso de la Administración de Recursos Humanos es realizado adecuadamente en las micro y pequeñas empresas. Los procesos de Reclutamiento y Selección por lo tanto, no son la excepción y es precisamente por ello que esta investigación se enfoco en verificar si estos procesos son realizados correctamente y de acuerdo a sus necesidades por las micro y pequeñas empresas del sector servicio del giro de consultoría contable.

METODOLOGÍA

Básicamente fueron utilizadas dos fuentes de información. Para realizar esta investigación. La primera fuente es información documental ya existente relacionada con el tema, la cual se localizó, en libros de texto, documentos electrónicos y revistas sobre la materia. La segunda fuente, fue la obtención de información directamente de las pequeñas empresas objeto de estudio, mediante la aplicación de un cuestionario, se utilizaron preguntas abiertas y de opción múltiple, las cuales se referían a la aplicación de procesos de Reclutamiento y Selección, la forma de aplicarlos y los resultados obtenidos.

Para determinar el universo de micro y pequeñas empresas del sector servicio dedicadas al giro de consultoría contable se consultó a las empresas registradas en el Colegio de Contadores Públicos de Mexicali, ya que es en esta asociación donde se puede encontrar un registro más exacto de las empresas dedicadas a este giro.En el municipio de Mexicali existen, de acuerdo al registro del Colegio de Contadores Públicos de Mexicali, actualmente 110 micro y pequeñas empresas dedicadas a la consultoría contable, ubicadas en la zona urbana de Mexicali. Son estas empresas las que serán consideradas con la población de esta investigación. Se utilizó la fórmula para poblaciones finitas con el fin de determinar la muestra representativa a la cual se aplicó el instrumento de verificación.

$$n = \frac{Z^2 p q N}{N E^2 + Z^2 p q}$$

Donde:
n = es el tamaño de la muestra;
Z = es el nivel de confianza;
p = es la variabilidad positiva;

q = es la variabilidad negativa;
N = es el tamaño de la población;
E = es la precisión o el error.
Z= Nivel de confianza: 90% (de lo cual resulta Z= 1.645)

Sin embargo, debido a que la población se puede considerar pequeña, se comprenderá una muestra de 30 elementos, ya que si se consideran pruebas estadísticas convencionales, se señala un límite de 30 para el uso de (n-1) en las fórmulas para muestras pequeñas, por lo que puede considerarse este número como mínimo aceptable. (Ibáñez: 1996). Por tanto la muestra de 30 empresas es adecuada para el universo que se tiene de empresas registradas.Calculado el tamaño de la muestra se determinaron los elementos muestrales para la aplicación del instrumento de medición. Una vez que se obtuvo la información, se codificó cada una de las preguntas y se capturó en el sistema electrónico SPSS cada una de las respuestas obtenidas, estando en posibilidad así de obtener la frecuencia de cada respuesta, que después de su análisis nos permitiera llegar a una conclusión.

ANÁLISIS E INTERPRETACIÓN DE LOS RESULTADOS

Los principales resultados obtenidos del análisis de la información arrojada por el instrumento de medición se presentan a continuación:

Figura1: Número de Empleados
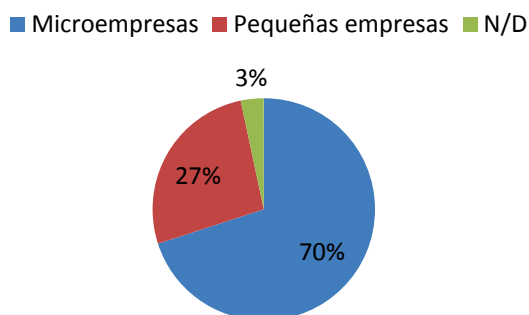
La mayoría de las empresas entrevistadas son microempresas, el resto son pequeñas empresas. Solo una de las empresas encuestadas no respondió esta pregunta. Es importante mencionar que de las empresas encuestadas ninguna resultó ser una mediana o gran empresa, por lo que podemos decir que el grueso de las empresas dedicadas a la prestación de servicios de asesoría contable son de tamaño pequeño o micro.
Figura 2: Antigüedad de la Empresa

■0-2 años   ■3-5 años

■6-8 años   ■9-11 años

■Más de 11 años
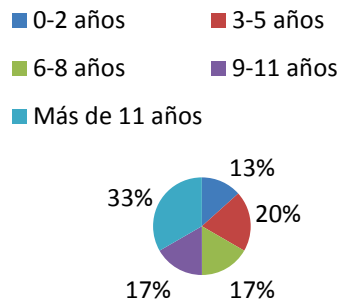
Se puede observar que de 0 a 11 años la cantidad de empresas permanece relativamente constante. Sin embargo, pasando ese rango, se incremente el número de empresas. Esto nos indica que los primeros 10 a 11 años pueden ser riesgosos para la organización, sin embargo, aquellas empresas que superan esa curva, se estabilizan y pueden continuar creciendo.

Figura3 Persona que lleva a cabo el proceso de Reclutamiento

■Socio ■Rec. Hum. ■Contador ■Gerente
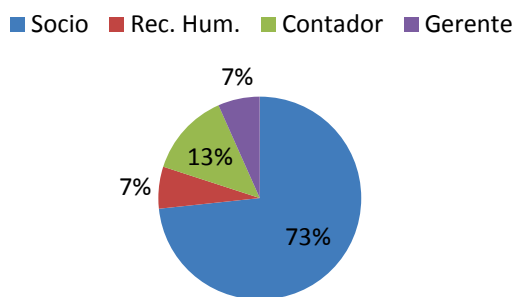
Como se puede observar en la gráfica anterior, la mayoría de las empresas de este giro, quien lleva a cabo el proceso de Reclutamiento es alguno de los socios-directivos. Este tipo de empresas no tienen personal o departamentos dedicados a procesos de Recursos Humanos, entre ellos el de Reclutamiento y Selección. Al ser empresas Micro y Pequeñas, los mismos socios-directivos, son quienes absorben estas funciones.

A pesar de que casi el 40% de las empresas negó contar con descripciones de puesto actualizadas, el 87% de las empresas encuestadas confirmó revisar los requisitos y perfil necesarios para llenar una vacante. Esto indica que aunque sea de forma no documentada, los responsables de realizar los procesos de Reclutamiento y Selección conocen la importancia de conocer el perfil de un puesto para poder realizar eficazmente estos procesos.

De las empresas encuestadas que respondieron que sí contaban con descripciones de puesto vigentes, al momento de preguntar sobre si se verificaban características y perfiles de los puestos para el momento del Reclutamiento y Selección, 11% respondieron que no. Esto nos indica que si bien, se puede contar con una herramienta, no necesariamente se utiliza de forma adecuada o se obtiene el mayor beneficio de ella.

Figura4 ¿Se verifican características y perfil del puesto al hacer el Reclutamiento y Selección?
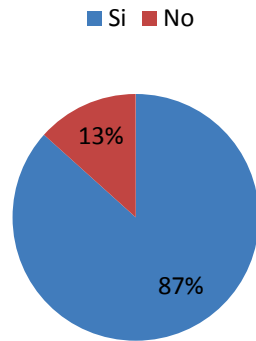

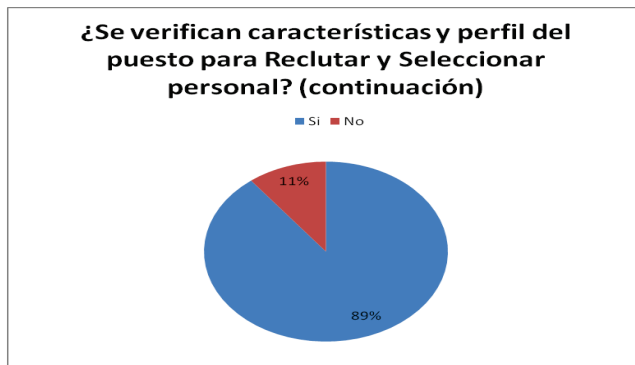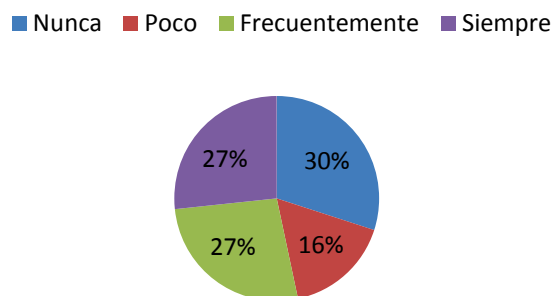Figura5 ¿Se verifican características y perfil del puesto al hacer el Reclutamiento y Selección?

Figura 6: ¿Se utiliza la promoción interna?

De las empresas encuestadas solo el 30% no ha practicado alguna vez la promoción interna. Si bien no se encuentra una marcada tendencia sobre su uso, la mayoría de las empresas la han utilizado alguna vez.

Figura7 ¿Han utilizado avisos clasificados?
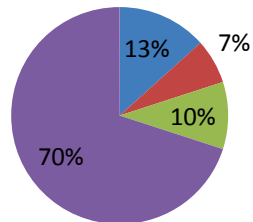
La mayoría de las empresas utilizan con mucha frecuencia los avisos clasificados. Solo el 13% no lo han utilizado. Este es uno de los medios más usado para reclutar personal en este giro. Es frecuente encontrar anuncios en el aviso clasificado reclutando personal por parte de estas empresas. Este medio tiene un costo relativamente bajo y llega a muchas personas al mismo tiempo, las cuales pueden cumplir con el perfil necesario para llenar la vacante.

Figura8 ¿Han utilizado agencias de empleo?
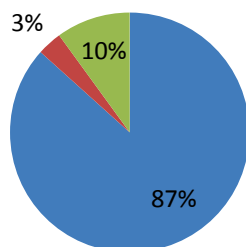
De las empresas encuestadas 87% respondieron que nunca han utilizado las agencias de empleo como fuente de Reclutamiento, debido al alto costo que representa utilizar este medio para reclutar personal. Como se pudo ver en la gráfica anterior, es más conveniente utilizar el anuncio clasificado, que llega a más personas y a un menor costo, que una agencia de empleo, que se recomienda utilizar para el reclutamiento de personal especializado.

Solo el 40% de las empresas encuestadas afirmó haber utilizado o utilizar el archivo de solicitudes de empleo de aquel personal que ha mostrado interés en trabajar en estas empresas. El 60% restante no ha utilizado esta fuente, aun a pesar de ser una fuente sin ningún costo y poder proporcionar personal con el perfil adecuado para cubrir posiciones vacantes.

Por lo menos alguna vez, si no es que frecuentemente (47%) las empresas afirmaron haber utilizado el reclutamiento de universitarios para llenar vacantes. Esto se puede considerar conveniente, ya que da la oportunidad a estudiantes o recién egresados de adquirir experiencia laboral y a la empresa le proporciona ventajas tales como un bajo costo y personal que cuente con un perfil y requisitos adecuados para cubrir vacantes.

Figura9 ¿Se utiliza el archivo de solicitudes de empleo?
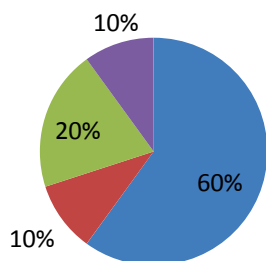
Figura10 ¿Se reclutan universitarios?
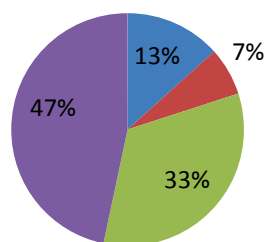
Figura11 ¿Se ha participado en ferias de empleo para reclutar personal?
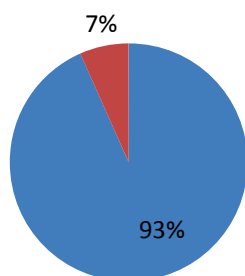
El 93% de las empresas encuestadas negó haber utilizado las ferias de empleo para reclutar personal y solo el 7% restante utilizó esta fuente pocas veces. Esto es debido a que las ferias de empleo generalmente son utilizadas para aquellas empresas que requieren realizar reclutamientos masivos o bien, empresas grandes que se encuentran en proceso de Reclutamiento para diversas posiciones, ya que las ferias de empleo permiten llegar a numerosas personas con diferentes perfiles.

Figura12 ¿Se utilizan o han utilizado radio y TV para reclutar personal?
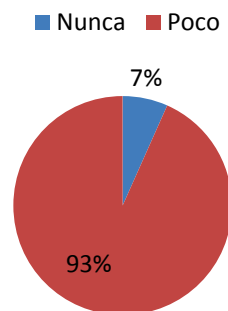
Este tipo de empresas utiliza o ha utilizado poco o nunca el radio y TV para realizar el proceso de Reclutamiento. Debido a su alto costo es conveniente que no utilicen frecuentemente esta fuente de Reclutamiento.

Figura13 ¿Funcionan las fuentes de Reclutamiento?
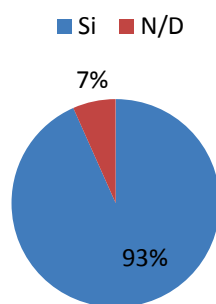
El 93% de las empresas encuestadas confirmaron la efectividad de las fuentes de Reclutamiento utilizadas. Esto indica que independientemente de que no haya un área dedicada a los Recursos Humanos los cuales lleven a cabo los procesos de Reclutamiento y Selección, las personas que realizan estos procesos han tomado buenas decisiones al momento de realizar estos procesos.

Figura14 ¿Se solicita currículum vitae para el proceso de Selección?
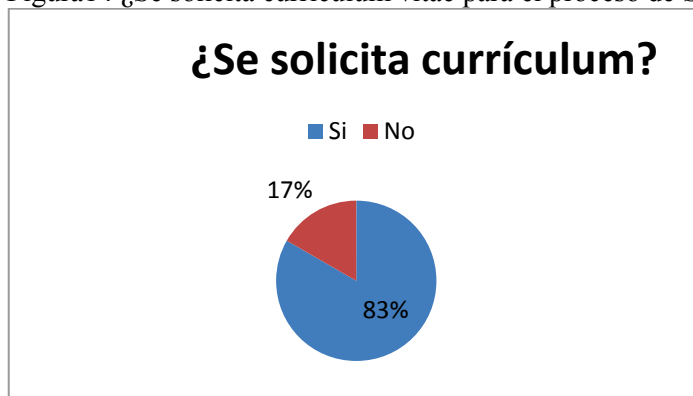
El 83% de las empresas confirmaron solicitar el currículum vitae al realizar sus procesos de Reclutamiento y Selección. Esto nos indica que las empresas están interesadas en conocer a sus candidatos y confirmar que cuenten con el perfil y características requeridos para ocupar una vacante. Por otra parte al ser la mayoría profesionistas el personal que se recluta, el currículum es una buena opción para conocer más a detalle en el ámbito profesional a los candidatos.

Figura15 ¿Se requiere solicitud de empleo para el proceso de Selección?
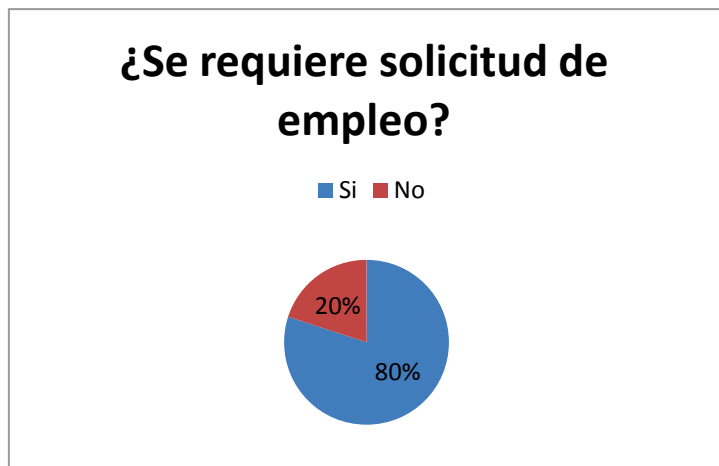
Casi el mismo número de empresas que solicita el currículum vitae es el que requiere la solicitud de empleo. Si bien el currículum proporciona información más precisa sobre el perfil y características en el ámbito laboral de un candidato, la solicitud de empleo proporciona datos más básicos, por lo tanto, si bien no son mutuamente excluyentes, pueden resultar un retrabajo para el entrevistador, ya que tiene que consultar dos fuentes de información, que puede resultar repetitiva.

Figura16 ¿Se solicitan cartas de recomendación?
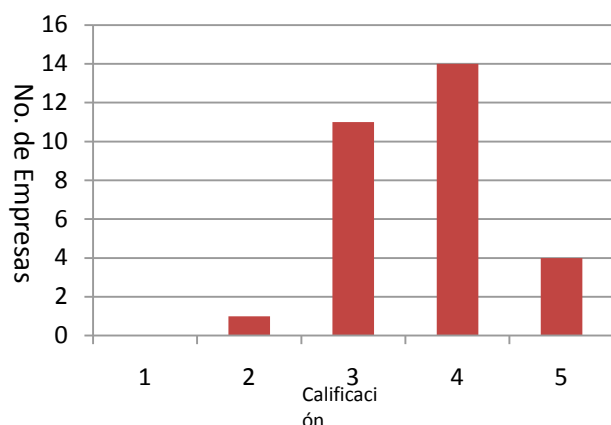
Figura17 ¿Se considera importante la experiencia previa?
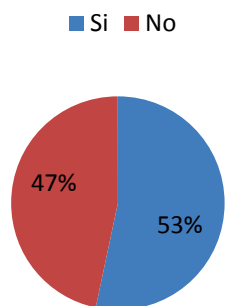
Figura18 ¿Se considera importante la antigüedad en puestos previos?
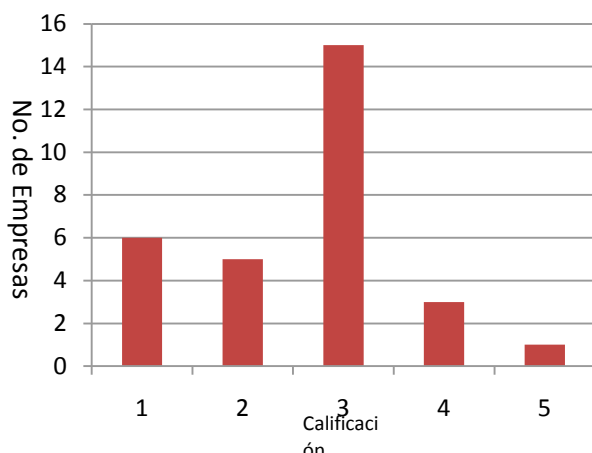
Solo el 53 % de las empresas solicitan cartas de recomendación. Si bien no son un documento determinante en la contratación de un candidato, resulta de utilidad obtenerlas, ya que de esta manera se tiene una opinión sobre el desempeño del candidato, teniendo así una idea más cercana de cómo se desenvuelve en el plano laboral.

Como se puede observar 26 de las 30 empresas encuestadas consideran la experiencia como algo importante, sin embargo, la mayoría las colocó en el rango medio, es decir, si el candidato cuenta con experiencia previa es bueno, sin embargo, no es un factor decisivo al momento de la selección.

Como se puede observar, definitivamente la antigüedad en puestos previos no es un factor que se considere importante al momento de realizar el proceso de Selección. La antigüedad fue calificada del 3 al 5 (solo una empresa calificó este factor con un 2), esto nos indica la poca importancia que se le otorga a este factor.

Figura19 ¿Se considera importante la escolaridad?
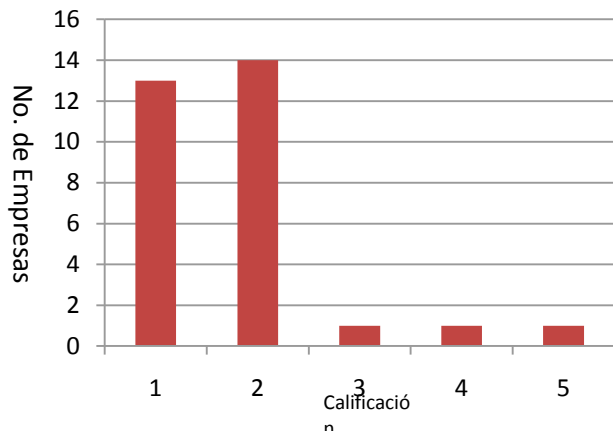
La mayoría considera la escolaridad importante al momento de la Selección ya que al ser un giro especializado, requieren personal que tenga carrera profesional en el área contable, siendo esto el principal requisito al momento de reclutar y seleccionar.

Figura20 ¿Se consideran importantes las características específicas del puesto?
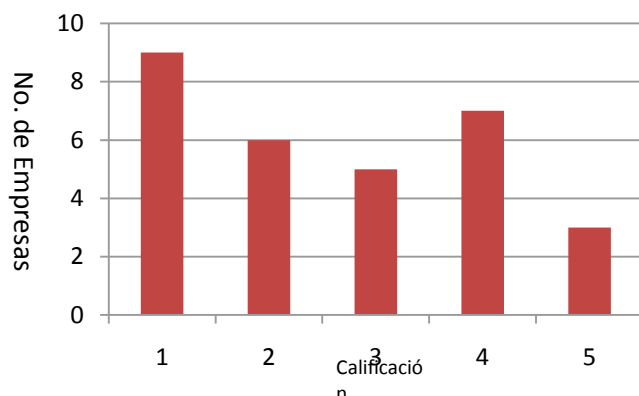
No hay una marcada tendencia sobre la importancia de las características específicas del puesto. Para unas si bien pueden resultar importantes, para otras no tanto. Como se pudo ver en la gráfica anterior la escolaridad tienen más peso, por lo que los demás factores no se consideran importantes en comparación con ese.

Figura21 ¿Quién es el responsable de realizar las entrevistas de Selección?
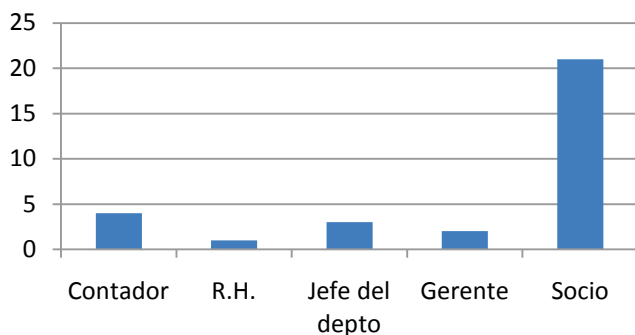
Como lo muestra la gráfica, en la mayoría de las empresas encuestadas el socio es quien lleva a cabo las entrevistas de Selección. Si consideramos que la mayoría de estas empresas son Micro o Pequeñas es de esperarse ue los propietarios (en este caso el o los socio(s)) sean quienes realicen esta labor.

Figura22 ¿Quién es el responsable de decidir sobre una contratación?
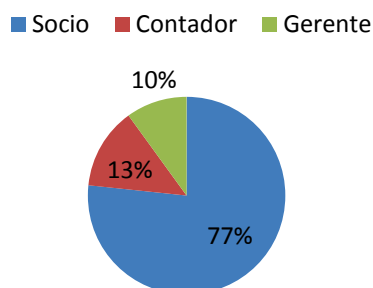
Al igual que en la gráfica anterior, en ésta podemos observar que el socio en el 77% de las empresas es quien toma la decisión final al momento de contratar a un candidato para llenar una vacante. Como se menciono anteriormente, al ser Pequeñas y Micro empresas es común que los propietarios sean quienes tomen estas decisiones.

Figura23 Pruebas realizadas a los candidatos que aplican para una vacante.
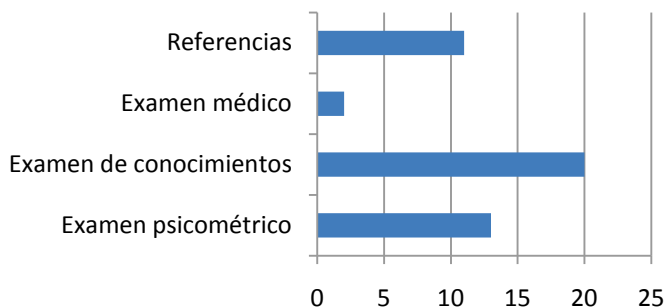
La mayoría de las empresas que respondieron confirmaron que los candidatos que aplican para una vacante deben realizar un examen de conocimiento, sin embargo, el resto de pruebas que se sugieren para realizar la selección de personal son realizados por menos de la mitad de éstas.

Figura24 ¿Qué porcentaje de candidatos cumple con el perfil necesario para ocupar una vacante?
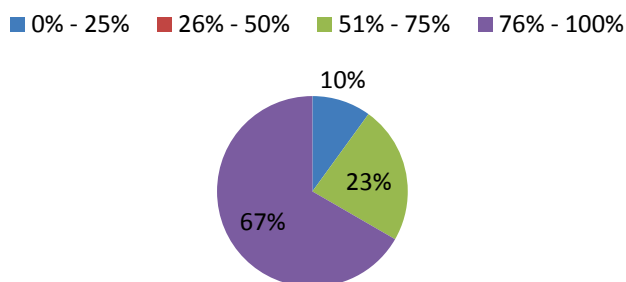
El 67% de las empresas afirmó que los candidatos que cumplían con el perfil adecuado para llenar sus vacantes era del 76% al 100%. Otro 23% respondió que del 51% al 75% de los candidatos cumplían con el perfil. Solo el 10% considera que del 0% al 25% son los candidatos que cumplen con el perfil necesario.

Figura25 Estas empresas ¿Estarían dispuestas a recibir asesoría en materia de Reclutamiento y Selección?
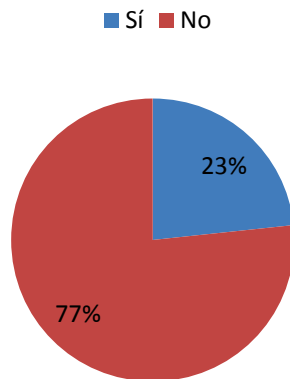
A pesar de que una asesoría pudiera apoyarles a mejorar sus procesos de Reclutamiento y Selección, la mayoría de las empresas no desea recibirla, debido al poco personal que se maneja no consideran necesario que se les oriente respecto a cómo realizar estos procesos. Solo un 23% de las empresas estarían dispuestas a recibir asesoría.

CONCLUSIONES

En base a los resultados obtenidos se establecieron las siguientes conclusiones:

Las micro y pequeñas empresas del giro de consultoría contable conocen los procesos de Reclutamiento y Selección: utilizan diferentes fuentes de reclutamiento y al realizar la selección de los candidatos para llenar una vacante realizan entrevistas y solicitan en algunos casos documentos de apoyo tales como currículum vitae y/o solicitud de empleo, cartas de referencia, además de aplicar exámenes de conocimientos y (aunque no tan frecuentemente) exámenes médicos y psicométricos. Por otra parte, más de la mitad de las empresas encuestadas, confirmaron contar con descripciones de puesto, las cuales son utilizadas para determinar el perfil y requisitos a considerar al momento de cubrir una vacante; aún aquellas empresas que no contaban con descripciones de puesto vigentes, verificaban en su mayoría el perfil y requisitos del puesto, con el fin de realizar una mejor selección.

Sin embargo en la mayoría de los casos realizan los procesos de Reclutamiento y Selección de forma empírica, esto es, que no existe un proceso determinado para esto. Es importante mencionar que debido al grado de especialidad de estas empresas, la mayoría de su personal, por no citar a los socios-directivos, cuenta con carrera profesional, sobre todo enfocada a las áreas contables y administrativa, esto proporciona cierta ventaja sobre micro y pequeñas empresas de otros giros, ya que esta preparación permite a los directivos de estas empresas tener una visión mayor de lo que implica la administración de los diversos procesos de la empresa, entre ellos los de Recursos Humanos.

Los canales más utilizados para reclutar personal son: promoción interna, avisos clasificados y reclutamiento de universitarios. Los resultados que han obtenido, de acuerdo a lo respondido por las empresas encuestadas, consideran que han obtenido buenos resultados utilizando estas fuentes de

reclutamiento. Se confirmó que al momento de hacer el reclutamiento solicitan ya sea currículum o solicitud de empleo, para contar con herramientas e información para realizar las entrevistas y, posteriormente la selección. Los datos que son de mayor importancia al momento de realizar la selección son la escolaridad y las características específicas, esto se debe en gran parte al grado de especialización para el personal que labora en este giro.

Los resultados del estudio no apoyan totalmente lo establecido en la hipótesis que se planteó para este estudio "Las micro y pequeñas empresas del giro de consultoría contable no cuentan con procesos de Reclutamiento y Selección formales", si bien no se encuentran documentados estos procesos, tienen conocimiento y utilizan los canales de Reclutamiento y los herramientas para Seleccionar a los candidatos que llenarán las vacantes que surgen dentro de sus empresas.

PROPUESTA

Las siguientes propuestas se hacen con el fin de fortalecer los procesos de estas empresas en materia de Reclutamiento y Selección:
a) Buscar por parte de alguna institución educativa apoyo para cursos de capacitación sobre el tema. Por el perfil administrativo de colaboradores y socios-directivos les resultaría sencillo familiarizarse con términos, técnicas y herramientas.
b) Hacer mediciones sobre la efectividad de sus canales de Reclutamiento, esto dará una mayor certeza sobre los resultados obtenidos y permitirá la evaluación y selección de otros o ciertos canales que den mejores resultados.
c) Buscar apoyo ya sea en instituciones médicas o educativas para realizar exámenes psicométricos y médicos a un bajo costo, permitiéndoles así tener mayor información al momento de una contratación.
d) Hacer mediciones sobre el éxito del proceso de Selección, verificando cuestiones como desempeño, duración en el puesto y realizar entrevistas de salida con el fin de identificar algún factor que pudo haber sido detectado durante este proceso.

Al aplicar estas sencillas recomendaciones las micro y pequeñas empresas contarán con una ventaja competitiva al realizar un reclutamiento y selección más efectivo, permitiendo esto obtener candidatos que cumplan con el perfil para cubrir una vacante, asegurando así contar con colaboradores que contribuyan al crecimiento de la empresa.

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LA SUCESIÓN EN LAS EMPRESAS FAMILIARES DEL SECTOR TEXTIL EN TIJUANA, B. C. MÉXICO

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RESUMEN

El presente trabajo contempla una investigación sobre las empresas familiares del sector textil en Tijuana, B.C. México, abordando el tema de la sucesión. Las empresas familiares constituyen el grueso de las pequeñas y medianas empresas que aportan tanto en empleo e ingresos en la economía mexicana. El objetivo del presente trabajo es conocer el mecanismo de sucesión de los propietarios de empresas familiares del sector textil en la ciudad de Tijuana, B.C. Muchas de las empresas familiares no cuentan con planes de sucesión y desconocen la utilidad de los mismos para el futuro de sus empresas, sin embargo, el dueño desea que uno de sus familiares directos asuma la dirección de la empresa cuando se retire. Asimismo, el nombrar a un sucesor puede generar conflictos familiares. Para lograr los resultados se han realizado 43 encuestas representativas a los propietarios afiliados al padrón de la Cámara Nacional de la Industria de Transformación (CANACINTRA) delegación Tijuana, en Baja California.

PALABRAS CLAVES: empresa familiar, sucesión, sector textil.

INTRODUCCIÓN

Una de las características económicas de los países en desarrollo es la presencia mayoritaria de pequeñas y medianas empresas, en ella predomina la empresa familiar, como soporte del crecimiento de las actividades económicas básicas, pero importantes que son grandes generadores de empleos.

Las empresas familiares son organizaciones que pueden crecer y desarrollarse, pero esto tiene que ver con el diseño e implementación de estrategias de negocio, disponibilidad de recursos, calidad del producto o servicio, las redes con clientes y proveedores, la administración del negocio y con la prevención de posibles conflictos entre los intereses de la empresa relacionados con el crecimiento de la familia.

Definir al futuro sucesor en la empresa familiar es determinante para garantizar la continuidad de la empresa; tiene que actuarse bajo la lógica empresarial, lo cual no siempre coincide con los privilegios de la lógica familiar. La dirección de la empresa basada en jerarquías familiares, puede afectar a la empresa e impedir su crecimiento e incluso su mantenimiento en el tiempo. Por ello, el propietario debe tener un plan de sucesión que garantice el futuro y la expansión de la empresa en un ambiente cada más competitivo.

Los retos presentes para las empresas familiares son la internacionalización y las alianzas estratégicas, advirtiendo de que manera pueden afectar ambos fenómenos. La internacionalización se presenta principalmente como consecuencia de la globalización, siendo esta la unificación del mercado de dos o más países para efectos prácticos del intercambio comercial y de establecimiento empresarial, de tal manera que la empresa que adopte este tipo de estrategia como respuesta al aumento de la competencia a nivel mundial, hecho que a su vez hará que se acentúe la competitividad en el país donde se instala.

Por tanto, las empresas familiares deben de tomar en cuenta que es importante que tengan un plan de sucesión para designar a un sucesor; esto es para anticiparse a las carencias de dirección; es decir, saber identificar los puestos clave de la organización, que están bloqueados o sin evolución por falta de

sustitutos adecuados y reducir por otro lado, el impacto, que tiene en cualquier negocio, el cambio de dirección cuando el propietario fallece, o queda incapacitado, sin la designación de un sucesor, ya sea un hijo (a), sobrino, nieto, etc.

El plan de sucesión no debe limitarse a la idea de que la segunda o tercera generación tome las riendas del negocio. "La meta debe ser cómo se conserva el patrimonio familiar a largo plazo, y eso no necesariamente implica que un familiar se quede con el negocio a largo plazo". (Gallo, 1998)

REVISIÓN LITERARIA

Dado que existe una gran cantidad de definiciones de la empresa familiar, comenzaremos acotando los términos a partir de los cuales se diferencia a la empresa familiar de aquella que no lo es, delimitando así los límites entre unas y otras empresas.

De acuerdo con Salazar (2008), "la empresa familiar es aquella en la que la familia tiene el control accionarial y el de los órganos de gobierno y en la que todos los accionistas familiares comparten un deseo de continuidad, una misma visión, cultura familiar y empresarial".

Anteriormente, ya Eddy (1996), mencionaba las principales características que presentan las empresas familiares, que son: "la familia tiene cierta propiedad o propiedades, la familia tiene un alto control dentro de la dirección de la empresa y hacer negocio es el principal ideal de la familia".

La definición de empresa familiar puede abarcar multitud de características, las cuales son consideradas como más o menos importantes según el autor del que se trate, de modo que, unos incluirán unas peculiaridades y otros tendrán en cuenta otras en su definición. Si bien sabemos que no existe una definición clara y única de este tipo de negocios, sí podemos decir que son "tres los patrones que se repiten" cuando se hace referencia a ellos. Así, podemos distinguir tres rasgos que deben estar presentes cuando nos referimos a estas compañías. En concreto, estos rasgos son:

a) La transferencia del negocio a través de las distintas generaciones;
b) La propiedad y dirección mayoritariamente en manos de una familia; y
c) La implicación de dicha familia en todo lo concerniente a la firma.

Para Rosenblatt (1985), "las empresas familiares son cualquier negocio en el cual la mayoría de la propiedad y del control se encuentran en manos de una familia y en el que, dos o más miembros familiares están implicados en los negocios de la empresa. Un empresa familiar es toda organización cuya propiedad y dirección esté mayoritariamente en manos de una familia y exista un deseo de continuidad hacia las siguientes generaciones inculcando a sus miembros un sentido de identidad a través de la cultura familiar"

En este sentido, podemos considerar, la definición que realizó Donnelley (1964), quien indica que las empresas familiares son aquéllas que se identifican con al menos dos generaciones de la familia y donde ese vínculo lleva a una influencia en la compañía de los intereses y objetivos de la familia.

En México existen muchas empresas familiares muy destacadas como Bimbo y Comex, Televisa, Tv Azteca, Famsa, URBI, etc. Las empresas familiares casi siempre empiezan siendo pequeñas y van creciendo con el paso de los años. Esta evolución de las empresas están relacionadas a los éxitos generacionales logrados a base de una buena planeación en la sucesión la empresa familiar.

Es conveniente caracterizar la empresa familiar para dar diferencias con las demás empresas. En primer lugar, habría que mencionar la existencia de varios subsistemas que engloban a un sistema común que es

la empresa. Aquí se incluye el subsistema empresa, el subsistema familia y el subsistema propiedad y, la forma en que éstos, en la medida en que estén presentes en la compañía, van a influir en la firma de una u otra manera.

El modelo de los tres círculos de Davis & Tagiuri, (1982), probablemente el primero que se presentó en el tiempo, es uno de los que han sido más empleados para describir distintas situaciones actuales y futuras de las empresas familiares. En este modelo "cada círculo representa un grupo de personas, con particulares características en relación con la empresa familiar, y las intersecciones de los círculos los grupos de personas que poseen dos o tres de las tres características identificadas por el modelo".

Según coincidan en mayor o menor grado los tres círculos, es decir, estos se superpongan como atraídas por una fuerza centrípeta, algo que suele ocurrir en primera y segunda generación, o se distancien como separados por una fuerza centrífuga, como acostumbra a pasar en empresas familiares de gran tamaño, se estará frente a distintos tipos de empresas familiares, con características muy diferentes, por el número de protagonistas que en ellas trabajan o con ellas tienen relación, por los distintos roles que desempeñan y sus diferentes intereses, así como por el contenido de las relaciones y actitudes que entre unas y otras personas se dan.

Sobre este tema son muy importantes los estudios realizados por Davis y Tagiuri (1982) con el "Modelo de los tres círculos", el cual ha sido objeto de mención en trabajos posteriores como Leach (1993); y Gersick, Davis, Mc Collon y Lansberg (1997).Otra característica que destaca en estas empresas es la cultura, o dicho en otras palabras, las tradiciones, los valores, actitudes y creencias propias de una familia que mayoritariamente dirige y controla la empresa en cuestión.

Las principales ventajas de este modelo son que, además de resultar fácil de comprender, tiene una gran aplicación práctica. Ante cualquier situación conflictiva en una empresa familiar resulta muy útil tomarse la molestia de dibujar estos tres círculos y ubicar a los individuos implicados en el sector que corresponda.

Esta cultura define el funcionamiento interno que adoptará la firma y debido a ello también han sido cuantiosos los autores que han tratado de estudiarla con el fin de obtener resultados acerca de la problemática específica de la empresa familiar. Sobre esta cuestión podrían destacarse los trabajos de Dyer (1986) y Gallo (1992) los cuales realizan un exhaustivo análisis de la incidencia de dichos valores en los negocios de tipo familiar.

Por último, hay que subrayar otro aspecto significativo que es la visión a largo plazo que este tipo de negocios plantea y que es fruto de numerosas disparidades con las empresas no familiares. Estudios como los realizados por Daily y Dollinger (1991; 1992; 1993) o Donckels y Fröhlich (1991) demuestran esa afinidad a la continuidad a lo largo de las generaciones, la cual implica uno de los problemas más importantes tratados a través de los años como es la sucesión, puesto que aun existiendo esa visión a largo plazo muchas empresas no logran superar el cambio de generación.

Una vez conocidos los rasgos más distintivos de este tipo de negocios, a continuación nos centraremos en los retos que debe afrontar el gerente-propietario de una empresa familiar comenzando, en primer lugar, con una de las particularidades de estos negocios, la confluencia de varios subsistemas que interactúan en un sistema común, lo cual nos conduce hacia uno de los conflictos que deben hacer frente como es la confusión de los patrimonios, familiar y empresarial, estableciendo posibles soluciones a esta problemática.

La Sucesión en la Empresa Familiar

"Un plan de sucesión familiar es cualquier esfuerzo diseñado para asegurar la continuidad y el funcionamiento efectivo en una organización, división, departamento o grupo de trabajo a través de provisión para el desarrollo y la aplicación del reemplazo estratégico de la persona clave en cierto plazo". (Rothwell, 2004)

"La construcción de un plan de sucesión puede ser definida de diferentes maneras, se puede iniciar con la definición operacional y sus propósitos. Se define la planeación de la sucesión como un proceso estructurado en el cual se involucran la identificación y preparación del sucesor, para asignarle un rol dentro de la organización, esto ocurre cuando el perfil es cubierto". (Garman & Tyler, 2004).

De manera formal se refiere al proceso que tiene una estructura excluyendo de la definición algo más ad hoc o justo a tiempo en la identificación del sucesor. El proceso de identificación y preparación a propósito deja de lado métodos específicos, para reflejar de manera completa la práctica utilizada. Finalmente las cualidades que le otorga el rol dado por la empresa y como este rol es completamente cubierto.

El proceso de sucesión es calculado, es decir, el comportamiento tiene en cuenta las consecuencias, esta ligado a unos objetivos y resultados futuros y esta controlado por las intenciones, es decir, es sistemático, por lo que el comportamiento refleja reglas históricas que han evolucionado y se han ido acumulando a lo largo del tiempo dentro de la organización las cuales puede que los participantes en la sucesión no sean completamente conscientes y es político, lo cual significa que el comportamiento como resultado del interés propio, pero los individuos y los grupos interdependientes utilizan el poder para influir en la organización de manera que esta persiga sus propios intereses.

La sucesión, tal y como se ha señalado, es uno de los temas más importantes dentro del ciclo de vida de una empresa familiar, puesto que sólo el 30% de las empresas familiares en México pasan a la segunda generación (Rothwell, 2004). La cuestión clave, en este caso, es determinar qué problemas se esconden detrás de esa dificultad de supervivencia. En este sentido, podemos distinguir tres posibles situaciones derivadas del traspaso generacional en la empresa familiar:

1. La intransigencia o resistencia del fundador a aceptar su retirada y por tanto a traspasar sus poderes al sucesor, no existiendo en estos casos un plan para llevar a cabo el proceso de sucesión de forma estudiada y meditada ni preparando al sucesor para su futuro papel de empresario.
2. Tensiones entre el fundador y sus descendientes por la designación del sucesor como líder en la empresa, con el consiguiente deterioro de las relaciones con aquellos que no sean designados como sucesores, y;
3. Tensiones entre los mismos herederos por la designación de ese sucesor. Cuando llega el momento de la sucesión, se ha de hacer hincapié en el aumento de la complejidad no sólo en el ámbito empresarial sino también en el ámbito emocional.

En este sentido, se argumenta que las causas del retraso en la sucesión vienen determinadas por no saber estructurar el problema ni por parte del fundador, ni por el resto de la organización, de tal manera que la resistencia o negación a su retirada es más cómoda que tomar una postura activa para solucionarlo. Una excesiva persistencia, si llegado el momento de la sucesión del predecesor no acepta su retiro, puede llevar al estancamiento, a la desmotivación de los directivos y además, a que la empresa no se adapte a los cambios que se suceden con el tiempo, de manera que ésta puede llegar a desaparecer. Este problema es considerado como uno de los más importantes en cuanto a la continuidad de la empresa familiar.

Sin embargo, teniendo en cuenta todas estas dificultades, que se derivan de la sucesión debemos tratar de que ésta llegue a su término con la menor repercusión posible para el negocio, de tal manera que son varias las soluciones que se plantean para esto. Por un lado, una solución que comparten muchos autores, entre otros, Ward (1988), Leach (1993), Oltra (1997) y Gallo (1998) es que la llegada de la sucesión es mucho más llevadera cuando la empresa, con tiempo, comienza a realizar la planificación estratégica de la compañía. Así, en un contexto familiar, se siguen una serie de pautas a la hora de su elaboración.

METODOLOGÍA

Para el presente trabajo se eligió una muestra de 43 propietarios de las empresas familiares del sector textil afiliados al padrón de la Cámara Nacional de la Industria de Transformación (CANACINTRA) delegación Tijuana, en Baja California.

A los propietarios se les aplicó un cuestionario titulado conformado con 75 preguntas relacionadas al tema de estudio. Una vez recopilada la información de los cuestionarios se procedió a la elaboración de una de base de datos en SPSS y posteriormente se procedió a la captura de la información para luego realizar el respectivo análisis para su interpretación.

Se utilizó una escala de medición con una escala de lickert. Se elaboraron los cuadros y gráficos que nos permite un análisis de la situación actual de la sucesión en las empresas del sector textil. Con dicha información se pretende saber si el gerente propietario ha postergado o desechado la idea de realizar un plan de sucesión familiar.

Objetivos

    a) Analizar el proceso de desarrollo de la pequeña empresa familiar y los problemas de continuidad si su gerente-propietario fallece.
    b) Conocer si el propietario cuenta con un plan de sucesión que designe a alguno de sus hijos u otro miembro de la familia e incluso a una hija para dirigir el negocio.

Determinación de la Muestra
Para el presente trabajo se eligió una muestra de 43 propietarios de empresas familiares del sector textil de la Cámara Nacional de la Industria de Transformación (CANACINTRA) delegación Tijuana, en Baja California.
Factores que se consideraron en el cálculo de la muestra:
    d) La población se considera con características homogéneas.
    e) Se cuenta con una población finita, ya que el número de empresas familiares es conocido.
    f) Fórmula empleada para el cálculo de la muestra:

$$n = \frac{\partial^2 pq}{e^2(N-1)\partial^2 pq} \qquad (1)$$

Tabla 1: Total de Empresas Según CANACINTRA, Marzo 2009.

	Poblacion	Muestra
Total de empresas fabricantes de prendas de vestir	43	33

Esta tabla muestra que el total de las empresas encuestas si cuenta con un nivel de confiabilidad .

Validación del Instrumento

A los propietarios se les aplicó un cuestionario conformado con 75 preguntas, el cual fue validado relacionado al tema de estudio. Se utilizó una escala de medición con categorías de respuestas de opción múltiple. Se elaboraron los cuadros que permiten un análisis de la sucesión en las empresas familiares, así como de las estrategias de competitividad. Con dicha información, se pretende saber si el propietario ha postergado o desechado la idea de realizar un plan de sucesión familiar y si cuenta con estrategias competitivas en su empresa. La validez del cuestionario se determinó mediante el coeficiente de confiabilidad de Alfa-Cronbach, por medio del programa SPSS: el resultado arrojado por dicho programa fue de .80, un grado de confiabilidad aceptable (ya que esta por arriba .60 y de 0.70, puntuación mínima aceptable.).

Tabla 2: Análisis Factorial Confirmatorio

Variable	Dimensión	Alfha Normal	Alfha Estandar
Competitividad sistémica	Competitividad	0.70	0.70
	Tecnología	0.60	0.60
	Rentabilidad	0.70	0.70
Conflictos intergrupales	Proceso de sucesión	0.80	0.80
	Contexto familiar	0.80	0.80
	Desarrollo de personal	0.80	0.80
Actitudes propietarios	Consejo de familia	0.80	0.80
	Estilos de liderazgo	0.80	0.90
	Formación del propietario	0.80	0.80
Clima organizacional	Gestión	0.70	0.80
	Supervisión	0.90	0.90
	Esfuerzo	0.90	0.90

Esta tabla muestra los resultados del análisis confirmatorio efectuado para validar el instrumento de medición utilizado en la investigación.

RESULTADOS

Situación Actual de las Empresas Familiares del Sector Textil

En Tijuana, B.C. las empresas familiares del sector textil actualmente se encuentran en proceso alto de desarrollo, dado que los propietarios de la empresas manifiestan en un que han aumentado sus ventas y tienen compromisos adquiridos en mediano plazo para seguir abasteciendo a sus clientes potenciales.

Tabla 3: Apreciación del Propietario Sobre el Proceso de Desarrollo

Opinión de los propietarios	Porcentaje
Alto desarrollo	40%
Mediano desarrollo	25%
Bajo desarrollo	20%
Ningún desarrollo	15%
Total	100%

Esta tabla presenta los resultados de la apreciación del propietario en cuanto a que el proceso de desarrollo de las empresas familiares del sector textil es alto.

Los propietarios de las empresas familiares manifiestan que se ha presentado un incremento en las ventas de un 50% al contar con un mayor número de clientes dando como resultado el que se tengan compromisos a mediano plazo para seguir abasteciendo a sus clientes.

Tabla 4: Incremento en las Ventas de las Empresas Familiares del Sector Textil

Opinión de los propietarios	Porcentaje
Ventas	50%
Distribución	25%
Exportación	15%
Otros	10%
Total	100%

Esta tabla presenta los resultados del incremento de las ventas de las empresas familiares del sector textil.

El proceso de desarrollo se refleja en la inversión de tecnología para maquinas de coser industriales y sistemas automatizados de control de calidad para corregir en línea cualquier defecto que presente la tela, con la finalidad de hacer más eficientes los procesos de producción a futuro y cumplir con los compromisos adquiridos con los clientes potenciales.

Tabla 5: Inversión Realizada por los Propietarios de las Empresas del Sector Textil

Opinión de los propietarios	Porcentaje
Tecnología	30%
Materia Prima	25%
Capacitación	20%
Diseños de moda	25%
Total	100%

Esta tabla presenta los resultados de la inversión que están realizando los propietarios de las empresas del sector textil, reflejándose está en la tecnología para hacer más eficientes los procesos de producción a futuro.

Participación de la Familia en la Administración del Negocio y Su Continuidad Después del Fundador

Es muy limitada la participación de la familia política en la administración de la empresa familiar, sólo esta se realiza en un 35% de las empresas encuestadas siendo la mayor participación de los yernos o algunos primos que trabajan más como empleados familiares, ocupando puestos como: jefes de los departamentos de ventas, producción y compra de materias primas.

Tabla 6: Participación de la Familia Política en la Administración del Negocio

Opinión de los propietarios	Porcentaje
Totalmente de acuerdo	35%
Medianamente de acuerdo	0%
Parcialmente en desacuerdo	0%
Totalmente en desacuerdo	65%
Total	100%

Esta tabla presenta el resultado de la participación de la familia política en las empresas del sector textil, siendo muy baja la participación en la administración del negocio.

La participación de la familia en las empresas de este sector está concentrada principalmente en la esposa (o), representando el 55 % de las compañías encuestadas, seguido por los hijos (as), ocupando los puestos claves como: la Gerencia General, Contabilidad, Finanzas y Recursos Humanos.

Tabla 7: Participación de la Familia en la Administración del Negocio

Opinión de los propietarios	Porcentaje
Esposa (o)	55%
Hija (o)	25%
Nieta (a)	15%
Hermana (o)	5%
Total	100%

Esta tabla presenta el resultado de la participación de la familia en las empresas familiares del sector textil, siendo la esposa (o) la de mayor participación en la administración del negocio.

En la administración de la empresa familiar existe el deseo de algún hijo(a) de participar en la continuidad y el desarrollo de la empresa cuando el propietario se retire o fallezca, siendo un 55% el que espera quedarse al frente del negocio familiar cuando el propietario se retire.

Tabla 8: Deseo de Algún Miembro de la Familia de Participar en la Administración del Negocio

Opinión de los propietarios	Porcentaje
Esposa (o)	25%
Hija (o)	55%
Hermano (a)	15%
Otros(as)	5%
Total	100%

Esta tabla presenta el resultado del deseo de algún miembro de la familia en participar en la administración del negocio después de que el propietario se retire o fallezca.

De acuerdo a las encuestas realizadas el 70% de los propietarios de las empresas familiares si ha pensado en que si fallece, alguno de sus hijos puede dirigir el negocio; solo que estos no llevan a cabo un plan de sucesión familiar o no cuentan con ningún documento que refleje la decisión de cuál de sus hijos llegado el momento puede ser el sucesor o el que dirija el negocio.

Tabla 9: El Propietario Ha Pensado Que Alguno de sus Hijos Puede Dirigir el Negocio

Opinión de los propietarios	Porcentaje
Totalmente de acuerdo	70%
Medianamente de acuerdo	0%
Parcialmente en desacuerdo	0%
Totalmente en desacuerdo	30%
Total	100%

Esta tabla presenta el resultado de lo que piensa el propietario acerca de que si alguno de sus hijos puede dirigir el negocio.

Asimismo, el 53% de propietarios considera que si hoy fallece, la empresa tendrá problemas en su operación ya que no está designado un sucesor de manera oficial y en lo que se designa a uno la empresa puede paralizarse, estancarse en su desarrollo o incluso llegar a la quiebra.

Tabla 10: La Empresa Tendrá Problemas en su Operación al Fallecer el Propietario

Opinión de los propietarios	Porcentaje
Totalmente de acuerdo	53%
Medianamente de acuerdo	0%
Parcialmente en desacuerdo	0%
Totalmente en desacuerdo	47%

Esta tabla representa el resultado de que si la empresa tendrá problemas en su operación al fallecer el propietario.

Sucesión y Conflictos en la Familia

Los conflictos en la familia derivados por la rivalidad existente entre sus miembros no afecta al 61% de los encuestados, lo que garantiza que el futuro de la empresa; en este caso ya depende de las decisiones del propietario al designar el sucesor de la empresa.

Tabla 11: Rivalidad Entre los Miembros de la Familia

Opinión de los propietarios	Porcentaje
Totalmente de acuerdo	39%
Medianamente de acuerdo	0%
Parcialmente en desacuerdo	0%
Totalmente en desacuerdo	61%

Esta tabla presenta el resultado obtenido acerca de que si existe rivalidad entre los miembros de la familia y si los conflictos derivados de esta situación afectan a la empresa.

De acuerdo con los resultados obtenidos se corrobora que si el propietario toma la decisión de nombrar un sucesor no generaría conflictos familiares en el 54% de los encuestados. Sin embargo, un considerable 46% de los propietarios creen que al nombrar un sucesor tendrán conflictos por las rivalidades que existen entre los miembros de la familia y sus hijos, e incluso el temor inherente a que si al nombrar al sucesor la compañía fracase o que exista una ruptura entre la familia y esto lleve a que la empresa no crezca o incluso que se vaya a la quiebra. Por tanto, muchos de los propietarios de las empresas familiares del sector textil posponen la realización de un plan de sucesión motivadas a la consecuencia de una posible desintegración familiar por conflictos en la empresa.

Tabla 12: Conflictos al Nombrar al Sucesor

Opinión de los propietarios	Porcentaje
Totalmente de acuerdo	46%
Medianamente de acuerdo	0%
Parcialmente en desacuerdo	0%
Totalmente en desacuerdo	54%

Esta tabla presenta el resultado obtenido acerca de si se general conflictos entre los miembros de la familia al nombrar al sucesor.

Llama la atención que el 70% de los propietarios de las empresas familiares todavía no tiene definido la distribución de bienes entre sus hijos o esposa, lo que indica que no existe un testamento; lo cual resulta alarmante ya que esto indica que a futuro existirán problemas legales por determinar quien es el sucesor en la empresa y como se realizará la distribución de los bienes.

CONCLUSIONES

Las empresas familiares del sector textil en la ciudad de Tijuana, B.C., se encuentran en un proceso de desarrollo, a pesar de las condiciones económicas del país, y de la actual crisis económica. Sin embargo, muchos dueños de estas empresas no tienen definido sobre la continuidad del sucesor en la empresa, no tienen preparado al sucesor para el liderazgo. Los empresarios son consientes de los problemas que va enfrentar la empresa si fallecen, incluso consideran que podrían cerrar y quebrar debido a la falta de un plan de sucesión familiar.

Además, la falta de involucramiento y preparación al futuro sucesor se verifica en la escasa participación de la familia política en la administración del negocio. No obstante, el propietario considera que no tendrá conflictos familiares al momento de designar un sucesor ya sea este un hijo (a) para el manejo de la

empresa. La rivalidad alguna entre los hijos (as) del dueño con otros miembros de la familia es controlable, siempre en cuando que el sucesor sea elegido cuando esté en vida, bajo un plan de sucesión y el diálogo al interior de la familia.

Los propietarios de las empresas familiares deben procurar que los miembros de sus familias se acerquen lo más posible a sus empresa para que las conozcan y evalúen si desean participar o no dentro de ellas. La continuidad de la empresa familiar está basada en su buen funcionamiento, y éste va depender básicamente de la capacidad de anticiparse y responder a los cambios. En el proceso de planeación de la empresa familiar es muy importante que participen tanto los miembros de la familia como los principales directivos de la empresa.

Otro factor importante es la profesionalización de la empresa familiar que esta relacionado con la optimización de las áreas del negocio, lo cual tiene que ver con la preparación y especialización en las tareas de la empresa, considerando que algún miembro de la familia se prepare para que mas adelanten en cuanto ya no esté el propietario, asuma responsablemente la organización y gerencia de la empresa familiar. Se trata de responder a los retos futuros de un mercado competitivo, cuyos objetivos empresariales tendrán que apuntar a una consolidación del negocio.

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BENEFICIOS FISCALES DE LA PREVISIÓN SOCIAL EN MÉXICO

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ABSTRACT

La investigación que se presenta fue realizada con base en la normatividad mexicana. Con el objetivo de conocer cualitativamente los beneficios fiscales que las leyes relativas a la previsión social brindan tanto a la empresa como al trabajador. La investigación se realizó a través de un estudio descriptivo de tipo documental, llevando a cabo un análisis de las leyes aplicables al objeto de estudio. En esta investigación se presentan los resultados del análisis de casos prácticos en los que se aplican las leyes relativas a la previsión social, esta actividad permitió conocer los diferentes beneficios que tanto empresas como trabajadores podrían obtener en cada caso, así como identificar los conceptos deducibles de impuestos para la empresa y toda prestación en beneficio de los trabajadores y sus familiares o beneficiarios que tengan por objeto elevar su nivel de vida económica, social, cultural e integral. En base a ello se presenta una serie de recomendaciones para las empresas encaminadas a brindar beneficios de seguridad social que estimulen al trabajador sin que se incremente su carga tributaria y favoreciendo a la vez la productividad en la empresa.

INTRODUCCIÓN.

En México la figura de la previsión social se gesta durante la etapa constitucional que surge de la revolución de 1910. Hasta antes del siglo XX, era nula la existencia de este tipo de derechos y prestaciones para la clase trabajadora (Campos, 2003). La previsión social en México tiene su primer antecedente jurídico en la Constitución Política de los Estados Unidos Mexicanos de 1917; nace y evoluciona en forma conjunta con el derecho del trabajo y desde su concepción tiene como finalidad procurar el bienestar del trabajador y su familia, considerando las necesidades y circunstancias actuales y futuras que se deriven de una relación laboral. En el artículo 123 de la Constitución mexicana se establecen las bases que garantizan la previsión social; así en la fracción XII se establece la obligatoriedad a todas las empresas a proporcionar en forma gratuita a sus trabajadores habitaciones cómodas e higiénicas.

En el ámbito fiscal la evolución que ha tenido la previsión social en el aspecto jurídico resulta más notoria que en otros. Con la creación de nuevos impuestos se han cambiado los criterios para la deducibilidad de egresos relacionados con las prestaciones sociales de los trabajadores. A partir del primero de enero de 2008, con el surgimiento del Impuesto Empresarial a Tasa Única (IETU), los beneficios fiscales por concepto de previsión social para los empresarios y trabajadores se han visto afectados. Por lo antes expuesto, la presente investigación se plantea como objetivo identificar los beneficios fiscales que las leyes relativas a la previsión social brindan tanto a la empresa como al trabajador.

REVISIÓN LITERARIA

Comenzamos la presente revisión literaria realizando un análisis de la normatividad mexicana aplicable a la previsión social de acuerdo a su jerarquía; así se revisó en primera instancia el artículo 31 fracción IV de la Constitución Política de los Estados Unidos Mexicanos en el que se establece que todos los mexicanos deben contribuir para el gasto público de la Federación, del Distrito Federal, de la Entidad Federativa o del Municipio en que se resida, de una manera proporcional y equitativa de acuerdo a lo que

dispongan las leyes de la materia. En tanto que el sustento constitucional del derecho al trabajo en México se encuentra en el artículo 123 de la citada Carta Magna. También en este artículo se sientan las bases para la creación de una ley que administre los recursos del Fondo Nacional de la Vivienda para los Trabajadores (INFONAVIT) y se establece la utilidad de creación de la Ley del Seguro Social (LSS), la cual comprenderá seguros de invalidez, de vejez, de vida, de cesación involuntaria del trabajo, de enfermedades y accidentes, de servicios de guardería y cualquier otro encaminado a la protección y bienestar de los trabajadores campesinos, no asalariados y otros sectores sociales y sus familiares (LSS, art. 123, frac. XXIX).

En el mes de Mayo de 1931se promulgó la primera Ley Federal del Trabajo con el objeto de reglamentar el artículo 123 constitucional. La vigencia de esta ley fue hasta el mes de Marzo de 1970, ya que, el primero de Abril de este año se publicó en el diario Oficial de la Federación la nueva Ley Federal del Trabajo, cuyo objeto es reglamentar el apartado "A" de la Constitución Política de los Estados Unidos Mexicanos, ordenamiento que se encuentra vigente hasta nuestros días.

Respecto a la previsión social la ley laboral establece una serie de disposiciones en su artículo 132 entre las cuales encontramos proporcionar capacitación y adiestramiento a sus trabajadores, instalar sistemas de seguridad e higiene en los centros de trabajo para prevenir accidentes, evitar que los contaminantes excedan los máximos establecidos en la ley, disponer de medicamentos y materiales de curación indispensables para proporcionar los primeros auxilios en caso necesario, así como propiciar el fomento de actividades culturales y deportivas apoyando al trabajador con equipos y útiles necesarios.

La Suprema Corte de Justicia de la Nación definió la previsión social como toda prestación en beneficio de los trabajadores, de sus familiares dependientes o beneficiarios, tendientes a su superación física, social, económica, cultural e integral.

Fue en el año de 1977 cuando la Ley del Impuesto sobre la Renta incorporó formalmente en su texto, las requisitos que debían cumplirse para que las erogaciones de previsión social a favor de los trabajadores y sus dependientes fueran deducibles para la empresa. A partir del año 2003 se incorpora por primera vez la definición de previsión social en la Ley del Impuesto Sobre la Renta en su Artículo 8, cuarto párrafo. Esta ley considera como previsión social: "todas las erogaciones efectuadas por los patrones a favor de sus trabajadores que tengan por objeto satisfacer contingencias o necesidades presente o futuras, así como otorgar beneficios a favor de dichos trabajadores, tendientes a su superación física, social económica o cultural, que les permitan el mejoramiento en su calidad de vida y de la familia." Esta definición es estimada por las autoridades fiscales como la más correcta, sin embargo, deja dudas y vacíos para diferenciar lo que es y lo que no es previsión social. El artículo 109 de esta ley da a conocer diferentes conceptos de previsión social por los cuales el trabajador podrá obtener ingresos exentos de Impuesto Sobre la Renta (ISR), entre ellos los que se reciban como subsidio de una incapacidad, por concepto de becas para educación del trabajador o de sus hijos, apoyo para guarderías infantiles, prestaciones para fomentar las actividades culturales y deportivas y "otras prestaciones de previsión social de naturaleza análoga" siempre que se proporcionen en forma general para todos los trabajadores de acuerdo con las leyes o contratos de trabajo.

En los párrafos anteriores se han vertido las principales disposiciones aplicables a la previsión social en México, se considera oportuno a continuación realizar una revisión de las principales publicaciones que abordan el tema materia de este estudio.

Algunos autores que han tratado el tema de la previsión social son Campos (2003), Ledesma (2004), Aréchiga (1995) y Koller (2003), entre otros. Campos (2003) analiza el tema de la previsión social desde una perspectiva histórica ubicando sus primeros antecedentes en la Constitución Política de los Estados

Unidos Mexicanos de 1917.   Ledesma (2004) analiza el tema desde dos puntos de vista: como una norma de carácter político y como una conducta del estado que procura la realización del bien común. Asimismo Ledesma (2005) retoma las palabras de Waldo Pereira para diferenciar los conceptos de previsión social y seguridad social, al decir que…

> la previsión social es un conjunto de ideas e instituciones que actúan pasivamente. La previsión social esperaba tranquilamente la realización de los siniestros y, frente a ellos, no hacia otra cosa que pagar o servir con prontitud. En cambio, en el concepto de seguridad social se ha querido indicar que la actitud de los seguros sociales debe ser activa, debe actuar adelantándosele a los siniestros para evitarlos. La seguridad social; desea realizar una idea de prevención, cuidando del capital humano.

Por su parte Aréchiga (1995) define previsión social como…

> una serie de reglas y prestaciones que conllevan una elevación del nivel económico, social físico, cultural e integral, que son proporcionados por los patrones con tales fines, y que no constituyen una remuneración de los servicios, pues no se otorgan en función a estos, sino para complementar y acrecentar el ámbito de desarrollo psico-físico y social del trabajador.

Koller (2003) aborda el tema de la previsión social enfatizando la finalidad de apoyar a los empleados en su desarrollo no sólo económico sino también cultural, dirigido hacia el mejoramiento de su calidad de vida y de su familia.

En resumen se puede decir que la revisión de las publicaciones sobre el tema de la previsión social, deja claro el interés de la sociedad en general por preservar la integridad de los trabajadores cuidando también su desarrollo psicológico, físico, social y económico.

METODOLOGÍA

El estudio que se presenta es de corte cualitativo de tipo documental sobre el tema de previsión social en México. Para realizar la revisión literaria, se dividió la bibliografía en dos categorías de análisis: leyes aplicables a la previsión social en México y publicaciones nacionales o extranjeras sobre el tema.

Para analizar las disposiciones de ley sobre la previsión social en México se plantearon como instrumentos de investigación dos casos prácticos hipotéticos con y sin plan de previsión social para efectos de determinación del Impuesto sobre la Renta. Los resultados del análisis sirvieron de base para realizar una serie de conclusiones.

RESULTADOS

Los resultados de esta investigación se presentan en dos categorías: los obtenidos de la revisión de las disposiciones fiscales aplicables a la previsión social y los obtenidos a través del análisis de los casos prácticos que presentan los planes de previsión social más utilizados en las empresas mexicanas.

En la revisión de las disposiciones fiscales aplicables a la previsión social, se encontró que en el artículo 109 fracción VI de la Ley del Impuesto Sobre la Renta se establecen las exenciones generales en el pago de este impuesto de manera imprecisa ya que al enlistar los diferentes ingresos que la Ley considera exentos agrega "otras prestaciones de previsión social de naturaleza análoga", situación que crea incertidumbre y deja al arbitrio tanto de la autoridad como del empresario las demás prestaciones de previsión social que se encuadran en este precepto.

En cuanto al análisis de la previsión social a través de casos prácticos se inició por su planteamiento de la siguiente manera:

Caso Práctico No. 1

Consideremos el caso de la empresa Productos Nacionales, S.A. de C.V., la cual para el año 2009 utiliza un plan de previsión social establecido en un contrato. El plan contempla un sueldo mensual de $15,000.00 para los trabajadores y prestaciones de previsión social de $3,500.00, en total $18,500.00. De acuerdo a lo establecido en la ley del (ISR) las erogaciones por concepto de previsión social serán deducibles para el cálculo de este impuesto. Por su parte para efectos de la ley del (IETU) no son erogaciones deducibles.

Caso Práctico No. 2

Consideremos el caso de la Compañía del Norte, S. A. de C.V. la cual para el año 2009 no tiene establecido un plan de previsión social y paga en total a sus trabajadores un sueldo mensual de $15,000.00.

Tabla 1: Impuesto sobre la Renta con o sin previsión social a cargo del trabajador.

Empresa	.Sueldo gravado	Previsión Social	Percepción Total trabajador	ISR a cargo del trabajador	Deducción total para (ISR) en cada empresa
Cía. Productos Nacionales, S.A. de C.V	$ 15,000.00	$ 3,500.00	$ 18,500.00	$ 2,028.00	$ 18,500.00
Cía. Del Norte S.A. de C.V.	$ 15,000.00	$ .00	$ 15,000.00	$ 2,028.00	$ 15,000.00

Esta tabla presenta el (ISR) mensual por trabajador durante 2009, puede observarse que las prestaciones de previsión social no le aumentan su carga tributaria y para la empresa es una deducción en (ISR).

En los casos de estudio planteados, al analizar la determinación del Impuesto sobre la Renta que pagan los trabajadores en cada una de las empresas, se pudo cuantificar que el impuesto a cargo de los trabajadores que perciben prestaciones de previsión social no se vio incrementado por este tipo de ingresos, lo cual representa un beneficio económico para el trabajador aunado a los beneficios sociales inherentes a dichas prestaciones. Por otro lado, la empresa también obtiene beneficios: de acuerdo con la ley del Impuesto Sobre la Renta. Las erogaciones por este concepto son una deducción autorizada; otro beneficio importante es que con base en la ley del Seguro Social el importe de estos conceptos no forma parte de la base para determinar el pago de cuotas obrero patronal al Seguro Social y al Fondo de Vivienda para los Trabajadores. Sin embargo, se hace la precisión que de acuerdo al artículo 5, fracción primera de la ley del IETU, las erogaciones de previsión social no se consideran una deducción autorizada para el cálculo del impuesto.

CONCLUSIONES

Tras realizar el análisis de la normatividad mexicana referente a la previsión social y su aplicación en los casos planteados en este estudio, se llega a las siguientes conclusiones:

Primera.- Con la aplicación de un plan de previsión social, los trabajadores obtienen un doble beneficio, por una parte reciben prestaciones que aumentan su nivel de calidad de vida y por otra no se incrementa su carga fiscal.

Segunda.- En el caso de las empresas éstas obtienen como beneficio fiscal que este tipo de erogaciones no incrementan la base para la determinación de las cuotas obrero patronal a pagar al Seguro Social y al Fondo Nacional de Vivienda para los trabajadores.

Tercera.- En la determinación del Impuesto sobre la Renta las empresas tienen como beneficio fiscal la deducibilidad de las prestaciones de previsión social para el cálculo de su impuesto anual.
Cuarta.- Las erogaciones por concepto de previsión social, para efectos del IETU no representan un beneficio fiscal.

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Ley Federal del Trabajo

Ley del Impuesto Empresarial a Tasa Única

Ley del Seguro Social

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ANÁLISIS CUANTITATIVO DE EVALUACIÓN DOCENTE. ESTRATEGIA ENCAMINADA A INCREMENTAR LA CALIDAD DE PROGRAMAS DE ESTUDIO EN LAS IES: CASO UNIVERSIDAD AUTÓNOMA DE BAJA CALIFORNIA, MÉXICO

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ABSTRACT

La Facultad de Ciencias Administrativas de la Universidad Autónoma de Baja California, unidad Mexicali alberga en sus instalaciones mas de 4000 estudiantes, quienes cursan alguno de los programas educativos que oferta la unidad académica, es lógico pensar que en ella existen un sin número de problemas que diariamente buscan solucionarse. Dentro de esta problemática es innegable la influencia del desempeño académico de sus profesores. Siendo una de las herramientas utilizadas la evaluación docente para la obtención de valores cuantitativos en cuanto a la apreciación del estudiante; principal objeto de ocupación y preocupación de las IES.

INTRODUCCIÓN

La Universidad Autónoma de Baja California (UABC), fundada en 1957, cuenta con cuatro campos universitarios conformados por distintas unidades académicas –Escuelas, Facultades, Institutos- ubicadas en las principales ciudades del estado. La evaluación de la enseñanza en licenciatura, a partir de la opinión de los estudiantes, inició de manera sistemática en 1988 con el propósito de identificar las áreas del quehacer docente que requerían preparación pedagógica; con la información recabada se pretendía orientar los programas formación de docente. La instancia responsable de su instrumentación fue la Dirección General de Asuntos Académicos (DGAA); el primer cuestionario y programa de cómputo fue diseñado por la Fis. Francisca Martínez, la aplicación y análisis de los cuestionarios estuvo a cargo de las unidades académicas. En esta etapa se delegó en cada escuela o facultad la responsabilidad de analizar los puntajes; asimismo, el uso de los resultados se dejó a discreción de los directivos de las unidades académicas. Gran parte del trabajo estuvo dirigido a introducir en la cultura de evaluación a directivos, académicos y estudiantes; en este sentido, a convencer a los involucrados de los beneficios de la evaluación. (Luna, Valle, Tinajero. 2003).

La evaluación docente con base en los puntajes de opinión de los estudiantes, es la estrategia de evaluación más utilizada en Norteamérica, Europa y Asia, y al mismo tiempo es la más estudiada (Theall y Franklin, 2000; Seldin, 1993).

En los cuestionarios aplicados en la encuesta institucional denominada "Evaluación docente", la enseñanza se asume como una actividad compleja y multidimensional; por lo general, los agrupamientos de reactivos proceden de los análisis factoriales a los que fueron sometidos los instrumentos, y reflejan las diferentes dimensiones de la efectividad de la enseñanza, a juicio de los estudiantes. (Luna, E. y Torquemada, 2008). Por ello, a pesar de que no existe consenso sobre las características de un docente de calidad, el estudio de las dimensiones relacionadas con la efectividad docente, las identifica y clasifica de acuerdo con su importancia para el aprendizaje. Así, se ubican como las más importantes: claridad y

entendimiento; estimulación del interés por la materia; preparación y organización del curso; logro de los objetivos planteados; y motivación a los estudiantes para tener alto rendimiento (Feldman, 1997).

Y es en este tenor que la UABC busca medir la satisfacción académica de los estudiantes; es decir, conocer en que medida estos se sienten satisfechos con el cumplimiento de las metas y objetivos establecidos en cada unidad de aprendizaje. Analizando el quehacer académico del profesor como factor inherente al resultado cuantitativo obtenido, mismo que mide el rendimiento del alumno.

METODOLOGÍA

Actualmente, -de acuerdo a lo anterior- en la UABC se lleva a cabo de manera institucional la encuesta "Evaluación docente". Dicha evaluación esta implementada en plataforma web, misma que es realizada en el último cuarto del ciclo escolar –periodo semestral- a todos los estudiantes de nivel licenciatura de todas las escuelas y facultades que conforman la UABC. Se entrega resultados a las unidades académicas UA, al inicio del ciclo escolar inmediato siguiente. Quedando a discreción de las mismas las acciones a tomar.

La información consignada a la UA especifica:
a. Unidad de aprendizaje evaluada.
b. Modalidad de estudio (clase, taller, laboratorio).
c. Cantidad de estudiantes que conforman la muestra.
d. Dimensiones evaluadas.
e. Ponderación máxima por dimensión dependiendo de la modalidad de estudio.
f. Resultados obtenidos por dimensión.
g. Total de la evaluación. *Catalogando el resultado en Excelente, Bueno, Satisfactorio No satisfactorio.*

Basado en la información consignada a la *Facultad de Ciencias Administrativas* FCA, se realiza estudio de tipo transversal descriptivo. Analizando los resultados obtenidos en los ciclos 20081, 20082 y 20091 de las asignaturas ofertadas en los programas que integran la UA -nivel licenciatura-, unidad Río Nuevo.

La muestra esta integrada por estudiantes que cursaron alguna asignatura con índice de Reprobación por arriba del 10%. Se considera que entre el 80 y el 100 % de los estudiantes contestan dicho instrumento.

De acuerdo al plan de estudios que rige a la UABC, las asignaturas se diseñan en clase y en apoyo a la formación de competencias en laboratorio o taller a fin de fortalecer habilidades, -transpolando los conocimiento a escenarios reales diseñados-. Es en ambos aspectos que el quehacer académico es evaluado, ponderándose las siguientes dimensiones con los valores máximos correspondientes.

En el caso de clase:

Dimensión	Ponderación máxima
Método de Trabajo	3
Estructuración de objetivos y contenidos	15
Facilitador del aprendizaje	17
Organización de la clase	10
Dominio de la asignatura	36
Estrategias de apoyo al aprendizaje	5
Cualidades de interacción	7
Evaluación del aprendizaje	7

Aplicando para laboratorio o taller:

Dimensión	Ponderación máxima
Estructuración de objetivos y contenidos	10
Comunicación	15
Organización de la práctica	15
Dominio de la asignatura	36
Estrategias de apoyo al aprendizaje	5
Cualidades de interacción	7
Evaluación del aprendizaje	7
Método de trabajo	5

Los resultados generados de la aplicación de la encuesta quedan a criterio de las UA. En el caso de FCA, apoya en la creación y organización de la agenda de capacitación. Nos permite detectar oportunidades de mejora en el quehacer académico permitiendo al docente conocer la apreciación del estudiante a fin de enriquecer su cátedra. Tomando cursos de formación docente ya sea en el área de su especialización o en la pedagógica. Además al cruzar información en relación a resultado cuantitativo obtenido en la unidad de aprendizaje permite identificar aquellos académicos que no cumplen con los índices establecidos y reorientar en cuanto a la cátedra que puede impartir, teniendo con estos datos, elementos para formar juicios de valor en este aspecto.

Esto es permite a las IES conocer el nivel de su planta académica.

CONCLUSIÓN

Aunque un análisis cuantitativo en áreas que son meramente cualitativas habla de las limitaciones de incluir únicamente las dimensiones asociadas a la efectividad docente en los cuestionarios basado en la apreciación del estudiante -y en ocasiones este no suele ser lo imparcial que se requiere en este tipo de medición dado que influye lo subjetivo- es por eso que se requiere incorporar las particularidades del contexto pedagógico. Pese a lo anterior, nos permite conocer el nivel y en su defecto encaminar esfuerzos a fin de mejorar la calidad de la enseñaza.

La evaluación de la docencia basada e en los cuestionarios de apreciación de los estudiantes, es la estrategia más utilizada y que acumula mayor conocimiento derivado de la investigación. No obstante, la incomodidad de los docentes sobre los puntajes y el déficit en las buenas prácticas son signos de la persistente disparidad entre el mundo de la investigación y las prácticas institucionales. Los cuestionarios son únicamente una medida que muestra la opinión de los estudiantes acerca de la calidad de la instrucción, por tal motivo, de ninguna forma se justifica su uso como instrumentos que cubren todas las manifestaciones de una actividad tan compleja como la docencia. (Luna, E. y Torquemada, 2008).

En la apreciación de los maestros al sistema de evaluación plantea críticas y sugerencias, tales como la consideración de tamaño de grupo, periodo de aplicación del instrumento, dependencia de la ideosincracia y costumbres del grupo en particular. En el entendido que cada grupo de estudiantes esta conformado por una serie de características muy particulares de trabajo. Y en la experiencia de todo docente; aquellas estrategias que funcionan en un grupo resultan infructíferas en otro. Pese a lo anterior no debemos perder de vista que la finalidad de dicho esfuerzo es mejorar la calidad de la enseñanza, y ofrecernos pautas a fin de superar nuestro quehacer día a día.

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EL FINANCIAMIENTO COMO FACTOR DE COMPETITIVIDAD PARA EL PRODUCTOR DE TRIGO DEL VALLE DE MEXICALI, BAJA CALIFORNIA, MÉXICO

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ABSTRACT

La presente investigación aborda el tema de la competitividad en el agro mexicano; problemática que representa un reto en los distintos niveles de producción, principalmente para el pequeño productor que en forma individual o a través de comunidades ejidales de producción agroalimentaria realizan sus actividades agrícolas. Este trabajo de investigación se delimita a los agricultores de trigo en el valle de Mexicali, Baja California, México. El propósito de la investigación es realizar un análisis de las diferentes opciones de financiamiento a las cuales se puede recurrir en el ámbito de la agricultura mexicana. Se detallan los requisitos que deben cumplirse para ser sujeto de crédito, el costo de los intereses y las características de las diferentes fuentes de financiamiento. La investigación que se presenta se realizó a través de la aplicación de una metodología de corte cuantitativo. Se aplicó un muestreo no probabilístico, el cual consistió en tomar en cuenta la participación voluntaria de los productores de trigo quienes realizaron sus cultivos en el ciclo 2008/2009. Los hallazgos de esta investigación mostraron la importancia del financiamiento para lograr una mayor y mejor producción, con la consecuente mejora en la competitividad, tanto en el mercado nacional como en el extranjero.

INTRODUCCIÓN

La productividad en el agro mexicano ha sido un reto en todos los niveles de producción y de organización, principalmente para el pequeño productor que en forma individual realiza sus actividades agrícolas o para las comunidades ejidales de producción agroalimentaria. La globalización ha impulsado el intercambio comercial a nivel nacional e internacional. El mercado en México, al igual que en otros países se ha visto inundado de una gran cantidad de productos de procedencia extranjera. En el caso específico del trigo, México es un importante productor de este cereal quien ocupa el tercer lugar de producción en América Latina. En México, Baja California exporta este cereal a países como Estados Unidos de América, España, Italia, Argelia y Marruecos; sin embargo, la producción nacional resulta insuficiente pues no logra cubrir las necesidades de consumo interno de trigo. Lo anterior tiene consecuencias graves, ya que México se ve en la necesidad de importar principalmente de Estados Unidos de Norteamérica, grandes cantidades de este cereal.

La producción de trigo en Mexicali, Baja California se caracteriza porque satisface la demanda interna de la entidad federativa y otra parte se exporta al extranjero. Los pequeños productores de trigo de Mexicali no se encuentran organizados por medio de asociaciones que los representen, a través de las cuales se establezcan programas para gestionar todo tipo de trámites como servir de aval en la obtención de financiamiento a tasas preferenciales, asesorar y supervisar los procesos del cultivo, brindar capacitación en la aplicación de tecnología, proporcionar información de los requerimientos del mercado a nivel nacional e internacional, y orientar y apoyar en la comercialización y distribución del producto, ya sea a nivel local o para su exportación.

Por lo antes expuesto, la presente investigación se planteó como objetivo el realizar un análisis de las diferentes opciones de financiamiento que tienen los agricultores del valle de Mexicali, Baja California, México a las cuales se puede recurrir en el ámbito de la agricultura mexicana.

REVISIÓN LITERARIA

El financiamiento ha sido uno de los eternos y grandes problemas en el agro mexicano. La falta de recursos económicos ha propiciado que una gran mayoría de productores de trigo en México no puedan renovar su maquinaria y equipo para desarrollar en forma más eficiente sus actividades, aplicar tecnología avanzada para obtener una mayor producción y de mejor calidad, que les permita alcanzar en forma sostenible una mayor competitividad y conquistar un mayor espacio en los mercados para sus productos. Resulta evidente que el mercado financiero juega un papel determinante en la disponibilidad y calidad de recursos para el financiamiento de las empresas, pues el acceso a la disponibilidad de capital y su costo, determinan en buena medida el ritmo de la inversión, el crecimiento y competitividad de las empresas (Cordero, 2003).

El financiamiento interrelacionado con las inversiones forma parte del *Management* estratégico-operativo, como palanca de rendimiento de inversión, y como palanca de generación o absorción de flujo de efectivo. En este sentido Valle (2008), Hernández (2000), Chavarría, Sepúlveda y Rojas, (2002) y Dussel (2002) coinciden en señalar al financiamiento como factor para la competitividad. A decir de Valle, (2008), el financiamiento en sus tres vertientes: operativo, financiero y de capital, puede ser y es utilizado como palanca de competitividad. De acuerdo con Hernández (2000) el costo de financiamiento puede ser también determinante en la ventaja competitiva de las empresas, el importe del interés real que debe pagarse, el acceso mismo a las fuentes de financiamiento, y en forma preponderante, las expectativas de devaluación son factores que inciden en los costos financieros de la empresa y repercute en la condición competitiva de la misma. Por su parte Chavarría y otros (2002) señala que es necesario desarrollar un nuevo mercado de capitales, que permitan al sector agropecuario obtener liquidez a bajo costo, para satisfacer sus necesidades de financiamiento y adelantar procesos de renovación tecnológica y administrativa, y como resultado alcanzar mayor competitividad.

De acuerdo a los resultados obtenidos en una investigación realizada por el Banco Interamericano de Desarrollo (2001)**,** los empresarios latinoamericanos consideran la falta de financiamiento como el principal obstáculo para el desarrollo empresarial; más de la mitad de los empresarios encuestados en Haití, Ecuador y México, consideran la falta de financiamiento como un obstáculo grave para sus empresas. De acuerdo a la citada investigación, este problema afecta al 38 % de los empresarios, porcentaje superado por los países de Europa Oriental donde el 42 % de los empresarios consideran grave la falta de financiamiento.

En resumen se puede afirmar que la revisión bibliográfica realizada nos permite ubicar al financiamiento como un factor preponderante para la competitividad de las empresas, toda vez que como se pudo constatar, existe una creciente brecha de competitividad entre los empresarios que tienen acceso a financiamiento y los que no lo tienen.

METODOLOGÍA

En la presente investigación se realiza un análisis del efecto del financiamiento como factor en la productividad y competitividad de los productores de trigo del Valle de Mexicali, Baja California. El presente estudio es de corte cuantitativo. La investigación se realizó teniendo como universo a los productores de trigo quienes realizaron sus cultivos en el ciclo 2008/2009. Se aplicó un muestreo no probabilístico, en el cual participaron de manera voluntaria 54 productores de trigo. El material y equipo que se utilizó en la realización de la indagatoria consistió en cámara fotográfica, grabadora de audio y un

instrumento de medición conformado por doce preguntas cerradas. Las variables analizadas fueron: el financiamiento bancario, el gubernamental y el de proveedores y clientes. El procedimiento puesto en práctica en esta investigación inició con la visita a las oficinas de la Secretaría de Fomento Agropecuario (SEFOA), a la oficina de diferentes distritos de riego y a algunos ejidos que conforman el Valle de Mexicali. En primera instancia se localizó y se entrevistó al comisariado ejidal quien proporcionó los datos de identificación de los agricultores de cada ejido. Esta información fue fundamental para la aplicación del instrumento de investigación. Una vez que el instrumento fue aplicado, la información fue procesada a través del paquete estadístico Statistical Package for the Social Sciences (SPSS) por sus siglas ingles. Los resultados obtenidos del análisis de las variables mencionadas sirvieron de base para el establecimiento de conclusiones.

RESULTADOS

En México, el sector agrícola y la agroindustria tienen difícil acceso a financiamiento de la banca de desarrollo y del sistema financiero comercial, además de altas tasas de interés reales. Según (Dussel (2002), lo anterior resulta evidente particularmente en la producción de piña en el Estado de Veracruz. Este sector requiere una mayor intensidad de capital e inversiones que le permitan incorporar innovaciones tecnológicas y científicas, indispensables para disminuir la brecha con otros productores nacionales e internacionales y mejorar su competitividad.

Las fuentes de financiamiento a las que puede acudir el productor de trigo en el área de estudio son: financiamiento bancario, financiamiento de programas de apoyo gubernamental y financiamiento de proveedores y clientes. El financiamiento bancario es aquel que otorgan las instituciones de crédito a cambio de intereses. El financiamiento de programas de apoyo gubernamental son aquellos establecidos por el gobierno federal para el desarrollo de actividades del sector agrícola. El financiamiento de proveedores y clientes es aquel que otorga la empresa que utiliza el trigo como materia prima para elaborar sus productos.

Los requisitos principales que exige la banca comercial consisten en entregar al banco estados financieros que muestren utilidades en los últimos ejercicios fiscales, donde la situación financiera de la empresa presente activos muebles e inmuebles suficientes para garantizar el monto del financiamiento otorgado; además debe entregarse al banco los títulos de propiedad de los inmuebles para garantizar el monto del crédito. Los requisitos para obtener financiamiento de programas de apoyo gubernamental incluyen, entre otras cosas, la presentación del permiso de riego por parte del agricultor y el pago de intereses. Si se requiere capital de trabajo sólo es necesario presentar ante el organismo oficial el permiso de riego del agricultor y con esto recibirá los materiales e insumos que requerirá durante el cultivo y hasta la entrega de la cosecha. En caso de créditos refaccionarios para adquisición de maquinaria y equipo, los requisitos son similares a los exigidos por el banco. En el caso de solicitud de financiamiento a proveedores y clientes los requisitos principales consisten, entre otras cosas, en presentar permiso de riego, aceptar pagar los intereses, y comprometerse a vender su cosecha al proveedor o cliente que lo esta financiando.

En las entrevistas realizadas a los agricultores de trigo sujetos de estudio en esta investigación se obtuvieron datos que ponen de manifiesto los altos costos de los intereses que deben pagar los agricultores para recibir financiamiento mismos que fluctúan, a decir de los agricultores, entre el 20% y 30% anual.

Con los datos obtenidos en esta indagatoria se pudo determinar que del total de productores de trigo encuestados 75.5% consideró que es importante para su empresa tener acceso a financiamiento bancario; sin embargo, 63% del total afirmaron que es complicado para ellos reunir los requisitos que exige el banco para el otorgamiento del financiamiento. Así mismo 74.10% estuvieron de acuerdo en considerar que el costo de los intereses bancarios por financiamiento son sumamente altos. De lo anterior se

desprende que los productores de trigo no acceden a este tipo de financiamiento porque los intereses les resultan onerosos y a la vez complicados debido a los trámites administrativos. Lo anterior sustenta el hecho de que solo 42.6% de los encuestados utilizan financiamiento bancario frecuentemente.

En cuanto a la variable de financiamiento gubernamental 92.6% afirmó que es importante para su empresa tener acceso a financiamiento de programas de apoyo gubernamental; sin embargo, 59.2% reconoció que les resulta complicado reunir los requisitos que exigen los programas de gobierno para obtenerlo, aunado a lo anterior 63% reconoció que el costo de los intereses por financiamiento en programas de apoyo gubernamental era muy alto. Por tanto se infiere que estas podrían ser las causas de que solo 50% de los encuestados utilizan programas de apoyo gubernamental de financiamiento con mucha frecuencia.

En el análisis de los datos obtenidos sobre la variable de financiamiento de proveedores y clientes se obtuvo que 79.7% de los productores de trigo encuestados consideraron que es importante para su empresa tener acceso al financiamiento de clientes y proveedores; sin embargo, 51.8% del total de encuestados reconoció que es complicado reunir los requisitos que exigen sus proveedores y clientes para otorgar financiamiento. Por otro lado, 72.2% reconoció que para su empresa el costo de los intereses por financiamiento que otorgan sus clientes y proveedores es muy alto. Cabe señalar que 63% de los encuestados dijo haber utilizado financiamiento otorgado por sus clientes y proveedores con mucha frecuencia.

Figura 1: Importancia del Financiamiento por Variable
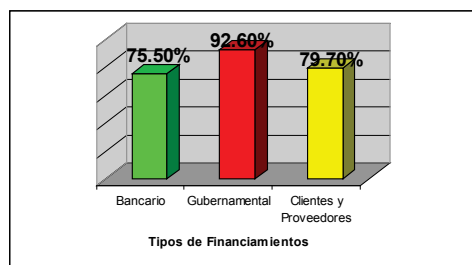
Esta figura muestra la importancia que tiene el acceso a financiamiento para los agricultores.

Los datos analizados en este apartado confirman la importancia que tiene el financiamiento como factor de competitividad para los productores de trigo del valle de Mexicali, Baja California; asimismo dan cuenta del alto costo de los intereses y de la complejidad de los trámites para su obtención.

CONCLUSIONES

Tras haber realizado la presente investigación se plantean las siguientes conclusiones:

Primera. Se confirma la importancia del financiamiento como factor para lograr una mayor competitividad.

Segunda. Los requisitos que deben cumplir los agricultores para ser sujetos de crédito resultan desalentadores por su complejidad y por el riesgo financiero que conllevan al poner en juego su patrimonio familiar.

Tercera. Los agricultores aceptan el pago de intereses altos a clientes y proveedores, y en su caso, a programas gubernamentales, como única alternativa para no poner en riesgo su patrimonio familiar ante los bancos.

Cuarta. Se requiere la creación de programas de financiamiento con tasas preferenciales que motiven la adquisición de crédito por parte de los agricultores y como consecuencia se incremente la competitividad.

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ESTRATEGIAS PARA FORTALECER EL SECTOR DEL MUEBLE Y LA MADERA: EL CASO DE TIJUANA-ROSARITO, B. C., MÉXICO

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RESUMEN

El objetivo de la investigación fue el determinar las causas que han provocado la pérdida de competitividad del sector del Mueble y la Madera de la región de Tijuana-Rosarito, B.C. y a partir de ellas proponer estrategias que les permita recuperarla. La importancia de la investigación está basada en los valores técnicos, económicos y sociales, desde el punto de vista técnico se propone estrategias para la gestión integrada del sector. El valor económico se expresa por la disminución de los costos debido al reordenamiento del sistema de empresas de la industria de la región. El valor social se destaca por los beneficios a la comunidad y permite la generación de conocimientos y habilidades de nuevas prácticas empresariales validas para el contexto de México y en particular de Baja California. Con un total de 30 empresas encuestadas a las cuales se les aplicó un cuestionario para determinar el nivel micro, meso, meta y macro para identificar la competitividad sistémica y proponer estrategias de competitividad del sector. Al momento de procesar y analizarse la información se utilizó el programa estadístico SPSS 15.0 for Windows Evaluation Version.

PALABRAS CLAVES: competitividad sistémica, estrategias de competitividad, sector del mueble

INTRODUCCIÓN

El presente trabajo es el resultado de un proyecto de investigación aplicado a veinte empresas del sector del Mueble y la Madera, de la región de Tijuana – Rosarito. El concepto de "competitividad sistémica" constituye un marco de referencia para los países tanto industrializados como en desarrollo. (Meyer, 2005).

Las empresas industriales de los países desarrollados y de los países en vías de desarrollo se ven hoy ante la necesidad imperiosa de incrementar su competitividad. Semejante desafío proviene de una competencia cada vez más dura, una "carrera" por adoptar y adaptar modelos de producción "japoneses" y un cambio tecnológico acelerado.

Y en esa carrera están enfrascadas todas las empresas, ya que hasta las posiciones hegemónicas se tornan cada vez más vulnerables. Los esfuerzos más importantes para elevar la competitividad deben efectuarse a nivel de empresa. Las empresas se hacen competitivas al cumplirse dos requisitos fundamentales: primero, estar sometidas a una presión de competencia que las obligue a desplegar esfuerzos sostenidos por mejorar sus productos y su eficiencia productiva; segundo, estar insertas en redes articuladas dentro de las cuales los esfuerzos de cada empresa se vean apoyados por toda una serie de servicios e instituciones. Ambos requisitos están condicionados a su vez por factores situados en el nivel macro (contexto macroeconómico y político-administrativo) y en el nivel meso.

Los países fuertes en materia de innovación y competitividad van desarrollando grupos regionales de comercio e integración cuyo resultado es la formación de sistemas interconectados en que las industrias colaboran de un modo intensivo sobre la base de la división del trabajo. El regionalismo abierto permite

ensayar el uso de nuevas tecnologías en un extenso mercado doméstico antes de lanzarse a la conquista de segmentos de mercado mundial. El regionalismo puede conducir a la formación de bloques regionales o de agrupamientos.

REVISIÓN LITERARIA

Competitividad

Es un hecho inevitable que en esta época que casi en cualquier parte del mundo y en México, la clave del éxito reside en ser competitivos, entendiendo por éxito que la sociedad pueda obtener los satisfactores materiales y los emocionales que permitan vivir con calidad. Los satisfactores pueden ser muchos y muy variados, así como las expectativas de cada individuo con respecto al nivel de éstos, sin embargo en todos los casos se requiere que las organizaciones dedicadas a generar dichos satisfactores sean competitivas. Ser competitivos significa poder operar con ventajas respecto a otras organizaciones que buscan los mismos recursos y mercados en donde los consumidores demandan cada vez más calidad, precio, tiempo de respuesta y respeto a la ecología.

Las organizaciones competitivas serán la base para que la economía de un país sea fuerte y sólida. Todo se puede lograr si un país cuenta con población competente, lo cual significa gente capaz de crear e innovar, que cuente con las facultades necesarias para desarrollar y operar sistemas tanto tecnológicos como organizacionales que generen satisfactores de óptima calidad." (Cantu, 2001).

Entendemos por competitividad a la capacidad de una organización pública o privada, lucrativa o no, de mantener sistemáticamente ventajas que le permitan alcanzar, sostener y mejorar una determinada posición en el entorno socioeconómico." La ventaja de una organización estaría en su habilidad, recursos, conocimientos y atributos de los que dispone dicha organización, los mismos de los que carecen sus competidores o que estos tienen en menor medida que hace posible la obtención de los rendimientos superiores a los de aquellos.

Competitividad es un término que se utiliza con frecuencia pero que rara vez se define. En realidad no hay consenso sobre el concepto de competitividad. Competitividad es una traducción libre de lo que en inglés es "*Competitiveness*", que quiere decir: "justa, rivalidad", y que deriva de la competencia. Económicamente, es la creación y mantenimiento de un mercado en el que participan numerosas empresas y donde se determina el precio conforme a la ley de la oferta y la demanda". (Chauca, 2000)

La competitividad, como disciplina de estudio y análisis heurístico, es un concepto desarrollado recientemente aunque su aplicación práctica es antigua y universal. Existen diversos enfoques de análisis (sistémico basados en el mercado, basados en la tecnología y en la innovación, entre otros) y diversos marcos de aplicación (nacional, regional, sectorial, empresarial e individual).

Asimismo la competitividad aparece como una mezcla de: a) Una visión del mundo contemporáneo, sumergido en valores sociales, que acepta diversas combinaciones de organización y mercado. b) Conceptos de distintas vertientes teóricas que, al reunirse, sobrepasan el alcance de otros conceptos utilizados en teorías como la del comercio internacional. c) Vida práctica, donde se lucha ferozmente por mercados y donde no hay regulaciones internacionales tan civilizadas que permitan a los agentes experimentar los valores sociales propuestos por el modelo. (Chauca, 2000)

La actitud para competir debe de llevar implícito querer competir y tener la capacidad para hacerlo. Esta capacidad requiere de una preparación para hacer frente a la competencia y a las acciones que realizan las demás empresas que intervienen en la lucha por conseguir o reafirmar posiciones en los diferentes mercados.

Las características de las empresas competitividad empresas que triunfan ya que han sabido adaptarse, transformarse rápidamente bajo el rigor de los tiempos, que han sabido encontrar en las soluciones posibles, el hilo de la supervivencia, es decir de la vida. (Fauvet, 1985). El principal problema, en la actualidad, de las empresas, es que subestiman generalmente la información y el conocimiento, sin pensar que son recursos estratégicos y esenciales para la adaptación de los negocios en un entorno competitivo.

Cuando se hace referencia al concepto de competitividad, se refieren de una manera global y duradera de la empresa y no sólo la competitividad de uno de sus productos o servicios en particular, ya que una empresa puede tener un producto muy competitivo y ser globalmente ineficiente. Al referir una competitividad duradera se hace con la mira hacia el futuro, es decir basándose en el hecho de que si quieres ser competitivo se tiene que ir a la vanguardia en todos sentidos, y al decir en todos los sentidos también incluye el plano ético y moral.

Construcción de Competitividad Sistémica

El concepto de competitividad sistémica busca capturar ambas partes que determinan el éxito del desarrollo industrial, la parte política y la parte económica. De acuerdo con Meyer (2005), el significado de competitividad sistémica es un patrón en el que el estado y los actores sociales crean las condiciones necesarias para desarrollar competitividad sistémica. El concepto distingue cuatro niveles: Los ingredientes claves para el éxito del desarrollo industrial son:

En el Nivel Meta: Primero, Desarrollar- Orientar a los valores culturales compartidos en una larga parte de la sociedad. Segundo, Hacer un consenso de la necesidad del desarrollo industrial y de la integración competitiva hacia el mercado global. Tercero, La habilidad de los actores sociales para que conjuntamente formulen visiones, estrategias e implementen políticas. En el Nivel Macro: Un predecible y estable marco macroeconómico, que incluya una realista   política de tasa de intercambio y una política general de comercio al extranjero que estimule a   la industria local.

En el Nivel Meso: Generar políticas específicas y tener instituciones que permitan a las industrias alcanzar sus objetivos y a su medio ambiente que creen ventajas competitivas. (Institutos tecnológicos, centros de entrenamiento, finanzas para la exportación, etc.). Por otra parte, es el mundo local y regional de las industrias lo que permite incentivar la competitividad, para fortalecer el medio ambiente de los negocios. Algunas de estas instituciones que actúan en el Nivel Meso son típicamente o que en primera instancia pueden ser, asociaciones no gubernamentales. En el Nivel Micro: Empresas capaces de su continuo crecimiento y conexiones de empresas con pronunciadas exterioridades.

Para realizar la identificación de las estrategias se realizo un análisis FODA que es la sigla (Fortaleza, Oportunidades, Debilidades y Amenazas). Herramienta analítica que le permitirá trabajar con toda la información que posea sobre su negocio. Nos facilita la identificación de las amenazas y oportunidades externas, así como las fuerzas y debilidades internas de una organización.

El Análisis FODA se enfoca hacia los factores claves para el éxito del negocio, debe resaltar las fortalezas y las debilidades diferenciales internas al compararlo de manera objetiva y realista con la competencia y con las oportunidades y amenazas claves del entorno.

METODOLOGÍA

La metodología aplicada para llevar a cabo el proyecto de investigación, consistió en la aplicación de un cuestionario a 30 empresas se realizó una prueba piloto para la validación de dicho instrumento en la investigación y después se aplicó al total de la muestra.

Esta investigación se elaboró conforme a la construcción de estadística descriptiva, la cual consistió en la elaboración y obtención del cuestionario para después hacer la investigación de campo, posteriormente la captura de información en el software SPSS 15.0 for Windows Evaluation Version el cual es un programa estadístico para la generación de datos estadísticos y finalmente se elaboró el análisis. El proyecto de investigación consistió en la aplicación de varias herramientas administrativas para lograr desarrollar una estrategia que permita aumentar la competitividad en el cluster. El problema es: la baja competitividad que están presentando las empresas pertenecientes al cluster del Mueble y la Madera frente a la competencia, principalmente Estados Unidos, Canadá, China y otros países.

Tabla 1. Las cuatro estrategias alternativas

Matriz FODA		
FO	Maxi – Maxi	Maximizar fuerzas – Maximizar oportunidades
FA	Maxi – Mini	Maximizar fuerzas – Minimizar amenazas
DO	Mini - Maxi	Minimizar debilidades – Maximizar oportunidades
DA	Mini - Mini	Minimizar debilidades- Minimizar amenazas

La tabla muestra las cuatro estrategias alternativas en las cuales el análisis FODA puede enfocarse hacia los factores claves del éxito del negocio

Determinación de la Muestra

Para el presente trabajo se eligió una muestra de 30 propietarios del sector del Mueble y la Madera de Tijuana - Rosarito B.C. pertenecientes al *cluster*
Factores que se consideraron en el cálculo de la muestra:
   g) La población se considera con características homogéneas.
   h) Se cuenta con una población finita, ya que el número de empresas familiares es conocido.
   i) Fórmula empleada para el cálculo de la muestra:

$$n = \frac{\partial^2 pq}{e^2(N-1)\partial^2 pq} \qquad (1)$$

Tabla 2: Total de empresas pertenecientes al *cluste*r, Mayo 2009.

	Poblacion	Muestra
Total de empresas del sector del Mueble y la Madera de Tijuana – Rosarito B.C.	30	25

Esta tabla muestra que el total de las empresas encuestas si cuenta con un nivel de confiabilidad.

Objetivos de la investigación

El objetivo general es proponer alternativas estratégicas que faciliten alcanzar altos niveles de desempeño en la industria del mueble y la madera en los municipios de Tijuana y Playas de Rosarito lo cual contribuirá a recuperar su competitividad.

Objetivos específicos

1. Analizar las causas que han provocado la pérdida de competitividad de la industria del mueble.
2. Proponer estrategias que permitan mejorar la competitividad de la industria del mueble

<u>Hipótesis de la investigación</u>
Si se establecen opciones estratégicas coherentes, integradas y contextualizadas, se facilitará incrementar los niveles de competitividad de la industria del mueble objeto de este estudio.

RESULTADOS

Tabla 3. Habilidad del gobierno para formular estrategias y políticas de competitividad

Opinión de los propietarios	Porcentaje
Buena	15%
Regular	40%
Mala	35%
Pésima	10%
Total	100%

Esta tabla se observa que la habilidad del gobierno para formular estrategias y políticas de competitividad local o regional es deficiente. Ya que solo el 15% de las empresas de la prueba piloto estableció que su desempeño es bueno. Esto provoca que los programas actuales no tengan impacto en la competitividad del sector.

Tabla 4. Marco legal para hacer negocios en México

Opinión de los propietarios	Porcentaje
Buena	0%
Regular	30%
Mala	0%
Pésima	70%
Total	100%

En la tabla se observa que el marco legal par hacer negocios en México tiene que reformarse ya que las empresas del cluster consideran que es pésimo para la inversión en este sector. Los costos para cubrir una serie de trámites burocráticos no permiten la competitividad.

Tabla 5. Infraestructura de la región en términos de vialidades

Opinión de los propietarios	Porcentaje
Buena	5%
Regular	50%
Mala	0%
Pésima	45%
Total	100%

En la tabla se observa que las empresas encuestadas opinaron que la infraestructura en la región le parece inadecuada y regular para la operación optima de la empresa, representado el 95%. Esto no ayuda a la eficiencia de las operaciones de logística de la industria..

Tabla 6. Competencia en el sector del mueble y la madera

Opinión de los propietarios	Porcentaje
Alta competencia	55%
Regular competencia	35%
Baja Competencia	10%
Total	100%

En la tabla se observa que 11 de las 20 empresas encuestadas opinó que existe alta competencia en el sector del mueble y la madera. Esta situación se considera favorable ya que permite ser creativo e innovador para permanecer en el mercado.

Tabla 7. Opciones para generar competitividad en el sector y en el entorno regional en el que participa la empresa

Opinión de los propietarios	Porcentaje
Diseño de políticas especificas de apoyo al sector por parte del gobierno	45%
Creación de centros de entrenamiento y capacitación	25%
Creación de carreras de diseño	5%
Mayor vinculación entre competidores	10%
Generación de la información para el análisis de la demanda cambiante de segmentos de mercado	10%
Total	100%

En la tabla se observa que las empresas encuestadas consideran que lo que se podría hacer para crear competitividad en el sector es el Diseño de políticas específicas y de apoyo al sector por parte del gobierno con un 45%. El 5% de las empresas encuestadas no opinó.

Tabla 8. Ventaja competitiva

Opinión de los propietarios	Porcentaje
Disminución de costos (precios)	15%
Diferenciación del producto (Calidad)	60%
Otros	15%
Ambos	10%
Total	100%

En la tabla se observa que la ventaja más importante para competir por parte de las empresas del cluster es la diferenciación del producto. Este factor debe fortalecerse y consolidar otros para generar una ventaja competitividad.

Tabla 9. Problemas más frecuentes para cumplir un pedido

Opinión de los propietarios	Porcentaje
Tiempo de entrega	55%
Falta de materia prima	20%
Baja Calidad	5%
Entregas incompletas	5%
Otros	15%
Total	100%

En la tabla se observa que el problema más frecuente que se tiene para cumplir un pedido es el tiempo de entrega. Esta situación debe ser atendida a la brevedad por parte de la empresa.

Tabla 10. Capacitación en las empresas

Opinión de los propietarios	Porcentaje
Al inicio de la contratación	60%
En forma permanente	5%
Por programa	10%
Por requerimientos específicos	20%
Total	100%

En la tabla se observa que no existe capacitación en forma permanente a los empleados. El 5% de las empresas encuestadas no opinó al respecto .Es importante que se establezcan programas de capacitación permanente que permitan contar con recursos humanas actualizados.

Tabla 11. Maquinaria y equipo con que cuenta la empresa

Opinión de los propietarios	Porcentaje
Moderna	50%
De vanguardia	20%
Obsoleta	20%
Otros	10%
Total	100%

En la tabla se observa que la maquinaria y equipo con la que cuentan las empresas del cluster es moderna. El 10% de las empresas encuestada no opinó. Situación que se debe conservar ya que favorece la competitividad del sector.

Tabla 12. Utilizando la herramienta del Análisis FODA se determina el siguiente cuadro:

Factores Internos Fortalezas	Factores Internos Debilidades
a) Los productos que elaboran algunas de las empresas pertenecientes al cluster ofrecen un valor agregado ya que son elaborados de acuerdo a especificaciones de los clientes. b) Las empresas pertenecientes al cluster podrán mejorar sus procedimientos y procesos de producción ya que compartirán información con empresas del cluster. c) Las empresas pertenecientes al cluster tienen mano de obra de medianamente calificada a muy calificada principalmente en su área de producción.	a) Algunas empresas no tienen claramente definida una estrategia genérica para atacar el mercado. b) En el cluster la capacitación y entrenamiento principalmente se da al inicio de la contratación y no en forma recurrente. c) Las empresas tienen por lo general problemas para su ciclo de producción ya que un problema recurrente es la escasez de materia prima, (principalmente la madera).
Factores Externos **Oportunidades**	**Factores Internos** **Amenazas**
a) Hacer pláticas con el gobierno para que apoye a las empresas de este giro y en especial a los integrantes del cluster. b) Fomentar el financiamiento mediante cooperación del gobierno para exportar, por parte de Bancomext, la banca de desarrollo y SEDECO. c) Formar una agrupación que ayude a incrementar las ventas de los productos. d) Formar una alianza con los constructores de la región: Casas Geo, Urbi, Infonavit.	a) Existe fuerte competencia con Estados Unidos, Canadá y China principalmente, además de la entrada de competidores como: Vietnam, Malasia y Taiwán. b) La aparición de productos sustitutos a los muebles de madera principalmente y de acero, como la introducción de muebles de plásticos y de algunos materiales reciclables. c) Perdida de clientes ocasionada por factores de seguridad en la región.

La tabla muestra los factores internos en cuanto a las fortalezas y debilidades del sector del mueble y la manufactura en Tijuana – Rosarito B.C., así como los factores externos en cuanto a las oportunidades y amenazas que presenta el mismo

De acuerdo al análisis elaborado con la información recabada del cluster del Mueble y la madera determine que la mejor estrategia a desarrollar es la alternativa C, que dice lo siguiente:
Establecer una alianza estratégica del cluster del mueble y la madera con los principales fraccionamientos de la región entre los que se encuentran Casas GEO, Urbi e Infonavit., debido a que es la que mas alta calificación obtuvo en la matriz de decisión.

CONCLUSIONES

Se recomienda que el sector del mueble y la madera se organicen y fortalezcan el *cluster* ya que con esta categoría de análisis, nos permiten identificar la configuración de los territorios enfatizando las actividades económicas que en ellos podemos ubicar. En este sentido, para el desarrollo local son de importancia trascendental, pues como lo indica Vázquez Barquero (1999 p. 31): "los procesos de

industrialización endógena se caracterizan además por el hecho de que a través de las empresas se produce la integración del sistema productivo a la sociedad local".

Tabla 13. Las estrategias alternativas propuestas son de la clasificación FO del análisis FODA, y se forman de la mezcla de las Fortalezas a) y Oportunidades b), c) y d)

Estrategias A	Estrategia B	Estrategia C
Desarrollar mejores oportunidades para que las empresas pertenecientes al cluster exporten sus productos	Formar una comercializadora que ayude a incrementar las ventas de las empresas del cluster y que se establezca en Tijuana y Rosarito.	Establecer una alianza estratégica del cluster del mueble y la madera con los fraccionamientos de la región entre los que se encuentran Casas GEO, Urbi e Infonavit.
Pros: a) Mayor participación de mercado para las empresas del cluster. b) Posibilidad de emplear un único programa de exportación destinado a todo el sector. c) Posibilidad de innovar y mejorar los productos.	Pros: a) Incremento en la participación del mercado del mueble y la madera. b) Posibilidad de incrementar los ingresos en las empresas. c) El reconocimiento de la empresa en la región podrá atraer más consumidores.	Pros: a) Habrá generación de empleos locales al aumentar la producción en las empresas. b) El cliente del fraccionamiento podrá obtener su casa decorada y disponible para habitarla. c) Incremento en ventas.
Contras: a) Tasas de interés demasiadas elevadas en comparación a los financiamientos extranjeros. b) Descuidar más el mercado nacional al enfocarse en el mercado extranjero. c) Algunas empresas del cluster no podrán reunir los requisitos para obtener el financiamiento. d) Medidas Domping por parte de los países extranjeros para cubrir a su sector mueblero.	Contras: a) Las empresas son renuentes a compartir información. b) Existirán gastos para la formación de la nueva empresa y gastos preoperativos para su establecimiento. c) Posible riesgo de que la comercializadora no sea un éxito con el posible descontento de los integrantes del cluster.	Contras: a) De acuerdo con el estudio de Accenture realizado en 1999, revelo que el 61% de las alianzas fueron un fracaso o caminan cojeando, por lo tanto, la alianza los fraccionamientos representa un alto porcentaje de que sea un mecanismo ineficaz y no duradero para llegar a un límite competitivo. b) La alianza podría afectar la independencia de las empresas pertenecientes al cluster. c) Puede existir una fuerte presión por parte los fraccionamientos hacia las empresas del cluster en el momento de incumplir con las obligaciones contraídas con los clientes.

La tabla muestra las estrategias de las alternativas propuestas de acuerdo con el análisis FODA, mostrando la mezcla que se presenta entre las Fortalezas y Oportunidades

La innovación constituye un pilar en el desarrollo de los *clusters*. Aunque se centra en la estructura empresarial, cada día son más importantes las relaciones territoriales de carácter social e institucional que les permiten en todo caso generar acciones específicas para aprovechar el aprendizaje, los conocimientos, los valores, que surgen en el entorno local de la aglomeración.

a) Por su parte, el sistema productivo que constituye la industria mueblera en Baja California, México, evidencia la necesidad de fortalecer su competitividad a partir de la mejora tecnológica y de una mayor capacitación a los empleados.

b) Las innovaciones que se implementan están dadas sobre todo a partir de los procesos de imitación.

c) En su mayoría las empresas obtienen tecnología a través de que observan la tecnología en ferias y exposiciones y en las revistas especializadas, más que en la generación de tecnología propia.

d) Cabe mencionar que es necesario mejorar las relaciones que guardan las instituciones que apoyan al sector, en virtud de que deben mantener una lógica de interacción que favorezca las dinámicas de aprendizaje y la cooperación, tal como lo establece Porter: La formación de cúmulos se ve dificultada por

el bajo nivel local de formación y capacitación, por las carencias tecnológicas, por la falta de acceso al capital y por el insuficiente desarrollo de las instituciones.

e) El sector de la industria del Mueble y la Madera presenta una dinámica de lento crecimiento.

f) Al finalizar la aplicación de los 20 cuestionarios a las empresas del *cluster* del Mueble y la madera, se recabo información suficiente para elaborar el análisis que permitiera generar una estrategia que mejore la competitividad en este sector. Resultando como factible, por su costo- beneficio, por su efectividad y su tiempo de implementación apropiada la de: Establecer una alianza estratégica del *cluster* del mueble y la madera con los constructores de la región entre los que se encuentran Casas GEO, Urbi e Infonavit.

g) En segundo lugar se recomienda la alternativa B) que es: Formar una comercializadora que ayude a incrementar las ventas de las empresas del *cluster* y que se establezca en Tijuana y Rosarito., porque representa una alternativa viable para su ejecución.

Tabla 14. El plan de acción a implementar consistirá en acciones que se llevarán a cabo en un período de 6 meses (corto), un período de 12 meses (mediano) y un periodo de 18 meses (largo).

Objetivo	Estrategia	Línea de acción	Periodo	Responsable
Llevar a cabo la negociación con los fraccionamientos a fin de ver cuales aceptaran la propuesta.	Platicar las ventajas que tendrían las empresas de la región.	Se debe mostrar mediante contratos que las empresas de cluster podrán garantizar la propuesta de servicio.	Corto	Comité del cluster. (Presidente)
Mejorar la organización interna del cluster.	Realizar juntas periódicas semanales con el fin de establecer el funcionamiento óptimo para cumplir con las ventas futuras.	Las empresas integrantes del cluster deben saber que empresas están registradas a fin de optimizar los recursos que en ella están.	Mediano	Comité del cluster. (Presidente)
Evaluar el desempeño de las empresas del cluster en términos de cooperación.	Implementar una estrategia de ganar – ganar para motivar a que los integrantes del cluster vean los beneficios de apoyo conjunto.	Mediante el apoyo de una empresa de consultoria, asesorar a las empresas para que logren el objetivo de cooperación.	Largo	Comité del cluster. (Presidente)

La tabla muestra el plan de acción a implementar el cual consistirá en acciones que se llevarán a cabo a corto, mediano y largo plazo

RECOMENDACIONES

Las medidas de control consistirán en alcanzar los objetivos establecidos en el plan de acción en el tiempo que se establecen a fin de alcanzar los beneficios esperados.
Consistirá adicionalmente de juntas periódicas y asumir compromisos por parte de los integrantes del *cluster* y de los responsables que tengan a su comisión la gestión de control.
 Se recomienda realizar un seguimiento y evaluación de las estrategias que se hayan implementado en la práctica, con el fin de evaluar su efectividad para recuperar la competitividad del sector.

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LA COMPETITIVIDAD EMPRESARIAL Y EL FACTOR HUMANO DE LAS ORGANIZACIONES

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RESUMEN

La competitividad es un referente en el actual contexto de globalización económica y de mercados, donde los países, regiones, empresas, y personas compiten por un posicionamiento que les permita desarrollo. El presente estudio se enfoca en la competitividad microeconómica, particularmente se analiza la competitividad vinculada al factor humano, concepto que se define y describe en función de su relación con el término capital humano. También se ilustra la relevancia que tiene éste último en el desarrollo competitivo de una empresa, a través de una amplia revisión del estado del arte, puntualizando en los modelos en torno al aprendizaje organizacional. El estudio muestra los resultados a nivel descriptivo de cómo las empresas bajacalifornianas a través de la gestión de su personal construyen o inhiben competitividad. Se propone un cambio en la forma de administrar el personal a fin de construir fortalezas que detonen la competitividad de la empresa.

INTRODUCCIÓN

La competitividad se presenta como el nuevo paradigma del desarrollo empresarial (Porter, 1991). En los albores del siglo XXI, la globalización y la apertura de los mercados obliga a las empresas a ser cada vez más competitivas, para ello aplican diferentes estrategias, como políticas de precios, calidad de sus productos y servicios, entre otros. Sin embargo, para Petrella (2001), muchas de estas prácticas son cuestionables, ya que atentan en contra de la integridad de las naciones subdesarrolladas y de sus trabajadores.

Rastogi (2000), propone que para lograr ventaja competitiva las empresas deben reconocer que en el volátil ambiente de negocios de hoy, dicha ventaja es temporal. Además, ilustra que la tarea de la alta dirección, aunque se torna difícil, -dado que no pueden tener todas las respuestas a los problemas y situaciones cada vez más complejas y cambiantes que enfrentan sus empresas-, es reconocer que en tal contexto, el factor humano (FH) de la organización constituye su recurso base para mantener a la empresa competitiva.

Por lo tanto, es importante que la dirección considere que la única fuente de ventaja competitiva, radica en la forma como es organizada y administrada la fuerza laboral (Pfeffer, 1996). Es decir, las personas son el factor clave para mantener y desarrollar las competencias diferenciadoras que proporcionen sostenibilidad y crecimiento a la empresa. En este sentido, el propósito de este trabajo es establecer las relaciones causales que determinan la importancia del factor humano en la obtención de ventajas competitivas en las empresas, a través de una exhaustiva revisión del estado del arte, asimismo describir cómo las empresas bajacalifornianas de manufactura de clase mundial a través de la gestión de su personal construyen o inhiben su competitividad. Por ello el estudio termina con la propuesta de cambio de enfoque en la forma de administrar al personal.

REVISIÓN LITERARIA

La competitividad es un tema que ha estado en el centro del análisis de negocios desde que Adam Smith publicó, en 1776, el libro la Riqueza de las Naciones (Porras, 2007). A pesar de ello se considerada un

tema de vanguardia, ya que bajo el escenario de la sustentabilidad y la responsabilidad social empresarial, muchas de las estrategias que en el pasado funcionaron, hoy han perdido vigencia.

En el año 2000, la Comisión Económica para América Latina y el Caribe (CEPAL), estableció que la competitividad sistémica de empresas, regiones y naciones depende de la estructura e interacción de al menos cuatro niveles de actividad socioeconómica, los cuales son el nivel micro, meso, macro y meta. Para fines del presente la competitividad se focaliza desde el nivel micro, es decir, en la empresa.

Competitividad es una palabra de uso común en el lenguaje empresarial, que cada día cobra más importancia. Pero a qué se refiere la competitividad empresarial: Según Buckley (1988), la competitividad es sinónimo del funcionamiento eficiente y de largo plazo de una organización, es señal de la capacidad de compensar a sus empleados y de proporcionar utilidades superiores a sus dueños. De acuerdo con Mercado (1997:19), la competitividad "se entiende como la capacidad para vender un producto en un mercado en el cual existen otros similares y sostener a dicho cliente en el tiempo". Asimismo, Mercado plantea que para las empresas, es imprescindible competir con precios, calidad y el uso eficiente de los recursos productivos; lo que sólo puede lograrse mediante un incremento de la productividad.

Para la CEPAL (2000), la competitividad a nivel micro se refiere a las condiciones intra e interempresa; incluye aspectos de productividad, innovación y difusión tecnológica, la transferencia de información y la organización industrial específica, pero también de las instituciones que median en las relaciones interempresa. Es decir, la competitividad de la empresa es afectada por su cadena de valor, por el tipo de relaciones que sostenga con sus trabajadores, proveedores y clientes, así como los apoyos que le provean organismos de gobierno y privados.

La competitividad microeconómica es la principal competitividad, ya que son las empresas quienes inicial y finalmente tienen que enfrentar la hipercompetencia global en los mercados. Empero, es necesario reconocer que está en función de factores tales como: 1) sus propios recursos (el capital humano, su capital físico, y el nivel de tecnología), 2) su poder de mercado, 3) su comportamiento hacia los rivales y otros agentes económicos, 4) su capacidad de adaptarse al cambio acorde con las circunstancias, 5) su capacidad para crear nuevos mercados, y 5) el ambiente institucional, proporcionado en gran parte por el gobierno, incluyendo la infraestructura física y la calidad de las políticas gubernamentales (Asian Development Outlook, 2003).

Martínez (2007:123), resalta que los factores que dan la verdadera competitividad son creados: innovación, capacitación, educación y desarrollo tecnológico. Además, enfatiza:

> El acceso a mano de obra, capital y recursos naturales no determina la prosperidad, porque en la actualidad esos recursos son accesibles a todos; y que la competitividad surge de la productividad con la que las empresas emplean en una ubicación esos factores para producir bienes y servicios valiosos. Las raíces de la productividad se encuentran en el entorno competitivo nacional y plurinacional.

Resumiendo, se puede decir que el estado del arte trata a la competitividad como un concepto dinámico, la cual se alcanza a través de una serie de resultados que le permiten a las empresas mantener e incrementar su participación de mercado respecto de sus competidores, lo que demanda la posesión y gestión de ventajas competitivas. La competitividad no es un resultado lineal, sino producto de una serie de actividades y estrategias, entre las cuales destaca la efectiva gestión del FH, también llamado capital humano. A continuación, se define este concepto y se ilustran los resultados de una serie de estudios e investigaciones que ubican al FH y su administración como una fuente sustentable de competitividad, tanto para países como para empresas.

Primeramente, es necesario señalar que en este documento se usa FH en lugar del término recurso humano. El cambio obedece a la concepción de la palabra recurso, la cual según la Real Academia Española (RAE) se define como "el conjunto de elementos disponibles para resolver una necesidad o llevar a cabo una empresa, cita como ejemplo a los recursos naturales, hidráulicos, forestales, económicos, y humanos". Mientras, la palabra factor hace referencia a una persona que desempeña diversas actividades (RAE, 2001). Es decir, es una palabra vinculada al quehacer del hombre, que lo concibe como humano. Siendo esta visión humana la que cobra día con día mayor relevancia en las actividades empresariales. Al respecto Pfeffer (1996:14) argumenta:

> La gente y la forma como se administra se está haciendo cada vez más importante debido a que muchas de las otras fuentes de éxito competitivo son menos poderosas de lo que eran antes. El reconocer que la base para la ventaja competitiva ha cambiado, es esencial para desarrollar un marco de referencia diferente para examinar temas de administración y estrategia. En la actualidad, son más importantes la cultura y las capacidades organizacionales derivadas de cómo se administra a la gente.

De ahí la relevancia no sólo en el cambio del enfoque, sino en la necesidad de evolucionar en la concepción de recurso a factor y administrar a las personas como humanos. Bajo esta óptica, puede decirse que el FH es un término en desarrollo, el cual ha sido definido por un número importante de autores, a continuación se presentan algunas de las concepciones.

Según Gómez (2006), el FH se refiere al aporte humano en las empresas, considerando que es este aporte el que se puede gestionar y no a las personas. Para Rastogi (2000), el FH incluye el aprendizaje, el conocimiento individual y colectivo, las habilidades y experiencia, la creatividad e innovación, las competencias y capacidades, es decir, la gente de una empresa constituye su capital humano. De acuerdo con Myers *et al* (2004), el FH incluye las habilidades y el conocimiento de los empleados. Es un factor que forma parte de los llamados recursos intangibles, considerado uno de los más utilizados e importantes de las empresas, particularmente es la base de la producción eficiente y eficaz de artículos de valor.

Pološki y Vidović (2008), acentúan el papel del FH en el logro de las metas de la empresa y enfatizan que los empleados son el activo más importante, y representan la única fuente sostenible de ventaja competitiva. Es decir, afirman que "el más grande, el activo más valioso que cualquier compañía tiene es su gente, porque todos los planes de gestión para lograr el éxito se realizan, o no podrían ser realizados, sin la gente". Es aquí donde entra en escena la administración del FH, área estratégica responsable de crear los sistemas para su dirección y desarrollo. El término utilizado y ampliamente aceptado para nombrar a esta área es: Administración de Recursos Humanos (ARH), área que define las prácticas administrativas de reclutamiento, entrenamiento, remuneración y similares, pero que al adoptar un enfoque estratégico, se refiere al acoplamiento explícito entre dichas prácticas con los objetivos estratégicos de la organización (Cowell, 2007).

Khandekar y Sharma (2005), presentaron un modelo de ARH basado en el aprendizaje organizacional (ver figura 1). Modelo que plantea a la ARH como factor clave para incrementar la productividad de los empleados, da significancia a la necesidad de volver a las prácticas de desarrollo de los empleados, dado que son una fuente de competitividad. El modelo tiene su origen en el aprendizaje organizacional, y se basa en el modelo americano de Senge (1990), y en el modelo japonés de Nonaka y Takeuchi (1991). Enfatiza en la necesidad de que toda organización aprenda de sus experiencias, por lo que señala debería mantener una memoria electrónica de las mismas, a fin de facilitar su búsqueda y consulta.

En este sentido, el aprendizaje debe estar alineado con la estrategia que para la ARH haya definido la empresa, elementos que en conjunto deben indicar que prácticas de ARH son las más estratégicas para

llevar a la empresa al logro de sus metas y objetivos, es decir, a un funcionamiento eficiente y eficaz, de tal forma que la empresa pueda generar ventajas competitivas que le permitan sostener y, en el mejor de los casos, ampliar su posicionamiento de mercado.

Figura 1 Modelo de aprendizaje organizacional y de Administración estratégica del factor humano para la ventaja competitiva sostenible.
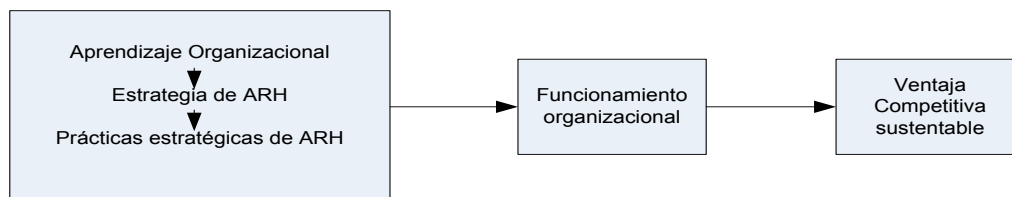
Fuente: Khandekar y Sharma (2005)

Es importante señalar que en 1999, Bob Guns presentó un modelo complementario al de Senge, su propuesta fue la creación de organizaciones de rápido aprendizaje (ORA) mediante tres estrategias: impulsar, que corresponde a los directivos de la organización; cultivar, cuya responsabilidad deja en el área de recursos humanos como gestores del desarrollo humano; y transformar, que compete a los equipos de trabajo y a cada uno de sus miembros. Otra propuesta es la teoría del conocimiento organizacional (ver figura 2), modelo japonés de Nonaka y Takeuchi (1999), que busca generar conocimiento mediante dos espirales de contenido epistemológico y ontológico, por medio de un proceso de interacción entre el conocimiento tácito y explícito que tiene naturaleza dinámica y continua. Se constituye en una espiral permanente de transformación ontológica interna de conocimiento, desarrollada siguiendo las fases de socialización, exteriorización, combinación e interiorización.

Figura 2. Teoría del conocimiento organizacional

Fuente: Nonaka y Takeuchi (1999).

Casas y Dettmer (2008), describen el modelo de Nonaka y Takeuchi, identifican tres características para crear conocimiento en las empresas, relacionando la forma en cómo lo tácito se hace explícito: 1) expresar lo inexpresable, confiando en el lenguaje figurativo o simbólico; 2) diseminar el conocimiento, el conocimiento individual debe ser compartido; y 3) el nuevo conocimiento nace entre la bruma de la ambigüedad y la redundancia. Casas y Dettmer (2008), también argumentan que el conocimiento provee a la empresa una ventaja competitiva sostenible sólo sí es independiente de los individuos, es decir, si es compartido por todos.

Caldwel (2003), en su propuesta enfatiza que para convertirse en modelo de competitividad la ARH debe cambiar el rol que ha venido asumiendo hasta ahora. Caldwell (2003) cita a Ulrich (1998), para definir los nuevos cuatro principales roles que debe asumir la ARH (ver figura 3).

Figura 3. Los cuatro nuevos roles de la ARH
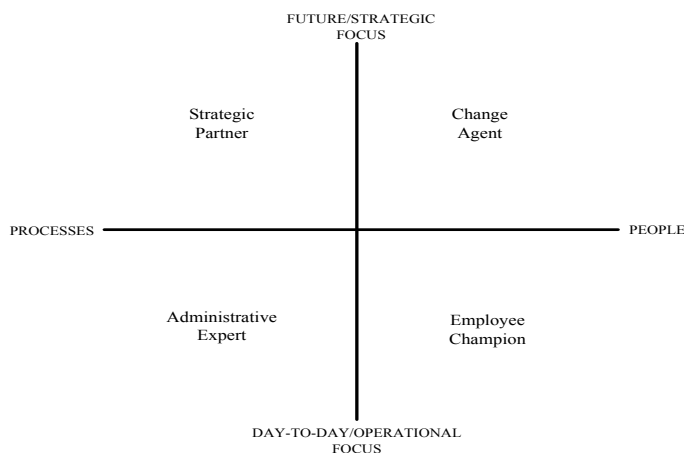
Fuente: Caldwell (2003)

La figura tres ilustra dos ejes: estrategia versus operaciones y procesos versus gente, la intersección de dichos ejes define las fronteras de los cuadrantes de los nuevos cuatro roles propuestos, que son: 1) Los socios son estratégicos(El documento se refiere a los empleados como socios.), deben ayudar a ejecutar con éxito las estrategias del negocio y cubrir las necesidades del cliente; 2) Administrar la experiencia, mejorar continuamente la eficacia de la organización mediante reingeniería a la función de FH y otros procesos; 3) El Campeón de los empleados, crear este concepto y maximizar las comisiones a los empleados de acuerdo a las competencias y 4) Agente de cambio, introducir a la organización en una cultura de cambio y transformación, donde cada socio es un agente de cambio.

Para evaluar la efectividad del modelo Caldwell (2003), realizó varios estudios en el Reino Unido, cuyos resultados le permitieron subrayar la presencia de las viejas ambigüedades y las nuevas complejidades que enfrenta la ARH, bajo el escenario de presiones competitivas sobre las cuales puede tener poco control. También inferir que desde la perspectiva organizacional, el desarrollo del FH se refiere al proceso de fomentar el aprendizaje organizacional con el objetivo de mejorar el funcionamiento y realzar la capacidad individual y perspectivas de carrera de los trabajadores. Respecto a los nuevos roles Cowell (2007), concluye que la ARH debe aplicarlos como un medio para transformar a las empresas en ORA´s, Además acentúa la importancia que tienen las estrategias del área de ARH para mantener una comunicación abierta con los empleados sobre la dirección del negocio; también realza la relevancia de la participación de los empleados en la toma de decisiones. Indica que las capacidades y habilidades incorporadas en los empleados representan una completa sinergia desarrollada en el tiempo y son exclusivas de la organización. Lo que proporciona una fuente única de ventaja competitiva.

Cowell (2007), argumenta que probablemente todos los *chief executive officer* (CEO) rutinariamente afirman que la gente es el recurso más importante para alcanzar los objetivos del negocio. Pero, paradójicamente, ante la primera amenaza, la respuesta instintiva es recortar al personal, lo que hace de la gente un recurso consumible. Práctica que refleja que en la mayoría de las empresas no hay una posición clara respecto a cómo administrar al personal: como FH o recurso humano. Cuando se demanda son el recurso más valioso, sin embargo, muchas organizaciones no pueden aplicar una política continua para desarrollar su FH, a fin de obtener su máxima capacidad.

METODOLOGÍA

Se diseño una metodología no experimental, trasversal exploratoria y descriptiva de acuerdo con lo señalado por Hernández *et al* (2006). Con un enfoque mixto, se utilizó una encuesta integrada por preguntas cerradas y abiertas. Las cuales se orientaron a conocer la conformación de la planta laboral, las estrategias y prácticas que aplican las empresas respecto a la forma en cómo administran su factor humano, si los capacitan, cómo diseminan el conocimiento de cada trabajador y el que se va creando dentro de la organización, para determinar si las empresas aprenden. La encuesta se aplicó a un total de 14 empresas dedicadas a la manufactura de exportación.

RESULTADOS

Un aspecto importante de las empresas en el naciente siglo XXI es la preparación y el tipo de empleados con que operan; para Drucker (1999, p. 159-160), la productividad del trabajador manual creó en el siglo XX lo que hoy se llaman economías "desarrolladas", pero en este siglo XXI el bien más valioso de una organización, son sus trabajadores del conocimiento y su productividad. Sin embargo, el análisis de los resultados ilustra que las empresas manufactureras de Ensenada continúan soportando el desarrollo de sus productos en la mano de obra, ello se infiere dado que en promedio el 71% de sus empleados son trabajadores directos, es decir los llamados obreros, ensambladores, u operadores -de acuerdo con Drucker, trabajadores manuales-. La figura 4 ilustra el porcentaje que representa este tipo de trabajador para cada una de las empresas estudiadas, destacan las plantas 2, 7 y 10 cuya planta laboral en más del 84% se compone de personal operativo.

Figura 4 Cuantificación de trabajadores manuales

Fuente: Elaboración propia a partir del análisis de la encuesta

Esta estadística, indica que las plantas maquiladoras-IMMEX de Ensenada, mantienen un enfoque tayloriano, concebido para el trabajo manual en la producción de manufacturas (Drucker, 1999, p. 165). Además, la línea de tendencia muestra que el porcentaje de empleados directos tiende a incrementarse. Empero, bajo las actuales condiciones de globalización, es necesario incorporar a la plantilla laboral a los llamados trabajadores del conocimiento (mente de obra), los cuales se consideran bienes de capital y su productividad apuntala en principio a obtener calidad óptima, la máxima; representan una ventaja competitiva significativa, ya que su trabajo suele traducirse en productividad e innovación.

En contra parte la figura 5 ilustra que las mismas empresas poseen un mínimo porcentaje de trabajadores de conocimiento, además con una línea de tendencia negativa, es decir en el futuro se prevé una disminución de dicho porcentaje. Lo que representa un área de oportunidad, dado que su incorporación puede apoyar a que las empresas puedan mantenerse o tornarse competitivas; puesto que este tipo de

trabajador genera conocimiento nuevo y útil, estudia y mejora los procesos, además está enfocado a resultados (Drucker, 1999, p. 161, 174).

Figura 5 Cuantificación de trabajadores del conocimiento
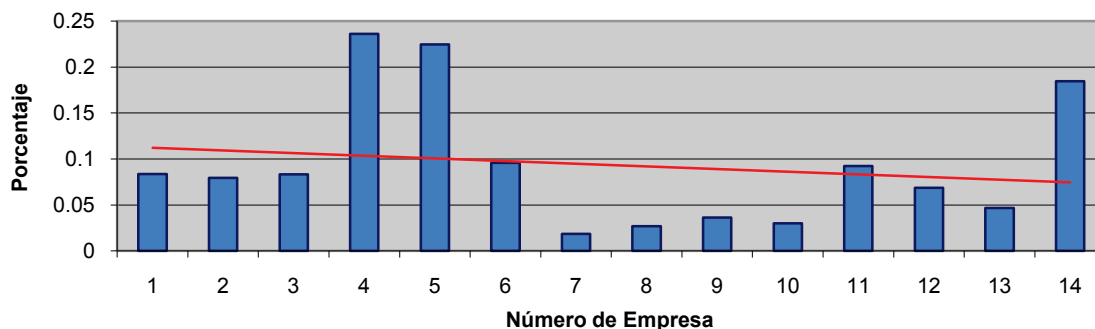
Fuente: Elaboración propia a partir del análisis de la encuesta

Por otra parte se preguntó sobre el porcentaje de trabajadores capacitados a lo largo del año y de las actividades de capacitación al personal, la figura 6 muestra que un 42.85% ha capacitado hasta el 25% de su personal y el 42.84% ha capacitado al menos al 50% del personal. Esta actividad es muy importante dado que es la principal estrategia aplicada para diseminar el conocimiento a fin de poder mejorar las competencias de los trabajadores y asegurar la calidad y productividad en cada una de las tareas desempeñadas.

Figura 6 Personal capacitado por año
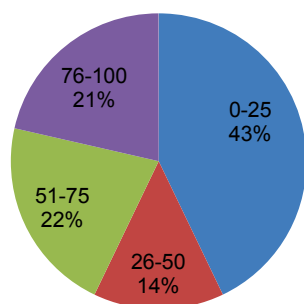
Fuente: Elaboración propia con base en resultados

Respecto a los temas de capacitación, destacan dos de las catorce empresas estudiadas. Para diferenciarlas las denominaremos A y B. La planta A tiene el objetivo de aplicar 6σ en la solución de problemas, mientras la planta B lo aplica para la mejora estratégica. Ambas plantas están certificando a su personal de ingeniería. La planta "A" lleva cinco años con el proceso de capacitación, cuenta con dos master black belt (Son directivos de primer nivel responsables de los procesos a mejorar. Experto en calidad seis sigma, es el responsable de la implementación estratégica de seis sigma en la organización, es experto en control estadístico de procesos (consultado en http://www.isixsigma.com/dictionary/Master_Black_Belt-83.htm), cinco ingenieros certificados en nivel black belt (un especialista en Seis Sigma dedicado al desarrollo del programa y a la formación del resto de los empleados. Es el líder del equipo y responsable de los proyectos DMAMC (consultado en www.isixsigma.com/dictionary/Master_Black_Belt-83.htm) y

ocho green belt(un empleado de una organización que se ha entrenado en la metodología seis sigma y dirigirá a un equipo para la mejora de proceso o mejora de calidad como parte de su trabajo de tiempo completo. Posee un conocimiento extenso de los productos en su compañía, puesto que es una necesidad en su tarea de mejora de proceso. Es el siguiente nivel de responsabilidad, sirven de respaldo a los Black Belt (consultado en http://www.isixsigma.com/dictionary/Master_Black_Belt-83.htm). En la planta B el proceso es más reciente, inició hace sólo dos años, sin embargo está a punto de certificar a todo el personal de manufactura (incluyendo obreros) como yellow belt(Persona con conocimientos básicos sobre seis sigma, además puede participar en proyectos como experto en SME, pueden ser responsables en pequeños proyectos de mejora usando la metodología PDCA de Deming (consultado en http://www.isixsigma.com/dictionary/Master_Black_Belt-83.htm), tiene un master black belt, diez black belt y quince green belt.

Además, la planta A viene trabajando con Yokoten palabra japonesa utilizada para definir el concepto de "compartir las mejores prácticas". Implica que la empresa ponga en práctica un sistema de desarrollo mediante delegación, compuesto por círculos de calidad y un sistema de sugerencias. Los círculos de calidad se integran por los miembros del proceso, quienes realizan dos reuniones al día, una al arranque de la producción y otra al cierre, al correr la jornada sólo si es necesario, en las reuniones se analizan los resultados y en su caso se estudia una problemática detectada por alguno de los miembros y elaboran propuestas para su mejora.

Asimismo, la planta A tiene institucionalizada la técnica *8D´s* para analizar las causas raíz de los problemas y ha sustituido el *kanban* por *jidoka*, que significa verificación en el proceso, se usa cuando un miembro del equipo encuentra un problema en su estación de trabajo, puesto que son los miembros del equipo los responsables de corregir el problema - si ellos no pueden, ellos pueden detener la línea-. El objetivo de *jidoka* se resume como: Calidad asegurando 100% del tiempo.

También es importante indicar que una de las empresas desde hace dos años viene operando con *KYT*, Sistema de Predicción de Riesgos Japonés; que significa K: *kiken* (riesgo), Y: *yochi* (predicción) y T: *training* (entrenamiento). *KYT* opera bajo el *concepto de cero accidentes*, es una técnica que ha permitido a las empresas reducir en más del 70% los índices de accidentes, principalmente en Japón y en las organizaciones que lo han implementado, a la empresa en particular, argumenta la entrevistada, médico de la planta: "le ha apoyado a reducir en un 30% los riesgos de trabajo".

Asimismo y de acuerdo con el jefe de seguridad de la planta que aplica *KYT*, se trata de "un sistema que eleva la concentración del empleado para detectar riesgos potenciales en su lugar de trabajo, fortaleciendo la labor en conjunto para proponer soluciones efectivas. Así, resuelve problemas y peligros mediante la participación y colaboración de todos". Además indica que el sistema fue diseñado por Mitsuo Nagamachi con la intención de enseñar a las personas a actuar de manera segura mediante un entrenamiento basado en la predicción; por medio de la autodisciplina, que busca que los trabajadores se defiendan entre sí. Preferentemente se aplica en grupos de pocos trabajadores y es participativo. También explicó que el objetivo es la sensibilización humana como herramienta que garantice la aplicación del sistema. KYT consta de cuatro fases: la primera se denomina Análisis: Se reúnen los grupos de trabajo, reconocen los hechos, discuten las tareas diarias y la forma de cuidarse. La segunda es Detección, se identifican los puntos de riesgo o problemáticos. En tercer lugar: Propuesta, el grupo establece medidas para controlar o manipular los riesgos. Por último, la Implementación: se ponen en marcha las medidas de solución seleccionadas.

En cuanto a la capacitación de la mano de obra, es pertinente destacar que representa un problema, puesto que el nivel promedio de estudios de los trabajadores operativos es de primaria terminada, particularmente para el caso de los obreros, lo cual es muy bajo, por lo que las empresas deben invertir en complementar la formación requerida a fin de que puedan realizar sus tareas con eficiencia. Por ello un

50% de las plantas al año invierte en promedio el 0.50% de las ventas, mientras el 35.71% invierte más del 1% de las ventas en la formación de sus empleados, lo cual se destina a cursos principalmente y becas para aquellos trabajadores que desean continuar su formación. Gracias a ésta formación, los gerentes de las plantas señalan que la mayoría de los trabajadores han alcanzado el nivel óptimo de preparación de acuerdo al puesto que desempeñan.

CONCLUSIONES

A través de la revisión teórica que antecede, se ha ilustrado como el FH ha venido recuperando el valor estratégico perdido en las empresas. Las cuales por varios años vieron soportada su competitividad en una serie de factores como la tecnología, la cercanía al mercado, la calidad de los productos, entre otros. En los últimos años se establece una fuerte relación entre la competitividad y la productividad. Donde el FH es un actor principal para detonar dicha productividad, puesto que el trabajador establece el ritmo de trabajo. Sin embargo, se debe señalar que hay una disparidad enorme entre la concepción de hombre en las distintas sociedades del mundo. En muchas regiones, el hombre tiene que trabajar en condiciones precarias y por un salario ínfimo, a fin de favorecer la reducción de costos que demanda el mercado para que una empresa pueda mantener su competitividad.

Ciertamente, una fórmula que lleva a la competitividad se enfoca en costos mínimos, pero no es una estrategia sostenible, en el actual mundo de los negocios el liderazgo y las funciones directivas son críticas para el curso continuo de éxito de las empresas en términos de competitividad global, desafortunadamente, como lo ilustran los resultados las empresas no poseen personal capacitado (mente de obra) hecho que genera dificultades para la oportuna solución de problemas y aprovechamiento de oportunidades.

Por ello, hoy día las empresas deben enfocar su competitividad en reunir personal competente, desarrollando el que se tiene y definiendo un perfil para los futuros empleados. De ello deriva la propuesta de que las empresas apliquen una fórmula que incluya capital humano y potencial de su FH. Es decir, que combinen estratégicamente las posesiones de los trabajadores como son: capacidad, experiencia, comportamiento, esfuerzo y tiempo. Empero debe reconocerse que para detonar el FH como ventaja competitiva, se debe gestionar el conocimiento individual de forma tal que esté disponible para el resto de los miembros de la empresa, razón por la cual es importante diseñar y mantener un sistema de información que resguarde el conocimiento organizacional a fin de que pueda ser consultado cuando sea necesario.

En conclusión, el FH es en la era del conocimiento la vía para hacer de una empresa una entidad competitiva, para lo cual demanda la gestión del conocimiento del FH a través de estrategias de ARH que favorezcan el aprendizaje organizacional, al mismo tiempo requiere la generación de una base de conocimientos de la empresa, que mediante las TIC este a disposición de toda la organización a fin de que la empresa aprenda. También es primordial que la ARH asuma sus nuevos roles. Al aplicar estos cambios las empresas podrán realizar la tesis de Pfeffer (1997): "construir ventajas competitivas a través de su gente".

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LA COPROPIEDAD Y SUS BENEFICIOS FISCALES EN MÉXICO

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ABSTRACT

Esta investigación fue realizada con base en la normatividad mexicana, con el propósito de analizar las disposiciones fiscales que afectan a las personas físicas en copropiedad, del Título IV, de la Ley del Impuesto Sobre la Renta (ISR). Se realizó un estudio descriptivo de tipo documental. Se llevó a cabo un análisis de las leyes aplicables a esta figura jurídica. Se plantearon y analizaron casos prácticos en los que se aplican las leyes relativas a la copropiedad, incluyendo la determinación de pagos provisionales de ISR, Impuesto Empresarial a Tasa Única (IETU) e Impuesto al Valor Agregado (IVA), y la determinación del Impuesto Anual, el cual comprende la actividad empresarial, el arrendamiento de bienes inmuebles y la enajenación de bienes. Esta actividad permitió identificar la aplicación de las leyes fiscales a esta forma de organización, definir el aspecto fiscal y determinar la carga tributaria en diversos tipos de copropiedades, considerando las reformas fiscales vigentes. Con base a los resultados obtenidos se presentan en este estudio una serie de recomendaciones para las personas físicas que obtienen ingresos de empresas familiares que les podrían ser de utilidad para disminuir su carga tributaria y favorecer a la vez su productividad.

INTRODUCCIÓN

La copropiedad ya se regulaba en la época de los romanos y era considerada un derecho real por excelencia. La figura de la copropiedad se perfecciona en el momento en que nace un derecho conjunto de varias personas sobre un mismo bien u objeto. En el caso de la copropiedad cada individuo es propietario de una cuota ideal, indivisible por no ser material, por tanto no sujeta a reparto entre los copropietarios. La división física del bien origina la extinción de la copropiedad. En México la figura de la copropiedad encuentra su regulación en la normatividad mexicana, el derecho a la propiedad se establece en el artículo 127 constitucional; por su parte el Código Civil Federal (CCF) establece en forma específica "la copropiedad se da cuando una cosa o un derecho pertenecen pro-indiviso a varias personas, denominándose copropietarios a cada una de éstas." Así mismo la legislación fiscal mexicana regula a la figura jurídica de la copropiedad en sus diferentes leyes, con el objeto de que las personas físicas que obtienen ingresos en copropiedad puedan pagar en forma correcta y oportuna sus impuestos.

El derecho a la copropiedad en México se puede originar de diferentes formas, una de las principales nace de manera natural e involuntaria, por lo regular –los bienes o derechos heredados de padres a hijos en forma irregular por la ausencia de un testamento notariado que especifique la división de derechos; la otra forma de origen de esta figura es voluntaria y nace cuando dos o más individuos deciden adquirir derechos conjuntos sobre un mismo bien tangible o intangible con la finalidad de servirse de él o explotarlo en forma conjunta.

De acuerdo con el artículo 31 de la Constitución Política Mexicana, es obligación de los mexicanos contribuir para el gasto público de la Federación, del Distrito Federal, de la Entidad Federativa y del Municipio en que se resida, en forma proporcional y equitativa según lo dispongan las leyes. Independientemente de la forma en que se originó la copropiedad, los bienes y derechos de ésta al ser explotados con fines económicos generan ingresos, los cuales están sujetos al pago de impuestos.

En México uno de los grandes problemas existentes en el ámbito jurídico es la complejidad para interpretar las disposiciones fiscales que establecen la obligación de determinar y pagar los diferentes tipos de impuestos. El presente trabajo de investigación tiene como propósito identificar la aplicación de las leyes fiscales a esta forma de organización, definir el aspecto fiscal y determinar la carga tributaria en diversos tipos de copropiedades, considerando las reformas fiscales vigentes.

REVISIÓN LITERARIA

Para llevar a cabo la revisión literaria sobre la copropiedad, en primera instancia se hace un análisis de las principales disposiciones legales establecidas en las diferentes leyes que integran la normatividad mexicana. Se analizó lo establecido en el Código Civil Federal (CCF) sobre esta figura jurídica en sus artículos del 938 al 979. Este ordenamiento establece que "la copropiedad se da cuando una cosa o un derecho pertenecen pro-indiviso a varias personas, denominándose copropietarios a cada una de éstas." Este mismo ordenamiento establece en su artículo 946 que para la administración del bien en copropiedad deben tomarse en cuenta los acuerdos tomados por la mayoría de los copropietarios; en caso de que no haya mayoría será el juez del lugar donde se encuentra el bien referido quien decida quien debe administrarlo. Así mismo el CCF reglamenta en su artículo 950 la obtención de ingresos de un bien en copropiedad y dispone que cada copropietario tiene derecho a la parte alícuota y a los frutos y utilidades que de ella provengan; además la podrá vender, ceder, arrendar o hipotecar. Los copropietarios gozarán del derecho del tanto y tendrá preferencia quien represente la mayor parte, si son iguales el designado por la suerte, o conforme al convenio que realicen.

Por su parte el Código Fiscal de la Federación (CFF) en su artículo 27 establece que cuando se inicie actividades en una copropiedad, tanto el representante común, como sus representados deberán solicitar su inscripción al Registro Federal de Contribuyentes (RFC) ante el Servicio de Administración Tributaria. Aunado a lo anterior, los copropietarios deben solicitar a la misma autoridad fiscal su certificado de firma electrónica avanzada y proporcionar la información relacionada con su identidad, su domicilio fiscal y en general sobre cualquier cambio o modificación a su registro fiscal.
Por su parte la Ley del Impuesto Sobre la Renta (LISR) en su artículo 108 primer párrafo, establece que las personas físicas que obtienen ingresos derivados de bienes en copropiedad deben nombrar a uno de los copropietarios como representante común de todos ellos. La persona en quien recaiga el nombramiento debe cumplir las obligaciones fiscales por cuenta propia y de los demás copropietarios. Esta ley en su artículo 129, primer párrafo, establece que el representante común determinará la utilidad fiscal o en su caso la pérdida fiscal y la distribuirá entre los copropietarios a efectos de que cada uno de ellos determine el impuesto que le corresponda. Así mismo se establece que en el caso de incumplimiento en el pago de impuestos por parte del representante común, los copropietarios son responsables solidarios.
La ley del Impuesto al Valor Agregado (IVA) establece en su artículo primero, la obligación de pagar este impuesto a las personas físicas o morales que en México realicen las siguientes actividades: la enajenación de bienes, la prestación de servicios independientes, el arrendamiento de bienes, así como la importación de bienes o servicios. Para determinar el impuesto establecido en esta ley debe aplicarse la tasa del 15% a los actos o actividades que se realicen. Así mismo esta ley establece en su artículo 32, antepenúltimo párrafo, que los contribuyentes que tengan una negociación en copropiedad y los integrantes de una sociedad conyugal deben nombrar un representante común a través de aviso ante las autoridades fiscales, y será éste quien a nombre de los copropietarios o consortes cumpla con las obligaciones fiscales. Para ello, deberá considerar el total del impuesto que la copropiedad haya trasladado a terceros y el que ésta haya pagado en sus compras gastos o inversiones durante el periodo, siempre que se reúnan los demás requisitos previstos en ésta ley, la diferencia será el impuesto a pagar dentro del periodo establecido.
A partir del primero de enero de 2008 entró en vigor la Ley del Impuesto Empresarial a Tasa Única, ésta ley establece en su artículo primero la obligación de pagar el Impuesto Empresarial a Tasa Única (IETU)

al empresario residente en México por los ingresos que obtenga, con independencia de la ubicación de la fuente de donde provengan. También están sujetos al pago del impuesto quienes residan en el extranjero y que tengan un establecimiento permanente en el país por los ingresos atribuibles a dicho establecimiento, sin importar el lugar donde se generen. Las actividades sujetas al pago del IETU de acuerdo a esta ley en su primer artículo son: la enajenación de bienes, la prestación de servicios personales independientes y el arrendamiento de bienes muebles o inmuebles. Este impuesto se determina aplicando la tasa del 17% a la cantidad de ingresos obtenidos, disminuidos con las deducciones autorizadas por este ordenamiento jurídico. La ley del IETU no considera a la copropiedad como figura jurídica sujeta al pago de este impuesto, sin embargo los integrantes de la copropiedad ya sean personas físicas o morales si son sujetos al pago del impuesto. Cada copropietario debe determinar y enterar el IETU en forma independiente, para ello, debe considerar como base para su cálculo la proporción de utilidad que le corresponde de acuerdo a su participación dentro de la copropiedad.

Una vez analizadas las disposiciones de ley sobre la copropiedad consideramos conveniente pasar a revisar lo escrito por varios autores sobre este tema. Así, se encontró que según De Ibarrola (1977), el derecho de un copropietario sobre el bien común no recae en una parte específica o determinada de este, su parte alícuota se refiere al derecho sobre la cosa y sus frutos, derecho que dividido entre sus titulares engloba todas las partes en que se encuentre dividido el objeto común.

Mas tarde comenta Rojina (1991) que sobre la copropiedad existen dos concepciones: la romana que atribuye al copropietario una parte alícuota del objeto en copropiedad, desde el punto de vista aritmético en función a una idea de proporción. Esta parte sólo se manifiesta mentalmente pues el objeto que genera el derecho es indivisible; la concepción germánica no reconoce cuotas o partes ideales individuales, pues sostiene que el derecho pertenece en su conjunto a los condueños. Por su parte (Ibíd.) comenta que la parte alícuota de un copropietario es fundamental para poder entender el derecho que éste tiene sobre el bien común, mismo que puede ser enajenado, arrendado o cedido por su titular. Desde la perspectiva de Luna (2008), se considera a la copropiedad como un tema complejo tanto en el área civil como en el área fiscal, sin embargo debe manejarse como una herramienta útil en la toma de decisiones la cual incluye la opción de beneficios fiscales.

METODOLOGÍA

En el desarrollo de este trabajo de investigación se analizó en primer término la normatividad mexicana, con el propósito de analizar las disposiciones fiscales que afectan a las personas físicas en copropiedad, del Título IV, de la Ley del Impuesto Sobre la Renta (ISR). Este trabajo es de tipo descriptivo documental. Hecha la revisión de las disposiciones fiscales se procedió a la elaboración de casos prácticos con la finalidad de determinar los impuestos: (ISR, IVA y IETU) que debe pagar el representante común de una copropiedad y otra persona que paga en forma individual sus impuestos. Después de determinar el monto de impuestos causados a través de la figura jurídica de copropiedad, y habiendo hecho la comparación contra los causados por un contribuyente que tributa en forma individual, se procede a hacer una serie de recomendaciones considerando los beneficios fiscales para personas físicas que obtienen ingreso de empresas familiares las cuales le serán de utilidad para disminuir su carga tributaria, y por ende estar en posibilidad de incrementar la competitividad de su empresa. Los resultados obtenidos a través de la resolución de casos prácticos permitieron plantear una serie de conclusiones.
Resultados

Los resultados de esta investigación se presentan en dos categorías: los obtenidos de la revisión de las disposiciones fiscales aplicables a la copropiedad y los obtenidos a través del análisis de los casos prácticos que presentan el tratamiento de esta figura jurídica. En la revisión de las disposiciones fiscales aplicables a la copropiedad, se encontró que aunque la ley del IETU no considera a la copropiedad como figura jurídica sujeta al pago de este impuesto, los integrantes de la copropiedad ya sean personas físicas o

morales si son sujetos al pago del impuesto, por lo que la citada ley no establece beneficio alguno hacia la copropiedad.   Asimismo se encontró que la ley del ISR permite que los ingresos obtenidos en copropiedad sean divididos entre los miembros que la integran a efecto de que cada uno de ellos cuente con la información para determinar sus pagos provisionales de impuesto, así como el impuesto anual.

En cuanto al análisis de la copropiedad a través de casos prácticos se inició por su planteamiento de la siguiente manera:

Caso Práctico No. 1
Consideremos el caso de una persona física que obtiene ingresos en forma individual de una empresa familiar, la cual para el año 2009 obtuvo ingresos para efectos de ISR, IVA e IETU por un importe de $627,580.00 mensuales. Las deducciones autorizadas fueron por un importe de $376,538.00, información que se debe considerar para determinar el pago provisional mensual de noviembre de los tres impuestos.

Tabla 1: Determinación de pago provisional de ISR, IVA e IETU 2009 Ingresos obtenidos en forma individual de una empresa familiar.

Tipo de Impuesto	Ingreso mensual (IM)	Deducciones autorizadas (D.A)	Base de Impuesto	Impuesto determinado	Impuesto a pagar
ISR	627,580	376,538	251,042	66,931	66,931
IVA	62,758	30,425	IM-DA	32,333	32,333
IETU	627,580	376,538	251,042	42,677	0.00

En esta tabla se observa que la persona física no requiere pagar el IETU debido
a que éste es absorbido por el ISR.

Caso Práctico No. 2

Consideremos el caso de una persona física que obtiene ingresos en copropiedad de una empresa familiar, la cual para el año 2009 obtuvo ingresos para efectos de ISR, IVA e IETU por un importe de $627,580.00 mensuales. Las deducciones autorizadas fueron por un importe de $376,538.00, información que se debe considerar para determinar el pago provisional mensual de noviembre de los tres impuestos.

Tabla 2: Determinación de pago provisional de ISR, IVA e IETU 2009 Ingresos obtenidos por una persona física en copropiedad de una empresa familiar.

Tipo de Impuesto	Ingreso mensual (IM)	Deducciones autorizadas (D.A)	No. de Copro-pietarios	Base de Impuesto Individual	Impuesto Individual	Impuesto Total	Impuesto por Pagar
ISR	627,580	376,538	6	41,840	8,354	50,124	50,124
IVA	62,758	30,425	0	0	0	47,667	0
IETU	627,580	347,185	0	0	0	28,040	28,040

En esta tabla se observa que la persona física que obtiene ingresos en copropiedad tiene una disminución de ISR de 25% en comparación con la
persona física que obtiene sus ingresos en forma individual.

En los casos de estudio planteados, al analizar la determinación del Impuesto sobre la Renta que paga la persona física que obtiene ingresos en copropiedad de un establecimiento familiar se puede observar que tiene una disminución en la carga tributaria, al dividir la utilidad entre el número de copropietarios, al aplicar una tasa de impuesto menor.

CONCLUSIONES

Tras realizar el análisis de la normatividad mexicana referente a la copropiedad y su aplicación en los casos planteados en este estudio, se llega a las siguientes conclusiones:

Primera.- Se tiene una reducción de la carga fiscal al obtener ingresos en copropiedad, ya que se permite distribuir la base de impuesto entre los miembros de la copropiedad y por tanto, entre menor sea la base para determinar el impuesto menor será el impuesto que resulte a pagar.

Segunda.- La ley del IETU y del IVA no establecen beneficio alguno para las personas físicas que obtienen ingresos a través de una copropiedad.

Tercera.- Considerando que la persona física que paga ISR puede compensar este impuesto contra el IETU, se concluye que la figura de la copropiedad sí contiene beneficios fiscales.

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LA EXCELENCIA EN LA GESTIÓN EMPRESARIAL A TRAVÉS DEL MARKETING DE CLIENTES EN UN ENTORNO DE ELECCIONES

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RESUMEN

En este artículo se describen técnicas de marketing de clientes, investigación de mercados y estrategias de comunicación para dotar al lector de una agenda básica de acciones que coadyuven a poder ganar las elecciones. Los postulados implícitos inherentes a todo el esquema que justifica la batería de acciones están basados en la visión del votante como cliente de nuestro producto (candidato). Se comienza con una breve introducción al marketing de clientes y, más concretamente, al modelo LCM (Loyalty Customer Model). El lector deberá, mentalmente, sustituir las palabras cliente por votante y compra por voto a nuestro favor. El LCM tiene por objetivo identificar los diferentes conceptos que debe incluir toda gestión de clientes y establecer las conexiones que existen entre ellos. El modelo posee dos ejes de desarrollo. El primero establece los diferentes tipos de relación que pueden establecerse con los clientes, mientras que el segundo tiene en cuenta los elementos necesarios de soporte para que las acciones de gestión sean realmente efectivas. Rebasada la parte inicial, el artículo se introduce de lleno en una campaña electoral, se explica que ella dependerá de múltiples factores como son el tamaño del electorado, el desarrollo de los medios de comunicación, el perfil de los votantes…. No obstante, lo ideal sería considerar que estamos en campaña desde el mismo día en que finalizan las anteriores elecciones. Suponiendo este timing, se pueden plantear tres fases básicas en toda campaña: Fase de gestión; Fase de maduración y Fase de lanzamiento. En la parte de resultados a exponer se describen las acciones a realizar, fundamentalmente en las fases de maduración y lanzamiento, pues la fase de gestión corresponde más al día a día de todo político.

INTRODUCCIÓN

Hay tres razones clave que permiten identificar la gestión de clientes como una exigencia necesaria en la dirección comercial.

El primero es que las empresas no pueden seguir perdiendo clientes como hasta ahora. La sangría promedio de clientes suele estar entre el 15% y el 35% anual. Esta sangría de bajas es una de las principales causas de quiebres empresariales, pues implica una cuantiosa pérdida de los beneficios que dejan de aportar los clientes perdidos.

Sin embargo, al no quedar reflejado "en libros", el coste de oportunidad por la pérdida de clientes no se tiene en cuenta a la hora de analizar las causas de caída de EBITDA.

La segunda razón es de coste. El coste de adquirir un nuevo cliente (desconocido y de resultados futuros inciertos) es del orden de cinco veces el coste necesario para mantener un cliente (conocido y de rentabilidad asegurada) fiel a nuestra empresa. El principal problema es que la mayoría de las empresas no se detienen a calcular estos costes por lo que no son conscientes de su dimensión real.

La tercera razón es el enorme potencial que tenemos en nuestra propia cartera de clientes. Si consiguiéramos hacer leales a nuestros clientes, los beneficios provendrían no sólo por los ingresos obtenidos con estos clientes sino sobre todo por la recomendación que harían a sus conocidos, familiares y amigos.

REVISIÓN LITERARIA

La literatura sobre este tema es escasa, Jose Daniel Barquero es quien más se destaca con sus contribuciones a esta temática siendo el uno de los exponentes más decidido en el tema de vincular el trabajo del marketing de clientes con todo lo que es el proceso electoral en un país. Sirven de base o de diversas formas se relacionan con este tema, trabajos de Xifra Triadú, Jordi (2001-2005) muy vinculados a las relaciones públicas, la gestión de la comunicación y la planeación estratégica y otros como los de Buil, Pilar (2001) quien en su tesis de doctorado en la Universidad de Navarra abunda en un modelo entre relaciones públicas y el marketing. Finalmente Kotler (1987) en una visión amplia del marketing, toca aspectos que se relacionan con esta idea.

METODOLOGÍA

En general, cada cliente leal suele recomendar nuestra empresa a 5 clientes potenciales. Si no gestionamos correctamente a nuestros clientes y generamos un elevado grupo de insatisfechos, es conocido que, en promedio, cada uno de ellos recomendará negativamente nuestra empresa a unos 20 potenciales clientes.

La metodología del trabajo se basa en vincular la técnica del Loyalty Customer Model con la campaña electoral ya que todas ellas necesitan de un plan de campaña basado en el conocimiento.

El primero en comenzar a preparar un verdadero plan de campaña basado en el conocimiento fue Kennedy en 1960, que estuvo 3 años preparando su campaña presidencial. Hoy en día todas las elecciones vienen precedidas de un plan de campaña.

Éste nos permitirá trazar las líneas básicas de nuestra campaña y poner orden allí donde podría haber caos. De esta forma conseguiremos que el equipo de asesores, consultores, simpatizantes y resto de personas implicadas, avancen en una dirección común y tengan claros sus cometidos.

Obviamente el plan de campaña deberá ser flexible y adecuarse a las diversas circunstancias del momento, pero es absolutamente necesario disponer de una lista de tareas y pasos a ejecutar para poder llegar al final de campaña con todos los deberes terminados. De hecho el plan de campaña suele prepararse desde el día de la votación hacia atrás.

Fundamentalmente en este artículo de habla de las fases de maduración y lanzamiento, pues la fase de gestión corresponde más al día a día de todo político.

RESULTADOS

Queda demostrado al introducir el LCM en la campaña que el plazo natural de una campaña electoral dependerá de múltiples factores como son el tamaño del electorado, el desarrollo de los medios de comunicación, el perfil de los votantes. No obstante lo ideal sería considerar que estamos en campaña desde el mismo día en que finalizan las anteriores elecciones. Suponiendo este timing, se pueden plantear tres fases básicas en toda campaña:

Fase de gestión: Desde el final de la anterior campaña hasta un año antes de las elecciones. En esta fase el objetivo es que el electorado sepa lo bien que hacemos las cosas y lo mal que lo hacen nuestros competidores, así como que nuestro representante vaya siendo cada vez más conocido y popular. Fase de maduración: Desde un año antes de las elecciones hasta 2/3 meses antes de las elecciones. Es el momento clave de la campaña. Debemos valorar nuestro posicionamiento frente al electorado y resto de competidores y perfilar cuáles deben ser nuestras líneas maestras de definición. Fase de lanzamiento: Los últimos 2 a 3 meses. Es el sprint final en el que ya no podremos pensar sino actuar, confiando en que las líneas definidas en la fase de maduración son las correctas.

Dentro de la fase de maduración una de las más atractivas es el Análisis neutro que comprende El conocimiento de nuestros competidores: cómo son, cómo les podemos atacar, en qué puntos son muy fuerte. Este análisis, para estar bien efectuado también deberíamos hacérnoslo nosotros mismos para identificar nuestros puntos flacos y aquellas áreas de las que podemos sacar provecho. Luego sigue el Análisis incisivo caracterizado por la necesidad de conocer exactamente cuáles son los puntos flacos y fuertes de cada uno de los que competimos en campaña.

Para ello es necesario realizar una investigación de mercado con potenciales votantes que incluya lo siguiente: Inquirir acerca de los tres rasgos positivos y tres rasgos negativos de cada político en la campaña. Mostrar frases ó mensajes dados por los diferentes candidatos a fin de que el potencial votante esté de acuerdo o en desacuerdo con ello. Plantear de hipótesis del tipo "si usted supiera que el candidato A tuvo problemas con el alcohol, ¿le votaría?"

A esto le sigue Análisis de los factores críticos de decisión ya que toda decisión humana se basa en un proceso similar caracterizado por las preguntas: ¿Cuáles son las cosas que realmente me importan? (criterios de decisión); ¿Cómo afectará mi decisión en estos criterios?

Luego siguen Análisis cualitativos y cuantitativos, Análisis de la dinámica de votos: tendencias y flujos y finalmente Análisis de los votantes pues llegamos ahora a una de las claves para ganar unas elecciones. No basta con tener claras las ideas y conocer bien a los adversarios y el marco del voto. Hacer falta conocer a los votantes.

Un votante es, en el fondo, como un cliente y primero hay que tener eso claro en la cabeza: El político está donde está porque un determinado mucho de votantes/clientes confían en él y le compran su producto.

Un apartado específico del análisis de votantes es el análisis geográfico. En la mayoría de los países las votaciones no se calculan proporcionalmente a los votos obtenidos. En general se otorga un número determinado de escaños a cada demarcación que engloba la elección, y que dentro de esta demarcación los escaños se consiguen mediante una fórmula de proporcionalidad que suele dar más valor a los votos obtenidos por los partidos más votados y que no tiene en cuenta los votos en blanco, nulos y de partidos poco votados. Por tanto es mucho mejor tener pocos votos acumulados en determinadas demarcaciones que muchos votos desperdigados.

Anteriormente se había definido claramente el LCM (Loyalty Customer Model), que es el modelo por el que se deberían regir todas las empresas que tengan un contacto de medio/largo plazo con sus clientes. La revisión y aceptación de este concepto en el tema elecciones es la clave para entender este artículo ya que al igual que con los clientes, lo importante es tener contentos a nuestros votantes, es complicado captarlos, fácil perderlos y dificilísimo recuperarlos.

En la fase de lanzamiento es clave el mensaje, éste es un conjunto de ideas, frases y conceptos que deben configurar nuestra personalidad política. Al haber varios conceptos en uno estos pueden estar

segmentados, dirigiéndonos a cada perfil socio-demográfico con un mensaje específico, pero nunca deberán estar en contradicción.

Deberíamos proceder de la siguiente manera:

Elaborar un conjunto de ideas centrales. El tema de la campaña es una mezcla entre lo que quiere el votante, lo que el candidato puede ofrecer y lo que el opositor pone en la mesa. Para cada idea generar varias frases que vengan a decir lo mismo pero de diferente manera. Las frases deben ser muy vendedoras, claras, breves pero que aúnen lo que deseamos transmitir.

También es importante coordinar el verbo con los gestos del político a la hora de hablar. Grabar al líder comunicándolos tanto verbal como gestualmente. Mostrar a diferentes votantes potenciales las grabaciones y esperar una puntuación de cada una de ellas. Seleccionar aquellas frases más adecuadas

Ya en campaña: Marcar el ritmo frente a los competidores con un mensaje claro semanal a planificar previamente y en función del movimiento de campaña. Cada vez que el político se dirija a un segmento determinado su discurso deberá ir orientado hacia el mensaje que sabemos que es el adecuado para este perfil

Le sigue el tracking de campaña. Durante la campaña ya no estamos a tiempo de modificar mensajes y posicionamientos de forma drástica y cualquier cambio podrá ser interpretado como una contradicción y una debilidad por nuestra parte, pero sí que debemos tener tomado el pulso a la campaña y saber día a día cómo evolucionan las preferencias por los diferentes partidos. Y desde luego la Campaña mediática basada tanto en el uso de los medios Standard de comunicación (prensa, radio y TV) como en el conjunto de mítines y celebraciones llevadas a cabo por cada partido.

CONCLUSIONES

En el artículo se demuestra la estrecha relación o imbricación que existe entre toda aquella persona que se interesa por lo que comercializamos y que a la larga, mediante técnicas de mercadotecnia y relaciones públicas, se llegará a convertir en cliente y la relación que existe con el elector en una campaña de elecciones.

La palabra cliente proviene del griego antiguo y hace referencia a la "persona que depende de". Es decir, mis clientes son aquellas Personas que tienen cierta necesidad de un producto ó servicio que mi empresa puede satisfacer.

Esta afirmación sigue plenamente vigente en la actualidad y debería ser la base para definir la misión de la empresa si ésta se quiere orientar a sus clientes.

En realidad, el término cliente tiene un significado idéntico al de la palabra "public" del concepto Public Relations (mal traducido al español como Relaciones Públicas).

Así pues, la traducción correcta y verdadero objetivo del Public Relations no es otro que "Relaciones con mis públicos", entendiéndose por públicos los diferentes tipos de clientes con los que me relaciono.

Si consiguiéramos hacer leales a nuestros clientes, los beneficios provendrían no sólo por los ingresos obtenidos con estos clientes sino sobre todo por la recomendación que harían a sus conocidos, familiares y amigos. En general, cada cliente leal suele recomendar nuestra empresa a 5 clientes potenciales. Si no gestionamos correctamente a nuestros clientes y generamos un elevado grupo de insatisfechos, es

conocido que, en promedio, cada uno de ellos recomendará negativamente nuestra empresa a unos 20 potenciales clientes.

El LCM proporciona las bases para realizar una gestión de clientes global que no descuide ninguno de los procesos que afectan a la calidad de nuestra cartera
El principal valor añadido del LCM es que puede desagregarse en acciones concretas a las que imponer objetivos de resultados cuantificables que a la larga logrará que en un proceso de elecciones se salga o no vencedor o que en un proceso comercial se logre el cierre exitoso de la negociación.

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ORGANISMO ACREDITADOR, GARANTIZADOR DE LA CALIDAD EN PROGRAMAS EDUCATIVOS RECONOCIDOS: FACULTAD DE CIENCIAS ADMINISTRATIVAS, IES MEXICANA

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ABSTRACT

La sociedad esta actualmente reclamando una educación de calidad en todos los aspectos, y esta se logra creando una cultura de evaluación que permita impulsar la mejora continua en el ámbito nacional e internacional de los programas académicos en Educación Superior. En el ámbito de la educación superior, la acreditación es el enunciado de algún organismo con autoridad profesional mediante el cual da fe pública de la buena calidad de un proceso o producto. El organismo acreditador, después de una evaluación de un programa académico de Licenciatura o Técnico Superior Universitario, determina su acreditación cuando considera que la calidad educativa que ofrece es satisfactoria para la formación integral de los estudiantes.

INTRODUCCIÓN

En el Plan Nacional de Desarrollo (PND) 2006-2012 se menciona que: En un mundo cada vez más competitivo…. el conocimiento se ha transformado en el factor más importante para incrementar la competitividad del país. Por esta razón uno de los objetivos fundamentales del PND es: Fortalecer las capacidades de los mexicanos mediante la provisión de una educación suficiente y de calidad concentrando los esfuerzos nacionales en el logro de una profunda transformación educativa

Instancia Responsable, ¿Quién Acredita, Cómo Acredita?

Actualmente existen en México 52 organismos acreditadotes -en las diferentes disciplinas del saber- reconocidos por COPAES (Consejo para la Acreditación de la Educación Superior, A. C.), fundado el 24 de octubre de 2000, es la única instancia validada por la Secretaria de Educación Publica para conferir reconocimiento oficial a los organismos acreditadores de los programas académicos que se imparten en este nivel educativo en México.

Los organismos acreditadores reconocidos por el COPAES están facultados para llevar a cabo los procesos de evaluación conducentes a la acreditación de programas de nivel de licenciatura y de técnico superior universitario o profesional asociado, en áreas definidas del conocimiento, en las instituciones públicas y privadas de todo el país.

Los organismos acreditadores reconocidos por el COPAES utilizan un *Marco de referencia para la evaluación,* coherente con el Marco General de Referencia del COPAES, en el cual se establecen los criterios e indicadores para valorar, entre los más importantes, los siguientes aspectos:
- Personal académico
- Currículo
- Métodos e instrumentos para evaluar el aprendizaje
- Servicios institucionales para el aprendizaje
- Alumnos

- Infraestructura y equipamiento
- Investigación
- Vinculación
- Normatividad institucional que regula la operación del programa
- Conducción académico-administrativa del programa
- Proceso de planeación y evaluación
- Gestión administrativa y financiera

De ahí que la mayoría de modelos de autoevaluación de carreras que existen nunca dejen de preguntarse acerca del currículo, del perfil de egresado, de los procesos de enseñanza-aprendizaje, el equipamiento, tutorías, investigación, calidad de los docentes, seguimiento de los egresados, equipamiento y capacidad de gestión, todos estos relacionados a la formación académica.

Dado que cada disciplina o área del conocimiento posee particularidades en cuanto a las estrategias para desarrollar habilidades y el contexto en el que se desenvuelve existen diversas áreas diferenciadas. Las cuales se detallan a continuación:

Agronomía	*Enfermería*
Arquitectura	*Informática y Computación*
Ciencias del Mar	*Ingeniería*
Ciencias Químicas	*Medicina*
Ciencias Sociales	*Medicina Veterinaria y Zootecnia*
Contaduría y Administración	*Odontología*
Diseño	*Psicología*
Economía	*Turismo*
Derecho	*Farmacia y QFB*
Nutriología	*Biología*
Ciencias de la Comunicación	*Cultura de la Educación Física*

Es por esta diferenciación que surge -del seno de ANFECA (Asociación Nacional de Facultades y Escuelas de Contaduría y Administración)- CACECA (Consejo de Acreditación en la Enseñanza de la Contaduría y Administración) cuya filosofía institucional, como organismo acreditador, nos dice que su misión es "Crear una cultura de evaluación que permita impulsar la mejora continua de los programas académicos impartidos en las instituciones de educación terciaria, en las áreas de contabilidad, administración y otras afines, con calidad y pertinencia académica en el ámbito nacional e internacion al. Con miras a que todas las instituciones de educación terciaria que impartan programas académicos en las áreas de contaduría, administración y otras afines, que decidan efectuar el proceso de acreditación reciban un servicio profesional de calidad que les permita impulsar la mejora continua de sus programas académicos y acceder al reconocimiento y prestigio social.

La forma de operación se detalla a continuación: Este proceso se considera voluntario. Se solicita por los directivos de una institución de educación superior. Proceso de acreditación: 1. Autoanálisis por parte de la institución, 2. Análisis por parte de pares, 3. Elaboración de dictamen final. Lo anterior basado en ocho variables de evaluación las cuales forman parte de un programa de estudio. Las cuales son: Profesores, Estudiantes, Programa de licenciatura, Formación integral, Recursos financieros, Recursos-eficiencia, Extensión-investigación e información adicional. Mismos a los que se les considera una puntuación máxima requerida. Definición de una variable.

Tabla 1: Definicion de una Variable

PROFESORES	FORMACIÓN	
	Valor máximo	Valor Mínimo
1. Información requerida	5	
2. Información requerida	10	
3. Información requerida	5	
4. Información requerida	5	
5. Información requerida	10	
Total	35	

	Variable
	Categoría
	Estándares
	Criterios

Aquellos que la llevan a cabo deben de tener un entendimiento profundo de la institución, su misión, objetivos y logros. Además de marcar lo esencial para la acreditación y lo recomendable. Esta acreditación tiene una vigencia de cinco años y puede ser renovada mediante un nuevo proceso de evaluación, que se conoce como reacreditación.

La Facultad de Ciencias Administrativas, perteneciente a la Universidad Autónoma de Baja California UABC, cuenta con 4 programas académicos acreditados Licenciado en Administración de Empresas, Licenciado en Informática, Licenciado en negocios Internacionales y Licenciados en Contaduría. Mismos que se encuentran reacreditados. La experiencia que proporciona este tipo de procesos brinda una oportunidad para la innovación y la creatividad, y finalmente un proceso continuo de mejora de estrategias, practicas, procesos, servicios o productos.

CONCLUSIÓN

Es un medio para que las instituciones públicas ofrezcan a la sociedad prueba de su calidad y transparencia administrativa, poniendo de manifiesto que los recursos destinados a la educación superior se emplean adecuadamente y de la mejor forma. A los programas acreditados se les puede facilitar el acceso a financiamientos extraordinarios y apoyos adicionales.

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SÍNDROME DE BURNOUT EN UNA INSTITUCIÓN EDUCATIVA MEDIDA CON LA ESCALA DE MASLACH (1986)

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RESUMEN

Se trata de un estudio de caso en la Universidad autónoma de Baja California, donde se aplica el instrumento de Maslach (año) a una muestra de 70 empleados administrativos de las oficinas de la Universidad. El instrumento de medición esta formado por 22 ítems que se valoran con una escala tipo Likert. El sujeto valora, mediante un rango de 6 adjetivos que van de "nunca" a "diariamente", con qué frecuencia experimenta cada una de las situaciones descritas en los ítems. La factorización de los 22 ítems arroja en la mayoría de los trabajos 3 factores que son denominados agotamiento emocional, despersonalización y realización personal en el trabajo. Los hallazgos demuestran que el agotamiento emocional o síndrome de burnout que manifiestan los empleados los ha hecho bajar en su rendimiento y productividad laboral y algunos muestran signos físicos de enfermedades que se manifiestan en su ausentismo y apatía hacia su trabajo.

PALABRAS CLAVE: Agotamiento emocional, despersonalización, burnout, estrés laboral, realización personal, rendimiento y productividad

INTRODUCCIÓN

A pesar de que el Síndrome de Burnout está estrechamente relacionado con el stress laboral, en donde se constituye en una etapa final en la que el individuo queda en una situación de agotamiento de los propios recursos, este padecimiento tiene características propias que lo diferencian cualitativamente de un stress laboral agravado.

Recién en la década de los 70´s comenzaron a construirse modelos teóricos e instrumentos capaces de registrar este sentimiento crónico de desánimo, de apatía, de despersonalización, etc., la primera conclusión se de una manera casi inmediata: se trata de un problema, un síndrome que afecta principalmente a los trabajadores encargados de brindar servicios de atención personalizada. Burnout fue el nombre escogido (Freudenberger, 1974). Este se definió en un principio como un síndrome a través del cual el trabajador pierde el sentido de su relación con el trabajo, de modo que las cosas ya no le importan más y cualquier esfuerzo le parece inútil hacerlo.

El behaviorismo (interpretación de conductas espontáneas o reflexivas del ser humano) al igual que Watson (1913), después Skinner (1931), desarrollaron un concepto semejante, el que para este último se aproximaría al descubrimiento del behaviorismo y del psicoanálisis. Un recorrido por las diversas teorías psicológicas, del estudio de las causas que generan la neurosis, la depresión, la ansiedad, en fin, un problema que es latente: ¿Por qué las personas desisten?, ¿Por qué fracasan?, ¿Cómo y cuándo lo hacen si no hay una razón aparente?, ¿Qué está inmovilizando al sujeto? Falta de motivación, desamparo,

desesperación, pasividad, depresión, fatiga, stress y ahora Burnout, en última instancia se enfrentan con una misma cuestión: ¿Por qué las personas desisten?

El problema sigue quitando el sueño a psicólogos y profesionales afines, siempre trayendo contribuciones que van poco a poco ayudando a montar un cuadro explicativo. Los estudios sobre "mecanismos de control interno y externo", llevados a cabo por Rotter en 1961, nos enseña que podemos desarrollar una actitud frente a la vida, acreditando la posibilidad del control sobre el medio (mecanismos de control interno) o acreditando en el control por la suerte, destino u otros poderes externos (mecanismos de control externos).

A pesar de que existen numerosas investigaciones sobre el burnout a nivel internacional, poco se ha investigado en México que documente cuales son las vertientes del burnout en trabajadores administrativos considerando que los países latinos presentan una dinámica distinta y que el mexicano por naturaleza disfruta del compañerismo y del trabajo lúdico que realiza de una forma continua, lo que quizá, le permita disminuir la cantidad de estrés que acumula a lo largo del tiempo trabajado. El objetivo de esta investigación es describir y correlacionar las variables que inciden en el agotamiento emocional en una muestra de trabajadores universitarios a través del instrumento de Maslach (1986). Es importante documentar este impacto para prevenir y controlar las variables que intervienen en dicha problemática.

MARCO TEÓRICO

Fischer (1983) consideró el Síndrome del Burnout como un estado resultante del trauma narcisista de la persona que traía como consecuencia una disminución en la autoestima de los sujetos. Para Pines y Aronson (1988), el burnout es un estado en el que se combinan fatiga emocional, física y mental, sentimientos de impotencia y de baja autoestima. Iba acompañado de un conjunto de síntomas que incluía vacío físico, sentimientos de desamparo y desesperanza, desilusión y desarrollo de un autoconcepto y una actitud negativa hacia el trabajo y hacia la vida misma. En su forma más extrema, el síndrome del Burnout representa un punto de ruptura más allá del cual la capacidad de enfrentarse con el ambiente resulta severamente disminuida y es especialmente duro para personas entusiastas e idealistas.

Desde una perspectiva psicosocial, la mayoría de los especialistas que adoptan esta teoría, aceptan hoy la definición de Burnout elaborada por Maslach y Jackson en 1986, quienes lo consideran como una respuesta, principalmente emocional, situando los factores laborales y los organizacionales como condiciones y antecedentes. Los estudios de Maslach y Jackson afirman que el Síndrome del Burnout es un síndrome tridimensional que se desarrolla en aquellos profesionales cuyo objeto de trabajo son personas (usuarios) y añaden tres dimensiones características (Agotamiento emocional, despersonalización y bajo logro de realización profesional y/ o personal). Se experimentan sentimientos de fracaso personal (falta de competencia, de esfuerzo o conocimientos), carencia de expectativas y horizontes en el trabajo, y una insatisfacción generalizada. Las consecuencias: impuntualidad, ausentismo y abandono de la profesión, son síntomas habituales y típicos de esta patología laboral.

Si bien es cierto, la mayoría de las investigaciones actuales aceptan la perspectiva psicosocial, algunos autores discrepan de los supuestos planteados por Maslach y Jackson, entre los que se encuentran Farber (1983), Golembiewski (1993), Leiter y Maslach (1996) y Gil-Monte y Peiró (1997). Golembiewski (1993) asegura que el Síndrome del Burnout afecta a todo tipo de profesiones y no sólo a las organizaciones que se dedican a ofrecer servicios de atención personalizada. De lo que no parece haber dudas es que el Síndrome del Burnout comprende una serie de alteraciones físicas, de comportamiento y de tipo emocional que tienen su origen en factores individuales, laborales y sociales.

Los creyentes de la perspectiva psicosocial afirman que el síndrome hay que entenderlo como un proceso que se desarrolla secuencialmente, en lo referente a la aparición de sus rasgos y síntomas globales (Maslach y Jackson, 1986). En cambio, algunos autores, entre los que se encuentran Harrison y Cherniss

(1980) además de Gil-Monte y Peiró(1997), quienes discrepan en el síntoma que se presenta en primer lugar, la secuencia del proceso, el protagonismo que conceden a cada uno de sus síntomas globales, en la explicación de sus mecanismos explicativos y en las estrategias que el individuo puede emplear para manejarlo.

De ahí que hayan surgido varios modelos procesales que traten de explicar el desarrollo de este proceso. Los modelos que causan y/o generan el síndrome, siguiendo la revisión de Gil-Monte y Peiró (1997), han quedado estructurado en tres grandes teorías: socio-cognitivo, teoría del intercambio social y la teoría organizacional. Los instrumentos de medida de este síndrome se basan en la evaluación de la disminución o pérdida de recursos emocionales. El cuestionario más usado para esto es la escala de Maslach de 1986. Para algunos especialistas, sobre todo en el área clínica, no existe ninguna estrategia simple, capaz de prevenir o tratar este síndrome. Se pueden utilizan modelos complementarios que tratan al individuo, al grupo social o a la organización completa. En el ámbito personal, se han utilizado técnicas de afrontamiento de stress y ensayo conductual.

Además pueden utilizarse técnicas de entrenamiento en relación y autocontrol. Es fundamental la orientación a los nuevos profesionales, estableciendo cursos de formación continua, mejorar las relaciones interpersonales y el soporte social entre compañeros y superiores. Para poder hacerle frente al Síndrome del Burnout, es imprescindible fortalecer los vínculos sociales entre los trabajadores. Por último, se sugiere que a escala institucional debería fomentarse el soporte real al profesional afectado, constituyendo grupos de expertos afectados capaces de ofrecer la ayuda necesaria.

Al igual que Maslach, autores como Gil-Monte y Peiró (1997), coinciden en la formulación de propuestas que puedan ayudar a evitar o prevenir el Síndrome de Burnout como: evitar sobrecargarse de tareas y menos si no forman parte de las tareas habituales, utilizar los canales de comunicación, averiguar si otras personas han pasado por lo mismo y preguntarles cómo lo solucionaron, delimitar las funciones, aprender a controlar las emociones, etc. A pesar de todo lo que se ha comentado, aún puede existir la duda con respecto a lo siguiente: ¿Cuál es la diferencia entre estrés laboral y Síndrome del Burnout?

El estrés laboral tiene aspectos positivos y negativos; en ocasiones la gente tiene que estar estresada en su trabajo para poder funcionar. Y eso es bueno en cuanto la persona pueda controlar el nivel, frecuencia y duración del estrés. El Síndrome del Burnout es sólo una de muchas maneras que tiene de progresar el estrés laboral. Es muy frecuente en profesionales de servicios por las condiciones de trabajo que tienen. - Muchas de las acciones de las empresas -programas de balance vida-trabajo, planes de motivación, capacitación e incorporación de nuevas Tecnologías- buscan el beneficiar a los trabajadores. Sin embargo, se dice que el Síndrome de estar Quemado por el Trabajo se está expandiendo. ¿No es contradictorio?
La aparición del Síndrome del Burnout, es entendido como una respuesta al estrés laboral crónico, el cual se debe a cambios sociodemográficos, organizacionales e interpersonales. En el nivel social hay nuevos fenómenos que afectan el mundo laboral. El más llamativo es la sociedad de la queja, por la que los ciudadanos, dentro de la cultura de acceso a los servicios, exigen, a veces, cosas imposibles. Los trabajadores se ven incapaces de poder atender esas demandas, entre otras cosas porque en ocasiones no tienen los recursos para dar respuesta. El ciudadano hace responsable a la persona que tiene enfrente porque entiende que es la institución.

El término Burnout se tomó de la industria aeroespacial, que significa agotamiento del carburante de un cohete como resultado del calentamiento excesivo. La traducción literal de este término es "estar quemado". Se trata de un síndrome clínico descripto en 1974 por Herbert Freudenberger, psiquiatra que trabaja en una clínica para toxicómanos en NY, este término hace referencia a la idea de quemar, arder o consumirse que sufren los que están superados por las situaciones que deben enfrentar. Las "victimas" suelen ser personas con actitudes de hiperresponsabilidad y que en las organizaciones de trabajo cumplen funciones para tapar las comúnmente llamadas deficiencias.

El Síndrome del Burnout es una patología severa que suele derivarse de stress laboral. Es un cuadro crónico en el que se experimenta agotamiento emocional, el cual se entiende como una disminución y/o perdida de los recursos emocionales; falta de realización, la cual hace que se perciba el trabajo de forma negativa, bajo situaciones de insuficiencia profesional y bajos niveles de autoestima; y una despersonalización, la que se observa con la aparición de actitudes negativas de insensibilidad en la persona.

TEORÍAS y MODELOS RELACIONADOS CON EL BURNOUT

La teoría de desamparo de Seligman (1976), la cual asegura que aprendemos a no responder, o que nuestras respuestas no son capaces de librarnos de nuestros problemas, que tanto hacen responder de una u otra forma. Con anterioridad, la teoría de alineación, surgida con Marx y tantas veces utilizada por la psicología, "resalta las consecuencias objetivas, económicas, empujando a los ciudadanos al camino de la pasividad, la pérdida de la crítica." (Gil-Monte y Peiró, 1997). La teoría del Síndrome del Burnout tampoco surge por casualidad, misma que se dispone a comprender las contradicciones en el área de prestación de servicios, exactamente cuando la producción del sector primario desciende y el sector terciario viene a ocupar su lugar. Por lo tanto, es preciso reconocer que el Síndrome del Burnout es otra moda, otra promesa que nos permite intentar comprender nuestro ancestral sentimiento de vacío. Otra vez ligada a su tiempo: Burnout es un síndrome de fin de siglo, y, otra vez trajo y traerá contribuciones importantes. El síndrome de final de siglo atacando a los trabajadores de final de siglo. A continuación se presenta una tabla de modelos del Síndrome de Burnout, de acuerdo a varios autores así como el tipo de variable que miden.

MODELOS	*AUTOR*	*AÑO*	*VARIABLES*
Competencia Social	Alice Harrison	1983	Autoeficacia percibida
Cherniss	Matt Cherniss	1993	Autoeficacia percibida
Pines	Pines	1993	Autoeficacia percibida
Autocontrol	Thompson, Page y Cooper	1993	Autoconfianza
Comparación Social	Buunk y Schaufeli	1993	Falta de equidad
Hofboll y Fredy	Hofboll y Fredy	1993	Falta de equidad
Golembiewski	Golembiewski	1993	Salud de la Organización
Cox, Kuk y Leiter	Cox, Kuk y Leiter	1993	Salud de la Organización
Winnubst	Winnubst	1993	Salud de la Organización
MBI	Leiter, Maslach y Jackson	1996	Baja eficacia personal, agotamiento y cinismo
Estrés laboral	Gil, Monte y Peiró	1997	Despersonalización, agotamiento emocional, disminución de la eficiencia personal

Fuente: investigación propia

ESTUDIOS RELACIONADOS A BURNOUT

En los primeros años de la década del 70, un estudio con profesionales relacionados al tratamiento de usuarios de drogas mostró que, después de algunos meses de trabajo, estos profesionales compartían algunos síntomas que ya habían sido observados y estudiados, pero en forma aislada (Freudenberger, 1974). Se podía observar el sufrimiento. Algunos decían que ya no veían a sus "pacientes" como personas que necesitaban de cuidados especiales, dado que ellos no se esforzaban por dejar de usar drogas. Otros decían que estaban tan cansados que a veces ni deseaban despertar para no tener que ir al trabajo.

Otros afirmaban que no lograban cumplir los objetivos que se habían imaginado. Se sentían incapaces de modificar el status quo; se sentían derrotados. A estos síntomas, ahora buscados y analizados en conjunto, se le atribuye el nombre de Síndrome del Burnout. La importancia del trabajo de Freudenberger fue exactamente nombrar un sentimiento que ya estaba allí. Por otra parte, una investigación llevada a cabo en la Universidad de Extremadura (España), traduce al término anglosajón Burnout, como "estar quemado", desgastado, exhausto y perder la ilusión por el trabajo. En dicha investigación, también se coincide en que aunque no existe una definición unánimemente aceptada sobre Burnout, sí parece haber consenso en que se trata de una respuesta al estrés laboral crónico, una experiencia subjetiva que engloba sentimientos y actitudes con implicaciones nocivas para la persona y la organización, para lo cual hacen referencia a diferentes autores. Gil-Monte y Peiró (1997) han afirmado que el síndrome del quemado puede estudiarse desde dos perspectivas, clínica y psicosocial. La perspectiva clínica asume que el Síndrome del Burnout como un estado a la que llega el sujeto como consecuencia del stress laboral y la psicosocial, lo define como un proceso con una serie de etapas que se generan por interacción de las características personales y del entorno laboral. Fue desde la perspectiva clínica que Freudenberger utilizó el término por primera vez en 1974.

METODOLOGÍA

El Maslach Burnout Inventory (MBI) es un instrumento en el que se plantea al sujeto una serie de enunciados sobre los sentimientos y pensamientos con relación a su interacción con el trabajo. Es el instrumento que ha generado un mayor volumen de estudios e investigaciones, formado por 22 ítems que se valoran con una escala tipo Likert. El sujeto valora, mediante un rango de 6 adjetivos que van de "nunca" a "diariamente", con qué frecuencia experimenta cada una de las situaciones descritas en los ítems. La factorización de los 22 ítems arroja en la mayoría de los trabajos 3 factores que son denominados agotamiento emocional, despersonalización y realización personal en el trabajo. Los tres factores han sido obtenidos con muestras de diferentes colectivos profesionales. Estos factores constituyen las tres subescalas del MBI. La subescala de Agotamiento Emocional (EE) está formada por 9 ítems que refieren la disminución o pérdida de recursos emocionales o describen sentimientos de estar saturado y cansado emocionalmente por el trabajo; la subescala de Despersonalización (D) está formada por 5 ítems que describen una respuesta fría e impersonal y falta de sentimientos e insensibilidad hacia los sujetos objeto de atención; y la subescala de Realización Personal en el trabajo (PA) está compuesta por 8 ítems que describen sentimientos de competencia y eficacia en el trabajo. La Tendencia a evaluar el propio trabajo de forma negativa y vivencia de insuficiencia profesional. Mientras que en las subescalas de Agotamiento Emocional y Despersonalización puntuaciones altas corresponden a altos sentimientos de estar quemado, en la subescala de realización personal en el trabajo bajas puntuaciones corresponden a altos sentimientos de quemarse. Se deben mantener separadas las puntuaciones de cada subescala y no combinarlas en una puntuación única porque no está claro si las tres pesan igual en esa puntuación única o en qué medida lo hacen. En cuanto al resultado, tanto el concepto de quemarse como cada una de sus dimensiones son consideradas como variables continuas, y las puntuaciones de los sujetos son clasificadas mediante un sistema de porcentajes para cada escala.

El instrumento se aplica a una muestra de trabajadores administrativos de la Universidad autónoma de baja california quienes desempeñan su trabajo en el area de abastecimiento del campus Ensenada, con un horario de 8 am a 6 pm, teniendo una carga de trabajo considerable y la mayoría de ellos muestra signos de enfermedades físicas desarrolladas por el estress que perciben en su trabajo. Se aplicaron 68 encuestas en total.

RESULTADOS

En la tabla 1 podemos observar que para la pregunta sobre sentirse agotado emocionalmente en el trabajo, encontramos que 9 personas, o sea el 13.2% de la muestra, dijeron sentirse así por lo menos una vez a la semana.

Tabla1: Cansancio Emocional

Me siento emocionalmente agotado por mi trabajo		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	nunca	14	20.6	20.9	20.9
	pocas veces al año o menos	37	54.4	55.2	76.1
	Una vez al mes o menos	7	10.3	10.4	86.6
	una vez a la semana	9	13.2	13.4	100.0
	Total	67	98.5	100.0	
Missing	System	1	1.5		
Total		68	100.0		

Fuente: investigación propia en programa SPSS

Igualmente, el 8.8% de los encuestados perciben que están trabajando demasiado todos los días, como lo podemos ver en la tabla No. 2:

Tabla 2: Creo que estoy trabajando demasiado

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	nunca	30	44.1	44.8	44.8
	pocas veces al año o menos	19	27.9	28.4	73.1
	Una vez al mes o menos	9	13.2	13.4	86.6
	una vez a la semana	3	4.4	4.5	91.0
	todos los dias	6	8.8	9.0	100.0
	Total	67	98.5	100.0	
Missing	System	1	1.5		
Total		68	100.0		

Fuente: investigación propia en programa SPSS

En la tabla No. 3, podemos observar que un 10.3% siente permanentemente la despersonalización, al afirmar su dificultad para entender cómo se sienten sus compañeros, estudiantes o proveedores.

Tabla 3: Despersonalización

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	nunca	7	10.3	10.9	10.9
	pocas veces al año o menos	8	11.8	12.5	23.4
	Una vez al mes o menos	6	8.8	9.4	32.8
	una vez a la semana	10	14.7	15.6	48.4
	todos los dias	33	48.5	51.6	100.0
	Total	64	94.1	100.0	
Missing	System	4	5.9		
Total		68	100.0		

Comprendo fácilmente como se sienten los compañeros, estudiantes y/o proveedores Fuente: investigación propia en programa SPSS

En la tabla No. 4 observamos la dimensión de despersonalización mas clara al observar que el 63.2% dice no preocuparse por lo que les ocurre a sus compañeros, estudiantes o proveedores.

Tabla No. 4: Despersonalización

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	nunca	43	63.2	67.2	67.2
	pocas veces al año o menos	6	8.8	9.4	76.6
	Una vez al mes o menos	4	5.9	6.3	82.8
	una vez a la semana	4	5.9	6.3	89.1
	todos los dias	7	10.3	10.9	100.0
	Total	64	94.1	100.0	
Missing	System	4	5.9		
Total		68	100.0		

Realmente no me preocupa lo que le ocurre a mis compañeros, estudiantes y/o proveedores

Fuente: investigación propia en programa SPSS

En la tabla No. 5 podemos observar que un 5.9% dice sentirse frustrado con su trabajo todos los días y solo el 69.1% dice no sentirse frustrado nunca.

Tabla 5 : Realización Personal (Me siento frustrado en mi trabajo)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	nunca	47	69.1	71.2	71.2
	pocas veces al año o menos	9	13.2	13.6	84.8
	Una vez al mes o menos	3	4.4	4.5	89.4
	una vez a la semana	3	4.4	4.5	93.9
	todos los dias	4	5.9	6.1	100.0
	Total	66	97.1	100.0	
Missing	System	2	2.9		
Total		68	100.0		

En cuanto a los resultados totales de la muestra, se observa lo siguiente:

CONCLUSIONES

Las investigaciones realizadas en el campo del Síndrome del Burnout no siempre son fáciles de interpretar debido a varias razones, entre ellas la complejidad de las relaciones involucradas con variables individuales y organizacionales. Se trata de un síndrome clínico general en relación con el afrontamiento de extrusores ocupacionales crónicos, derivados del trato con personas, con manifestaciones tanto en el ámbito individual como organizacional.

Como antecedente, está la acumulación de extrusores propios del rol laboral, mal afrontados, tanto a nivel personal como institucional, y los rasgos de personalidad previa. Como consecuencias están los síntomas físicos, psicológicos y organizacionales. Los trabajadores de la salud "de ayuda" son los más vulnerables ya que la urgencia y la atención de los pacientes posterga la urgencia en la escucha, contención y apoyo de los equipos; en pocas palabras nos estamos enfermando mientras realizamos nuestra tarea curadora.

Por otro lado, en el ámbito organizacional, la cultura empresarial juega un papel clave en este fenómeno. El estudio apunta que los empleados empiezan a identificarse con la empresa tan pronto como se sienten parte de ella, por lo que cuanto más respetados se sientan como miembros de un grupo, más fácilmente sentirán esa identificación, lo cual en este sentido facilita las cosas y reduce considerablemente los riesgos que los empleados puedan verse afectados por los síntomas de esta enfermedad.

El respeto, también, es el medio a través del cual el trabajador se arraiga en su puesto y siente que lo que hace es algo significativo. Por el contrario, si observa que sus compañeros no son respetados, se llega al consenso de que la empresa no trata bien a la gente y desaparece ese arraigo, el cual obviamente traerá consecuencias negativas en un periodo corto de plazo

Especialistas e investigadores citan varias maneras en las que la percepción de respeto en la empresa puede influir en el desarrollo de este síndrome. Por ejemplo, cuando el trabajador minusvalorado tiene que enmascarar sus verdaderos sentimientos ante sus clientes o pacientes el síndrome del Burnout llega en forma de agotamiento emocional.

El impacto de la falta de respeto es más fuerte cuando el trabajador siente que no tiene autonomía a la hora de realizar su función. Este descubrimiento confirma la hipótesis de los muchos investigadores respecto a la importancia de la autonomía, que funciona como una válvula de escape y aminora el estrés.

APENDICE

Cuestionario De Burnout
Este cuestionario forma parte de una investigación realizada en la UABC sobre burnout, Mucho le agradeceremos llenarlo según se indica. Gracias por su tiempo!
Nombre:_____Edad:_____Profesión:_____
Antigüedad en el empleo:_____Sexo:_____Puesto de trabajo:_____
Es de planta: si____ No_____ Nombre de la Empresa donde labora:_____
Elija la respuesta que más se adecúe a su manera de sentir:

PREGUNTA	0 = Nunca	1 = Pocas veces al año o menos	2 = Una vez al mes o menos	3 = Una vez a la semana	4 = Todos los días
Me siento emocionalmente agotado por mi trabajo					
Me siento cansado al final de la jornada de trabajo					
Me siento fatigado cuando me levanto por la mañana y tengo que ir a trabajar					
Comprendo fácilmente como se sienten los pacientes, estudiantes o clientes					
Creo que trato a algunos pacientes, estudiantes o clientes como si fueran objetos impersonales					
Trabajar todo el día con mucha gente es un esfuerzo					
Trato muy eficazmente los problemas de los pacientes, estudiantes (o clientes)					
Me siento "quemado" por mi trabajo					
Creo que influyo positivamente con mi trabajo en la vida de las personas					
Me he vuelto más insensible con la gente desde que ejerzo esta profesión					
Me preocupa el hecho de que este trabajo me endurezca emocionalmente					
Me siento muy activo					
Me siento frustrado en mi trabajo					
Creo que estoy trabajando demasiado					
Realmente no me preocupa lo que le ocurre a mis pacientes, estudiantes (o clientes)					
Trabajar directamente con personas me produce estrés					
Puedo crear fácilmente una atmósfera relajada con mis pacientes, estudiantes (o clientes)					
Me siento estimulado después de trabajar con mis pacientes, estudiantes (o clientes)					
He conseguido muchas cosas útiles en mi profesión					
Me siento acabado					
En mi trabajo trato los problemas emocionales con mucha calma					
Siento que los pacientes (o clientes) me culpan por alguno de sus problemas					

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ANÁLISIS CUALITATIVO DE LA TRANSPARENCIA DE LAS INSTITUCIONES DE EDUCACIÓN SUPERIOR PÚBLICAS MEXICANAS

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RESUMEN

Actualmente la necesidad de obtener información cierta y confiable sobre la gestión de las instituciones de educación superior (IES) ha convertido a la transparencia en una herramienta eficaz ya que través de ella, es posible evaluar el desempeño y la eficiencia de los gestores de esos recursos públicos. Este trabajo aborda el análisis de la transparencia de las instituciones de educación superior públicas mexicanas, a través de un estudio de tipo descriptivo en la modalidad de análisis de contenido que examina la información contenida en las páginas web. El objeto de estudio está conformado por diez instituciones de educación superior públicas de México elegidas con base en su representatividad y peso administrativo y científico. El propósito de la investigación consiste en explicar cómo es y cómo se manifiesta la transparencia en las universidades públicas de este país. Los hallazgos del análisis permiten concluir que el principal rasgo de la transparencia en las IES públicas mexicanas se circunscribe únicamente a lo señalado por la Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental aplicable; además, el contenido de la información presentada es escaso y, en la mayoría de los casos, no especifica el tiempo de actualización.

Palabras clave: Transparencia, Rendición de Cuentas, Instituciones de Educación Superior

INTRODUCCIÓN

En México, el Sistema de Educación se encuentra dividido en: educación básica, educación media superior y educación superior. El subsistema de educación superior comprende los estudios posteriores a los de la educación media superior: es impartido en instituciones públicas y privadas denominadas instituciones de educación superior (IES) teniendo como propósito la formación de personas en los niveles técnico superior universitario o profesional asociado, licenciatura, especialidad, maestría y doctorado (SEP, 2003).

Respecto a su estructura normativa, el artículo 3º fracción VII de la Carta Magna delinea la educación superior, así:

> "Las universidades y demás instituciones de educación superior a las que la Ley otorgue autonomía, tendrán la facultad y responsabilidad de gobernarse a sí mismas; para realizar sus fines de educar, investigar y difundir la cultura de acuerdo con los principios de este artículo, [...]" (SEP, 2003, p.37)

En el caso de las instituciones de educación superior públicas (IESP), sus leyes son orgánicas y a partir de éstas se generan los correspondientes Reglamentos Internos. Las leyes orgánicas de las IESP establecen fines, estructura, la forma de gobierno, métodos de administración, disposiciones generales sobre su funcionamiento, derechos y deberes de los estudiantes y profesores (SEP, 2003); esto es, la autonomía institucional abarca los ámbitos: laboral, académico y financiero.

Respecto al ámbito laboral, la selección, contratación, promoción y despido del personal de las IESP se realiza con base en los términos del Contrato de Trabajo elaborado por la propia institución. En relación al ámbito académico, la organización establece su propios lineamientos para el acceso a la Universidad, las ofertas de planes de estudio y de cursos así como los requisitos y autorización para obtener el título y por último, en lo referente al ámbito financiero, los criterios para el uso de los fondo, la contratación de bienes o servicios y la distribución del presupuesto se realiza de acuerdo a lo estipulado por autoridades de la propia Universidad. (Levy, 1987 citado en Casanova 2004).

De estas tres dimensiones, la relativa al ámbito financiero es la más ríspida y la que capta la mayor atención del Estado puesto que las IESP también denominadas Universidades Públicas utilizan recursos públicos para llevar a cabo sus funciones; lógicamente al ser financiadas por el Estado, éste se interesa en saber cómo son empleados esos recursos. Situación que genera una tensión especial entre la autonomía y la rendición de cuentas (*accountability*) pues surge con ello la pregunta: ¿cuál es el límite de la autonomía institucional? ¿Hasta dónde puede extenderse o restringirse? (Casanova, 2004).

Aun cuando las leyes orgánicas señalan que las IESP son autónomas; al ser entidades públicas y, por tanto, ser financiadas con recursos del erario público están obligadas a rendir cuentas e informar a la comunidad sobre sus actividades en los términos de la normatividad aplicable, la cual estipula cuales son las obligaciones de transparencia que deben cumplir éstas.

La presente investigación tiene como objetivo determinar si efectivamente en las IESP se da la transparencia en términos de la legislación vigente. El trabajo se centra en el estudio de las páginas web de las IESP de la República Mexicana (México) consultadas durante los meses de junio y julio de 2009.

El estudio se limita conceptualmente a transparencia, espacialmente a las IESP mexicanas afiliadas a la Asociación Nacional de Universidades e Instituciones de Educación Superior (ANUIES). Temporalmente la investigación cubrirá el periodo comprendido en 2009 y la limitación disciplinaria está dada por la Administración Pública.

REVISIÓN LITERARIA

Durante los últimos años los conceptos de rendición de cuentas y transparencia han adquirido una enorme importancia, principalmente porque aparecen como ejes de la nueva gestión pública (Ochoa y Montes de Oca, 2004).

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 organizaciones políticas y burocráticas al escrutinio público, mediante sistemas de clasificación y difusión del gobierno (Ugalde, 2002).

En realidad, la transparencia es un concepto referido a la apertura y flujo de información de las organizaciones políticas y burocráticas al dominio público. Valverde (2004) comenta sobre la transparencia:

> "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".

Para Valverde (2005) la falta de transparencia es un foco potencial de abuso de poder y corrupción, otorgando discrecionalidad a quien controla, restringe o deliberadamente distorsiona el acceso a información.

La transparencia frena a la corrupción, y 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).

Es evidente que la transparencia no significa rendir cuentas a un destinatario especifico, 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. La transparencia es pues, un instrumento del sistema de rendición de cuentas, por tanto, resulta impreciso usarlo como un sinónimo (Ugalde, 2002).

Lo anterior deja en claro que la transparencia no es un sinónimo de la rendición de cuentas; ésta es una traducción inexacta de la palabra anglosajona *accountability*, que en su acepción original significa "ser sujeto a la obligación de reportar, explicar o justificar algo; ser responsable ante alguien de algo". En realidad no existe una traducción exacta en la lengua española; Ugalde (2002) define el concepto de rendición de cuentas como "la obligación permanente de los mandatarios o agentes para informar a sus mandantes o principales de los actos que llevan a cabo como resultado de una delegación de autoridad que se realiza mediante un contrato formal o informal y que implica sanciones en caso de incumplimiento.

Diversos autores tales como Behn (2001), Schelder (2004) o Mulgan (2000) citados por J. Ackerman (2005) han construido una definición funcional del término. El primer elemento del concepto incluido por Behn es el castigo, esto es rendición de cuentas significa castigo. También Schelder (2004) incorpora este elemento, para él, el concepto se compone de dos dimensiones: *answerability* –"la obligación de los servidores públicos para informar y explicar sus actos"- *como enforcement* –"la capacidad de las instituciones de rendición de cuentas de imponer sanciones a los funcionarios que violen ciertas normas". Por su parte, Mulghan, enfatiza la naturaleza externa de la relación de la rendición de cuentas integrando un nuevo elemento a la definición: autoridad superior; dice que la rendición de cuentas implica relaciones de poder (Ackerman, 2005).

Una de las definiciones más amplias y claras de este concepto es la de Burneo (2007) quien la define como:

> "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", p.65.

Otro elemento fundamental de la rendición de cuentas 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).

El derecho a la información es, sin duda, la clave de acceso a la transparencia y a la posibilidad de exigir que los gobernantes rindan cuentas sobre sus actividades y los recursos que les son confiados (Castellanos, 2005). Para Valverde (2005, p. 238-239), el derecho a la información es "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".

Por su parte, Haf (2006) sostiene que cualquier individuo tiene el derecho de acceder a la información e inmiscuirse en los asuntos públicos. La información pública a la que todo individuo tiene derecho a acceder debe reunir características esenciales tales como: ser cierta, estar completa, ser clara y estar debidamente actualizada (Haf, 2006).

Actualmente más de cuarenta países en el mundo cuentan con leyes e instituciones dedicadas a garantizar la transparencia y el acceso a la información sobre la gestión pública y otros 30 países más se encuentran en el proceso de aprobarla. Aun cuando las leyes de libertad de información han existido desde 1776 (en Suecia), no es sino hasta los últimos diez años que un número sin precedente de naciones ha adoptado leyes de acceso a la información (IFAI, 2003).

Lo anterior es el resultado de la iniciativa de organizaciones no gubernamentales y académicas, así como de organismos multilaterales. La finalidad de esta iniciativa, consiste en que la información confiable y oportuna de las instituciones públicas es crítica para la credibilidad de los gobiernos, ya que la transparencia contribuye a la eficiencia de los mercados en un contexto de globalización económica (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, p.5).

Así, ya incorporado, transcurrieron casi tres décadas hasta que se elaboró la Ley reglamentaria correspondiente: la Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental (LFTAIPG), fue publicada en el 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 trasparentar la gestión pública, favorecer la rendición de cuentas de los ciudadanos y contribuir con la democratización de la sociedad mexicana (Poder Ejecutivo Federal, LFTAIPG, art. 5).

En el capítulo II de esta misma Ley se definen las obligaciones de transparencia en el artículo 7, en donde se consigna que los sujetos obligados deben poner a disposición del público la siguiente información: estructura orgánica, directorio de servidores públicos, sistema de remuneraciones, domicilio de la unidad de enlace, servicios que se ofrecen, tramites, requisitos y formatos, información sobre el presupuesto asignado, resultado de las auditorias al ejercicio presupuestal, concesiones, permisos o autorizaciones otorgadas, contrataciones celebradas, marco normativo, informes que generen, entre otras cosas (Poder Ejecutivo Federal, LFTAIPG, art. 7).

En comparación con las leyes de otros países, la LFTAIPG ha sido calificada como avanzada respecto a los mecanismos que garantizan el ejercicio del derecho a tener acceso a la información pública. Entre estos mecanismos destaca el Instituto Federal de Acceso a la Información Pública (IFAI), un órgano de la Administración Pública Federal, con autonomía de operaciones, presupuesto y decisión, que se encargará de promover y difundir el ejercicio del derecho de acceso a la información pública (LFTAIPG, art. 33). El IFAIP empezó a operar en el 2003, su misión consiste en garantizar el acceso a la información gubernamental, promover la transparencia y rendición de cuentas de los servidores públicos (Valverde, 2005).

Adicionalmente a la legislación federal en materias de derecho de acceso a la información pública, existen leyes a nivel estatal en la mayoría de los 32 Estados de la República Mexicana y una serie de ordenamientos municipales (Haf, 2006).

A raíz de la aparición de este ordenamiento jurídico, las IESP han mostrado buena disposición para difundir, a través de su página web y por conducto de la Unidad de Enlace, la información descrita como obligaciones de transparencia. De hecho, aun cuando no son abundantes, en la literatura especializada existen algunas investigaciones empíricas que abordan la información puesta a disposición de los usuarios a través de la página Web con la intención de ofrecer una imagen transparente de su gestión.

Tal es el caso de las investigaciones de Oviedo, Brea y Duarte (2007), aregional.com (2008), Sandoval, R. (2009) y Rivero, Mora y Flores (2007). Algunas de estas investigaciones como es el caso de aregional.com (2008) y Rivero, Mora y Flores (2007) proponen la inclusión de elementos de medida de la gestión desarrollada por la administración pública; esto es, no se limitan a estudiar solo los requerimientos establecidos en el ordenamiento jurídico.

La tabla 1 presenta las variables, dimensiones e indicadores que serán utilizados en esta investigación, los cuales se encuentran en concordancia con las obligaciones de transparencia estipuladas en la LFTAIPG.

Tablas 1. Variables de Estudio

Variables	Dimensiones	Indicador
ACCESO A LA INFORMACIÓN	Accesibilidad de la página web	1. Facilidad de acceso 2. Idioma 3. Mapa del Sitio 4. Buscador Interno 5. Diseño y administración
	Identidad de la IESP	6. Caracterización de la institución 7. Planeación 8. Oferta educativa
	Remuneraciones	9. Caracterización de las remuneraciones al personal
	Actividad de la Unidad de Enlace	10. Constitución de la Unidad de Enlace 11. Costo de la información 12. Domicilio de la Unidad de Enlace
	Contrataciones	13. Contratos 14 Proveedores
INFORMACIÓN REFERIDA A LA RENDICIÓN DE CUENTAS	Información Financiera	15. Estados Financieros
	Información no financiera	16. Informes Diversos (PIFI, Estimulo al Desempeño Académico)
	Información Presupuestal	17. Presupuestos
	Información sobre auditorías	18. Auditorías
CARACTERÍSTICAS DE LA INFORMACIÓN	Utilidad de la información	20. Contenido Informativo 21. Oportunidad

Fuente: Elaboración propia

Hoy en día existe una universidad absolutamente distinta de la tradicional y cuya complejidad ante la demanda del entorno la ha forzado a multiplicarse con la creación de nuevas universidades y a crecer internamente (Chave *et al.* 1998). En los últimos años, los sistemas de educación superior de muchos

países han experimentado grandes reformas y transformaciones. Prueba de ello es el surgimiento de nuevos tipos de instituciones y el establecimiento de mecanismos para la evaluación y la acreditación, así como los cambios en los patrones de financiamiento y gobierno, las reformas de currículo, y las innovaciones tecnológicas, tal como lo planteó en 1998 la Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO), en el documento denominado La Educación Superior en el Siglo XXI: Visión y Acción, que se ha constituido en el marco de referencia de acciones prioritarias para el cambio y desarrollo de la educación superior (UNESCO,1998).

La apuesta generalizada por el reconocimiento y el desarrollo de la autonomía universitaria y la nueva sensibilidad social frente al crecimiento constante de sus dotaciones desde el erario público, han conducido a la necesidad de que se exploren nuevas fórmulas de control de la universidad que cumplan simultáneamente con el compromiso de ser respetuosos con la autonomía de las universidades y acaten el mandato social de la correspondiente rendición de cuentas respecto del cumplimiento de la misión de la institución y del uso de los recursos que la sociedad ha puesto a su disposición.

Es en este contexto donde aparece la necesidad de iniciar un cambio en la cultura organizativa de la universidad y de proceder en ese nuevo marco a implantar la evaluación institucional como fórmula de autorregulación, por un lado, y por otro, el de la transparencia y de rendición de cuentas, como factores determinantes en la retroalimentación de los procesos de gestión de la calidad en las universidades, así como de reflexión, desarrollo institucional y generación de nuevos valores.

La importancia de la educación superior se refleja en el volumen de recursos humanos y materiales que sus instituciones manejan, los cuales, aunque puedan ser insuficientes en relación con lo idealmente deseable, son muy cuantiosos, por lo que resulta importante que se haga de ellos un uso óptimo y transparente.

Dentro de una tendencia de políticas públicas en que todas las instituciones deben tener un manejo transparente y rendir cuentas a las sociedades dentro de las cuales actúan, y que toca a todas las entidades gubernamentales, la universidad no puede ser la excepción. Como lo ha expresado el director general de la UNESCO: la universidad no es diferente de otros actores sociales: debe demostrar que juega un papel social importante y que cumple su cometido eficientemente. Así, con respecto a este punto se concluye que debe respetarse la libertad académica y la autonomía institucional; sin embargo, los principios de libertad de cátedra y autonomía no deben ser utilizados para encubrir la negligencia profesional o la incompetencia organizativa, esto es, se requiere presentar una **rendición de cuentas con calidad** (Salmi, 2001).

Chaffee (1998) indica que en relación con la educación superior, la falta de satisfacción es con frecuencia más implícita que explícita, por lo que se requiere que los beneficios sean definidos en términos importantes para el público, y que el público debe conocerlos. Por ejemplo, si una universidad estatal recibe millones de pesos para investigación en temas que son relevantes para el Estado, es posible que el presentar estados financieros transparentes no le sea suficiente para lograr que quienes conforman su comunidad sientan que están teniendo beneficios, pues a pesar de que los temas sean relevantes y los resultados importantes, la institución no obtendrá el valor total de la investigación si el público no se entera de sus beneficios.

La introducción de procesos de evaluación gubernamental de las IES para regular el funcionamiento de éstas, condicionando la provisión de financiamiento a determinados parámetros generales de calidad en lugar del tradicional criterio de la matrícula, y una opinión pública con creciente crítica respecto del grado de eficacia y eficiencia con el que las universidades –en especial las públicas– utilizan los recursos que se les entregan en el desempeño de sus tareas, sitúan a la evaluación en el centro de las estrategias de política

pública, tanto en el nivel de las instituciones como en el de las agencias gubernamentales y de la sociedad, y su relación con las IES.

METODOLOGÍA

Se realizó una investigación de tipo descriptiva con diseño no experimental, definida en función de los trabajos de Hernández, Fernández y Batista (2003), cuyo fin es determinar si efectivamente en las IESP se da la transparencia en términos de la legislación vigente, considerando tres variables: acceso a la información, información referida a la rendición de cuentas y características de la información.

El objeto de estudio de este trabajo son diez IESP mexicanas afiliadas a la ANUIES elegidas con base en su representatividad y peso administrativo y científico, cuyos nombres y direcciones aparecen en la tabla 2.

Tabla 2. IESP, Objeto de Estudio

Nombre de la IESP	Dirección Electrónica
Universidad Autónoma de Aguascalientes	http://www.uaa.mx
Universidad Autónoma de Campeche	http://www.ucam.mx
Universidad Autónoma de Coahuila	http://www2.uadec.mc
Universidad de Guanajuato	http://www.ugto.mx
Universidad de Guadalajara	http://www.udg.mx
Universidad Michoacana de San Nicolás	http://www.umich.mx
Universidad Autónoma de Yucatán	http://www.uady.mx
Universidad Autónoma de Nuevo León	http://www.uanl.mx
Universidad Veracruzana	http://www.uv.mx
Universidad Autónoma de San Luis Potosí	http://www.uaslp.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 IESP 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 realizar el análisis se utiliza una plantilla y un instructivo codificador, los cuales permiten recabar datos de cada uno de los portales de Internet del objeto de estudio. El instrumento de medición contiene 44 ítems distribuidos en dos partes, la primera consiste en determinar la accesibilidad a la página web; la segunda parte, ideada para identificar con qué facilidad se puede accesar a los documentos de la sección de Transparencia de la página web de las IESP.

La técnica de escalamiento utilizada en el instrumento es tipo Likert, existen dos modalidades; la primera: no acceso, no se ubicó en 10 min, más de 5 click, 4 click, 3-2 click, 1 click; y la segunda: no se describe, más de 12 meses atrás, de 7 a 11 meses, de 4 a 6 meses, de 3 a 2 meses y del mes en curso. Estas escalas fueron transformadas mediante reglas precisas de los datos brutos para permitir su representación en índices numéricos y facilitar el tratamiento estadístico.

RESULTADOS

Con la intención de caracterizar a la muestra se analizó la accesibilidad de la página web; entendiendo por esto, "la capacidad de un sitio web de ser aprehendido en su totalidad por todos los usuarios, independientemente de las condiciones físicas y/o técnicas en las que acceda a Internet" (Pinto, 2003, p.30). En este punto se analizaron los indicadores de idioma, mapa del sitio, buscador interno, entre otros.

Respecto al idioma, se encontró que solamente la Universidad Autónoma de Nuevo León ofrece versiones en varios idiomas (inglés, japonés, chino, alemán). El 40% de las IESP estudiadas únicamente ofrecen la versión inglesa mientras que el resto, no ha desarrollado ninguna otra alternativa en otros idiomas.

En relación a la existencia de un mapa del sitio para facilitar la navegación, se encontrados resultados polares ya que sólo el 50% del conjunto de IESP analizadas responden a esta exigencia.

La existencia de un buscador interno que permita recuperar no sólo la información evidente sino también aquella que subyace bajo los epígrafes principales, fue otro punto evaluado. Esta condición la presentan el 80% de la muestra estudiada.

ANÁLISIS DE LAS PÁGINAS WEB DE LAS IESP MEXICANAS

Acceso a la información

Esta variable se refiere al derecho fundamental por medio del cual toda persona puede tener conocimiento de la información de cualquier entidad, independientemente si la información se encuentra en papel o soporte digital (Haf, 2006). La variable incluye toda la información concerniente a la caracterización de la página web respecto a su visibilidad y lo descrito en el artículo 7, fracciones I, III,IV,V,VI, VII Y XIII de la LFTAIPG, referida a estructura orgánica, directorio, domicilio, servicios que se ofrecen, entre otros. Los resultados del análisis de estas fracciones revelan lo que a continuación se describe:

Ω   La estructura orgánica, en el 60% de las IESP es muy fácilmente localizable en la página web.

Ω   El directorio de funcionarios, en el 60% de las IESP es muy fácilmente localizable en la pagina web

Ω   La oferta educativa, en el 50% de las IESP es fácilmente localizable en la página web.

Ω   El Plan de Desarrollo institucional, en el 50% de las IESP es muy difícil de ubicar en la página web y, en el resto no es posible localizarlo.

Ω   La remuneración mensual por puesto de los empleados incluyendo los de confianza, en el 80% de las IESP es fácilmente localizable en la página web; mientras que, de éstos sólo el 60% es fácilmente localizable el sistema de compensación de los funcionarios.

Ω   El domicilio de la Unidad de Enlace, en el 70% de las IESP es fácilmente localizable en la página web, mientras que, en el 20% de ésta no fue posible localizarlo.

Ω   Los contratos de obra y adquisiciones así como sus montos, en el 60% de las IESP son fácilmente localizables en la página web; sin embargo, aun cuando los contratos de servicios están relacionados se observa que éstos solamente son fácilmente localizables en el 30% de las IESP.

Ω   Los nombres de los proveedores con quienes se efectúan los contratos, en el 60% de las IESP son fácilmente localizables en la página web.

Información referida a la rendición de cuentas

Esta variable integra la información a difundir por medios telemáticos en relación con el ejercicio de la rendición de cuentas, exigida por la LFTAIPG (Rivero, Mora y Flores, 2007). La variable evalúa la publicación de lo establecido en el artículo 7, fracciones IX, X, XII, XIV Y XV fundamentalmente lo relacionado con información sobre estados financieros, presupuestos, auditorias e informes diversos.

En relación a la información referida a la rendición de cuentas, los resultados del análisis revelan lo siguiente:

Ω   Los Estados Financieros, en el 80% de las IESP son fácilmente localizables en la página web; sin embargo la información complementaria a estos (Notas a los Estados Financieros) no fue localizada.

Ω   El nombre de la unidad responsable de presentar la información financiera, en el 90% de las IESP no fue posible localizarlo.

Ω   El informe sobre la gestión rectoral, en el 70% de las IESP es fácilmente localizable en su página web; no obstante, los informes del PIFI y el informe sobre el Estimulo al Desempeño Académico no fueron localizables.

Ω   La información sobre presupuestos de ingresos y egresos, en el 60% de las IESP es fácilmente localizable en su página web.

Ω   El resultado sobre las auditorías externas, en el 70% de las IESP es fácilmente localizable en la página web; sin embargo, únicamente el 30% de las IESP reporta el nombre de la instancia responsable de presentar esta información.

CARACTERÍSTICAS DE LA INFORMACIÓN

Son las cualidades que definen a la información presentada en la página web; esta variable pretende evaluar la oportunidad con que se publica la documentacion asi como su contenido informativo. En relación a la oportunidad con que se publica la información, se encontró lo descrito en la tabla 3.

Tabla 3. Tiempos de actualización de las páginas web

INFORME/ DOCUMENTO	RESULTADO
Estados Financieros	En el 80% de las IESP no se describe la fecha de actualización de esta documentación.
Presupuestos	En el 80% de las IESP no se describe la fecha de actualización de esta documentación.
Auditorías	En el 50% de las IESP no se describe la fecha de actualización de esta documentación.
Contratos de Obra	En el 60% de las IESP no se describe la fecha de actualización de esta documentación.
Contratos de Adquisiciones y Servicios	En el 70% de las IESP no se describe la fecha de actualización de esta documentación.
Informe de la Gestión Rectoral	En el 70% de las IESP no se describe la fecha de actualización de esta documentación.

Fuente: Elaboración propia

Los resultados de contenido de la información presentada en la página web se muestran en la tabla 4.

Tabla 4. Contenido la Información presentada en la página web

INFORME/ DOCUMENTO	RESULTADO
Informes sobre las auditorías	En el 50% de las IESP se presentan únicamente los dictámenes elaborados por un despacho externo; el 20% reporta solo un resumen ejecutivo, el 10% muestra los resultados del Órgano de Fiscalización.
Informes sobre Estados Financieros	El 60% de las IESP presentan los Estados Financieros dictaminados por un despacho de auditoría externa, el resto se presentan sin dictaminar.
Informes sobre obras	El 60% de las IESP presentan una lista detallada de nombre de la obra, importes de los contratos, inicio y término de la misma; el resto no lo incluye.

Fuente: Elaboración propia

CONCLUSIONES

Los portales de Internet (páginas web) 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 IES, Servicios que ofrece, Información sobre rendición de cuentas, entre otros. Los hallazgos de este estudio revelan que las IESP aun no explotan en su totalidad los indicadores relacionados con la accesibilidad a la página web; esto es, al no tener elementos tales como mapa del sitio, un buscador interno o estar diseñados en más de un idioma, se pierden la oportunidad de ser captados por todos los usuarios interesados.

Además de lo anterior, los resultados del presente análisis muestran que la mayoría de las IESP objeto de estudio presentan únicamente la información tipificada como obligaciones de transparencia de acuerdo a la Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental; no obstante, el contenido y oportunidad de esa información deja mucho que desear puesto que el contenido informativo es escaso y el tiempo de actualización de la información no se especifica en la mayoría de los casos.

Las páginas web de las IESP deben ser promotoras del posicionamiento de la institución; no deben ser sólo un sitio de acceso a la información, deben además mostrar su capacidad o su potencial a través de significados que hagan fácil al público y a la sociedad percibir en ellas valores añadidos como el de una identidad con una imagen que refleje transparencia en su gestión.

El análisis efectuado permite concluir que el grado de transparencia de estas instituciones, mostrado en sus portales de Internet, es incipiente; por lo cual es recomendable que la autoridad correspondiente de cada IESP tome dos acciones: la primera, gestionar los trámites necesarios para facilitar de manera expedita, en sus páginas web, el acceso a la información y en consecuencia éstas se convertirán en 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; y la segunda, verificar que la información colocada en la página web cumpla con los elementos básicos de ser suficiente, relevante, confiable y oportuna para que de valor agregado a la mejor comprensión de las IESP y a su vez, las posicione en su justa dimensión con respecto a su entorno.

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CLIMA LABORAL EN EL ÁREA FINANCIERA DE UNA INSTITUCIÓN DE EDUCACIÓN SUPERIOR: PROPUESTA DE UN INSTRUMENTO DE MEDICIÓN

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RESUMEN

Este trabajo presenta el análisis de la validez y confiabilidad de un instrumento de medición. Su objetivo consiste en validar una escala para diagnosticar el ambiente de trabajo percibido por los miembros del área financiera de una institución de educación superior pública. Para tal efecto se realizó un estudio en una población compuesta de 112 trabajadores, en el cual se evaluaron las propiedades de una escala integrada por seis variables: Organización, Desarrollo Laboral, Interacción Social, Comunicación, Condiciones de Trabajo e Identidad y Pertenencia. Se empleó el análisis factorial exploratorio y confirmatorio con SPSS 17.0 para indagar la estructura subyacente a los ítem de la escala, previo se constató la adecuación de los datos mediante KMO y la prueba de esfericidad de Barlett. Los resultados muestran que las pruebas de consistencia interna y de validez de la escala son satisfactorias; además, nos revelan que las condiciones del clima laboral en contexto del área financiera de la institución son bastante aceptables con base en los criterios de valoración analizados y por tanto es posible afirmar que la escala del Cuestionario de Percepción del Clima Laboral es un instrumento útil para evaluar el clima laboral en este contexto de la educación superior.

INTRODUCCION

El clima laboral u organizacional (CL) es uno de los conceptos que, en el uso cotidiano, toman diferentes connotaciones, se dice que el CL comprende el grupo de características que definen a una organización y que la distingue de otras, estas características son de permanencia relativa en el tiempo e influyen en la conducta de las personas y por ende, en su productividad en el trabajo. De hecho, el CL es la clave para el éxito de una organización porque condiciona las actitudes y comportamiento de su personal (Robles, et. al., 2005).

Existen diversas posturas respecto a este concepto así como un número considerable de variables estudiadas por diversos autores, lo cual trae como consecuencia la existencia de una gran cantidad de literatura que reporta innumerables instrumentos para medir el clima laboral. La mayoría de estos instrumentos coinciden en medir factores tales como: nivel de autonomía, grado de estructura y de obligaciones impuestas, consideración y el apoyo que el colaborador recibe de sus superiores (Rodríguez, 1999 en Gómez-Rada, 2004).

No obstante la diversidad de variables y la amplia gama de instrumentos de medición del CL, la ocurrencia de estudios en las instituciones de educación superior es prácticamente nula por tanto es necesario estudiar aquellos aspectos que influyen o condicionan el clima laboral.

Por ello, los responsables del área financiera de una institución de educación pública, preocupados constantemente en el buen manejo de los recursos con estándares de calidad y la mejora de la gestión, consideraron que los instrumentos de medición existentes, no representan un referente suficientemente preciso para la evaluación del CL por ello, se han dado a la tarea de realizar una serie de ejercicios en el afán de identificar con mayor claridad los elementos que componen el CL.

Los resultados preliminares de este estudio plantean la necesidad de diseñar y aplicar un instrumento que permita valorar los elementos y dimensiones del referido clima. En éste se pretende evaluar diversas situaciones que impactan el desempeño del trabajador y por consecuencia el ambiente de trabajo, cómo son los procesos de trabajo, el desarrollo laboral, la interacción social, las instalaciones y condiciones físicas de trabajo, aspectos de comunicación y coordinación, así como la identidad y pertinencia de los empleados, entre otros.

Este trabajo tiene como objetivo proponer un instrumento para la evaluación del clima laboral (CPCL) en el área financiera de una Institucion de Educación Superior (IES) Pública, en lo concerniente a la Organización, Desarrollo Laboral, Interacción Social, Comunicación, Condiciones de Trabajo e Identidad y Pertenencia. El fin último de la aplicación del instrumento de evaluación que se estudia y propone, consiste en asegurar un ambiente de trabajo que promueva iniciativas para la mejora de la calidad en la prestación del servicio a usuarios, así como, facilitar los medios y condiciones idóneas en los respectivos puestos de trabajo. El estudio se limita conceptualmente al clima laboral, espacialmente al área financiera de una Institución de Educación Superior Pública ubicada en el noroeste de México. Temporalmente la investigación cubrirá el periodo comprendido en 2009.

REVISIÓN LITERARIA

Varios investigadores han abordado la medición del clima organizacional pero no se han puesto de acuerdo respecto al tipo de dimensiones que deben ser evaluadas, pues éstos en sus investigaciones plantean diferentes dimensiones. Para constatarlo, a continuación en la tabla 1 se puede apreciarse un número significativo de dimensiones estudiadas (Gómez-Rada, 2004).

Tabla 1: Tipo de dimensiones evaluadas en el Clima Laboral

INVESTIGADORES	NÚMERO DE DIMENSIONES	DIMENSIONES EVALUADAS
Likert (1967)	8	Método de mando, fuerzas de motivación, procesos de comunicación, influencia e interacción, toma de decisiones, fijación de objetivos, control y objetivos de resultados y perfeccionamiento
Schneider y Bartlett (1968)	5	Apoyo de la dirección, interés por los nuevos empleados, conflicto de independencia de agentes, satisfacción y estructura organizacional
Meyer (1968)	6	Conformidad, responsabilidad, normas, recompensa, claridad organizacional y espíritu de trabajo.
Friedelander y Marquilies (1969)	7	Empeño, obstáculos o trabas, intimidad, espíritu de trabajo, actitud, acento puesto en la producción, confianza y consideración
Lawler y col. (1974)	5	Competencia, eficacia, responsabilidad, nivel práctico, riesgo e impulsividad

Fuente: Brunet 1992 en Gómez-Rada (2004)

A pesar del desacuerdo y la diversidad de dimensiones, la mayoría de los cuestionarios utilizados para la medición del clima laboral coinciden en medir factores tales como: nivel de autonomía, grado de estructura y de obligaciones impuestas, consideración y el apoyo que el colaborador recibe de sus superiores (Rodríguez, 1999 en Gómez-Rada, 2004).

Así como existe un sinnúmero de dimensiones propuestas para describir el CL también existe una gran cantidad de literatura que reporta innumerables instrumentos para medir éste. Éstos se han diseñado en

función de las características de cada organización y de acuerdo a la finalidad del estudio. En la tabla 2 se describen algunos de esos instrumentos.

Tabla 2: Instrumentos para la medición del Clima Laboral

NOMBRE DEL INSTRUMENTO	AUTORES
Organization Climate Descriptive Questionaire (OCDQ)	Halpin y Croft (1963), en Fernández (2004)
Work Environment Scale (WES) CLIOUNing	Moss e Insel (1974) Mejiás, Reyes y Arzola (2006)
Instrumento de Medición del Clima Organizacional y Liderazgo (IMCOL)	Mellado (2004)
Bussiness and Organization Climate Index (BOCI)	Payne y Manfield (1973), en Fernández (2004)
University-level environment questionnaire, (ULEQ) Profile of a organization	Dorman (2000), Rensis Likert (1967), en Fernández (2004)

Fuente: Elaboración propia

De ellos el más conocido es el cuestionario de Likert pues además de medir el CL, con éste es posible dar seguimiento después de la implementación del mejoramiento continuo. Cabe mencionar que los instrumentos están constituidos por diversas preguntas las cuales tienen varías posibilidades de respuesta y están diseñadas para explicar las diferentes dimensiones elegidas por el autor (León, 2000).

A efecto de determinar la naturaleza del CL no sólo es importante medir las dimensiones, también es prioritario conocer el enfoque de éste. Auchury y Maldonado (1984) citados por Gómez-Rada (2004) se refieren a los enfoques sobre el clima laboral, particularmente a las percepciones que el trabajador tiene de las estructuras y de los procesos que ocurren en el trabajo.

Este trabajo se enmarca dentro de ese enfoque, es decir, pretende ampliar y validar el CPCL para dar seguimiento al clima en función de las percepciones de los trabajadores responsables del área financiera de una Institución de Educación Superior Pública. Esta evaluación es importante porque permitirá analizar y diagnosticar el ambiente de trabajo percibido por todos los miembros, con la finalidad de establecer las estrategias de mejora para el desarrollo de condiciones y actitudes positivas frente a la organización con lo cual se propiciará un mejor ambiente laboral. El desarrollo de las referidas actitudes en los colaboradores que se dedican a gestionar, administrar y vigilar los recursos financieros de la institución, es fundamental para que el trabajo encomendado se realice con eficiencia y eficacia.

METODOLOGÍA

Breve Descripción de la Elaboración del Instrumento de Medición

Con la finalidad de delimitar el concepto de clima laboral, se realizó una investigación bibliográfica sobre trabajos relacionados con la medición del clima laboral en instituciones de educación superior, la cual aportó información relevante para la construcción del instrumento.

El instrumento de medición se elaboró atendiendo las siguientes consideraciones: a) La premisa respecto al ambiente de trabajo descrita en el Manual de Gestión de Calidad del PU, b) La revisión bibliográfica de trabajos relacionados con el clima organizacional, c) Entrevistas realizadas a expertos en la materia y, d) Los resultados de un cuestionario anterior de Alcántar y Arcos (2008), el cual se deriva de las

operacionalizaciones de los instrumentos de autores como Gómez-Rada (2004), Sandoval (2004), Salgado, et.al. (1996) y Litwin & Stinger, citados por Sánchez, (2007).

Todo ello generó un instrumento compuesto por seis variables: dos del modelo IPAO de Gómez-Rada (Organización e Interacción Social), uno del modelo de Brower y Taylor citado por Sandoval (Comunicación), uno del modelo de Salgado, et.al. (Condiciones de Trabajo), uno del modelo de Litwin & Stinger (Identidad y Pertenencia) y el último, por consenso de cinco expertos (Desarrollo Laboral). Tomando en cuenta la finalidad del instrumento (primera versión) y el resultado de la aplicación de ésta, se decidió adicionar una variable mas a la cual se denominó Desarrollo Laboral; el resultado fue un instrumento con seis variables del CPCL en su segunda versión con 46 ítems. Las variables que integran el instrumento de medición así como sus dimensiones se describen en la figura 1 mientras que en la tabla 3, se muestran las definiciones.

Figura 1. Variables del Clima Laboral
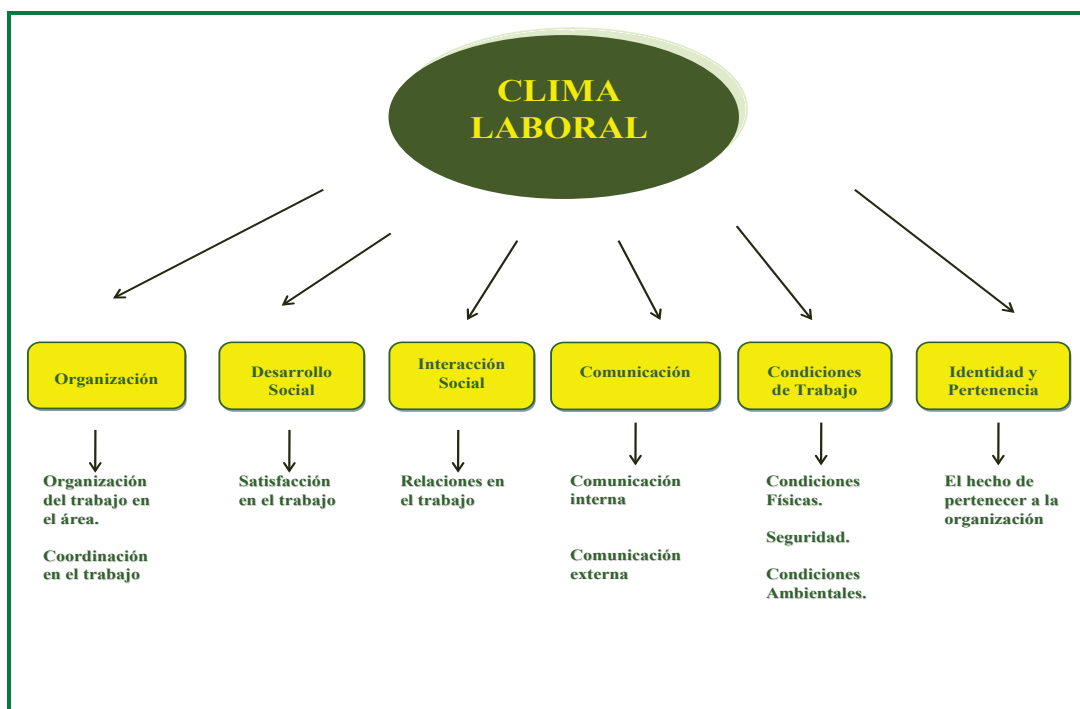
Fuente: Elaboración propia

La técnica de escalamiento utilizada en la segunda versión del CPCL es tipo Likert de cinco puntos, donde uno (1) corresponde totalmente en desacuerdo, y cinco (5) corresponde totalmente de acuerdo. La tabla 4 describe la composición de los ítems propuesta para el CPCL con el cual se trabajó.

Tabla 3: Definición de las Variables

VARIABLES	DEFINICIÓN	AUTOR
Organización	Se define como el grado en que el colaborador percibe que existen en la organización procesos y parámetros de accion claros y confiables.	Gómez-Rada, 2004
Desarrollo Laboral	Se define como un estado emocional positivo o placentero resultante de la percepción subjetiva de las experiencias laborales del sujeto.	Locke, 1976
Interacción Social	Se define como el grado en el cual el colaborador percibe que predominan las relaciones entre los miembros caracterizadas por el respeto mutuo, colaboración efectiva, metas consensuadas, expresión de ideas u opiniones	Gómez-Rada, 2004
Comunicación	Se entiende como las redes de comunicación que existen dentro de la organización	Brower y Taylor, citados por Sandoval, 2004
Condiciones de Trabajo	Se definen como los esfuerzos que realiza la organización para crear un ambiente sano y agradable para sus colaboradores	Salgado, et. al., 1996
Identidad y Pertenencia	Se define como la sensacion de compartir los objetivos personales con los de la organización.	Salgado, et. al., 1996

Fuente: Elaboración propia

Tabla 4: Ítem propuestos para el CPCL

VARIABLE	NÚMERO DE ÍTEM	CANTIDAD DE ÍTEM
ORGANIZACION	1,2,3,4, 5,8,12,25	8
DESARROLLO LABORAL	6,7,9,10	4
INTERACCION SOCIAL	11,13,14,15,17	5
COMUNICACIÓN	16,18,19,20, 21,22,23	7
CONDICIONES DE TRABAJO	24,26,27,28,29,30,31,32,33,34, 35,36, 37,38,39,40,41,42,43	19
IDENTIDAD Y PERTENENCIA	44,45,46	3
	TOTAL:	46

Fuente: Elaboración propia

Ámbito Y Universo De Estudio

El ámbito de estudio es el área financiera de una institución de educación superior pública del estado de Baja California perteneciente a la región noroeste de la Republica Mexicana. La selección de este campo de estudio obedece a la necesidad de contar con un instrumento especifico para analizar y diagnosticar el ambiente de trabajo percibido con la finalidad de promover iniciativas para la mejora de la calidad en la prestación del servicio a usuarios, así como, facilitar los medios y condiciones idóneas en los respectivos campus de la universidad.

En relación al universo de estudio, se decidió realizar un muestreo censal que consiste en recoger la información de todos los elementos de la población, por lo cual se aplicó el instrumento de medición (cuestionario) a los 112 empleados que conforman el área financiera de la IES pública (Espinosa, 2004). La finalidad de este tipo de muestreo es conseguir mayor certeza en las estimaciones.

Evaluación de la Validez y Fiabilidad del Instrumento de Medición

La validación del contenido de un instrumento trae consigo un examen sistemático del contenido de éste con el objeto de determinar si es una muestra representativa y relevante del dominio. Se entiende como validez de contenido "la evidencia de que la definición semántica quedo bien escogida en los ítems formulados" (Carretero-Dios y Pérez, 2005, p.531) y para determinar ésta en la segunda versión del instrumento, se sometió a un grupo de jueces. El grupo elegido se compone de expertos tanto en materia de evaluación y gestión de calidad, como en temas relacionados con el clima laboral en las IES. La selección del grupo fue intencional y se integró por cinco jueces; un juez en el área de evaluación, dos jueces en gestión de calidad y dos jueces en el área de clima laboral.

Una vez seleccionados los jueces, se remitió un cuestionario al grupo solicitando su colaboración para que valorasen la relación teórica entre el concepto o definición de la variable y cada ítem que conforma el instrumento. Posteriormente se procedió a determinar la frecuencia de las respuestas de los expertos con el objeto de establecer la calidad de los ítems.

Para determinar la validez de construcción lógica del instrumento, se llevó a cabo un análisis de factores. Para la extracción de factores se utilizó el método de componentes principales, combinando los valores *Eigen* mayores de uno junto a la revisión de la distribución de pendiente para la identificación de los mismos. Como método de rotación de la matriz factorial se utilizó la técnica ortogonal *Varimax*.

En cuanto a la fiabilidad de la escala en sí, se realizó un análisis de consistencia interna a través del alfa de Cronbach este índice estadístico, asume "que la escala está compuesta por elementos homogéneos los cuales miden las mismas características y la consistencia interna de la escala puede evaluarse mediante la correlación existente entre los ítems de la misma" (Zapata y Canet, 2008, p.10).

El valor del alfa de Cronbach varía entre 0 y 1, en la medida que se acerca a 1 indica una mayor fiabilidad; un consenso general sobre el limite inferior del alfa es de 0.70, pudiendo bajar a 0.60 en los casos de investigaciones exploratorias. La fiabilidad solo muestra que los ítems al estar muy correlacionados, miden la misma variable latente (Zapata y Canet, 2008).

RESULTADOS

Validez De Contenido

Con el objeto de establecer la calidad de los ítems se determinó la frecuencia de las respuestas de los jueces cuyos resultados se muestran en la tabla 5.

Con base en los resultados del análisis realizado por los expertos, se propone la eliminación de los ítems 4 y 20; modificando la redacción de las preguntas 6, 11 y 44. Con esta adecuación el instrumento quedo compuesto así: la primera variable se integrada por siete ítems, la segunda se conforma de cuatro ítems; la tercera, se compone de cinco ítems; la cuarta de seis ítems, la quinta de 19 y por último, la sexta variable contiene únicamente tres ítems; esto es un total de 44 ítems.

Tabla 5. Validez de Contenido del CPCL

Nombre de la Variable	ITEM				
	Muy Malos	Malos	Modificable	Muy buenos	Excelentes
	50%	50% 59%	60% 79%	80% 89%	90%
Organización			p4,p20	p5,p8	p1,p2,p3,p12,p25
Desarrollo Personal			p6	p9	p7,p10
Interacción Social			p11	p13,p14,p15	p17
Comunicación				p16,p19,p22,p23	p18,p21 p24,p26,p27,p28,p29 p30,p31,p32,p34,p35 p36,p37,p38,p39,p40 ,p41,p42
Condiciones de Trabajo				p33,p43	
Identidad y Pertenencia			p44		p45,p46

Eliminar reactivos
Dejar reactivos
Modificar reactivos

Fuente: Elaboración propia

Análisis Factorial

Como se mencionó para establecer la validez del constructo se utilizó el método de análisis factorial, este análisis es el nombre genérico con el que se designa a una serie de métodos multivariantes, cuyo propósito es definir la estructura subyacente del instrumento en una matriz de datos. Consiste en "proporcionar agrupamientos de variables (o de ítems) en función de criterios matemáticos basados en la correspondencia entre éstos" (Carretero-Dios y Pérez, 2005, p.535).

Como previo a este análisis y con la finalidad de evaluar que tan adecuada puede ser la información recolectada en el CPCL para realizar el análisis factorial, se realizó la prueba la prueba de Kaiser-Meyer-Olkin (KMO) y la prueba de esfericidad de Barlett; ambas pruebas ofrecen una medida de la adecuación muestral al permitir comparar las magnitudes de los coeficientes de correlación observados con las magnitudes de los coeficientes de correlación parcial.

Los resultados de la prueba KMO es 0.858 y la prueba de esfericidad de Barlett (C^2=3221.279; p=.000 para 780 gl) indicaron que los datos son adecuados para el uso del modelo de análisis factorial.

Inicialmente se aplicó el análisis de componentes principales y rotación *Varimax* fijando el número de factores a seis con la intención de verificar los factores propuestos y los enunciados relacionados con cada factor. Este análisis arrojó una variación explicada de 60.95% y determinó que las variables peor representados (<0.50) corresponden a los enunciados 25, 26, 27 y 34 en cuanto a las aportaciones de cada elemento a la estructura dimensional, por tanto, se tomó la decisión de excluirlas del cuestionario. Después de la exclusión, se analizaron las cargas factoriales de los seis factores propuestos; el análisis arrojo una variación explicada de 63.5%, el resultado de la matriz de los componentes rotados de describe en la tabla 6.

En la tabla 6 es factible observar la rotación realizada, al cabo de 8 iteraciones, cuya interpretación seria:

Tabla 6. Matriz de componentes rotadosa del CPCL

	F1	**F2**	**F3**	**F4**	**F5**	**F6**
p01	.243	.267	**.611**	.144	.135	-.064
p02	.200	.246	**.716**	.022	.040	.029
p03.	.037	.109	**.764**	-.018	-.009	.160
p05	.019	.171	**.725**	.118	.163	.210
p08	.119	.101	**.683**	.278	.113	.107
p12	-.010	.151	-.061	.180	-.027	**.663**
p06	.282	.125	.448	**.599**	.135	.053
p07.	.051	.203	**.590**	.537	.169	.019
p09	.264	**.566**	.279	.175	.185	.238
p10	.174	.115	.232	.228	.147	**.598**
p11	.127	**.801**	.072	.130	.258	-.090
p13	.226	**.610**	-.052	.180	.195	.258
p14	.072	**.759**	.171	.196	.022	.074
p15	.206	**.718**	.140	.056	.131	.184
p17	.031	**.644**	.213	.020	.356	.185
p16	.077	**.623**	.254	.137	.039	.323
p18	.127	**.735**	.217	.096	-.018	.176
p19	.150	**.727**	.267	.193	.214	-.071
p21	.177	.204	**.593**	-.034	-.079	.470
p22	.135	.176	.312	.106	.138	**.719**
p23	.294	.244	.269	-.103	.303	**.626**
p24	**.660**	.124	.097	.276	.233	.023
p28	**.613**	.111	.343	.408	.245	.129
p29	**.778**	-.066	.132	.018	.057	-.039
p30	**.637**	.078	.124	.354	.178	.112
p31	**.765**	.118	.212	.192	.198	.180
p32	**.741**	.142	.101	.204	.081	.080
p33	**.728**	.279	.115	.246	.212	.151
p35	**.571**	.252	.010	.139	-.185	.002
p36	**.590**	.313	-.034	.003	-.205	.121
p37	.216	.186	.020	**.778**	.024	.135
p38	.152	.179	.006	**.733**	.001	.124
p39	.413	.060	.122	**.605**	.022	.040
p40.	**.513**	.149	.054	.445	.153	.135
p41	**.508**	.105	.114	.392	.186	.196
p42	.315	.301	.114	**.603**	.162	.083
p43	.439	.063	.272	**.570**	.097	.074
p44	.153	.472	.166	.228	**.684**	.105
p45	.153	.253	.157	.105	**.812**	.158
p46	.188	.285	.075	.091	**.808**	.089

Método de Extracción: Análisis de Componentes Principales
Método de Rotación: Normalización Varimax con Kaiser
 a. La rotación ha convergido en 8 iteraciones

Tabla 7. Interpretación De La Matriz Rotada

Nombre de la Variable	Ítem propuesto	Ítem que cargan significativamente a lo propuesto	Ítems excluidos de lo propuesto
Organización	1,2,3,5,8 y 12	1,2,3,4,5 y 8	12
Desarrollo Laboral	6,7,9,10	Ninguno	Todos
Interacción Social	11,13,14,15 y 17	Todos	Ninguno
Comunicación	16,18,19,21,22,23	22 y 23	16,18,19 y 21
Condiciones de Trabajo	24,28,29,30,31,32,33,35, 36,37,38,39,40,41,42 y 43	24,28,29,30,31,32,33,35, 36,40 y 41	37,38,39,42 y 43
Identidad y Pertenencia	44,45 y 46	Todos	Ninguno

Fuente: Elaboración propia

<u>Fiabilidad</u>

El alfa de Cronbach para los 40 reactivos fue 0.945, lo cual indica que el instrumento es válido, esto es, los resultados obtenidos son confiables para inferir a partir de ellos (Agresti y Finlay, 1986). Los coeficientes (alfa de Cronbach) para las variables van de 0.723 para organización, a un alfa de 0.925 para el caso de las condiciones de trabajo. (Ver tabla 8).

Tabla 8. Coeficientes de Fiabilidad

VARIABLES DEL CLIMA LABORAL	Alfa de Cronbach's (unidad de análisis N=112)	Número de Ítem
Organización	0.723	6
Desarrollo Social	0.760	4
Interacción Social	0.858	5
Comunicación	0.831	6
Condiciones de Trabajo	0.925	16
Identidad y Pertenencia	0.909	3
TOTAL:		**40**

Fuente: Elaboración propia, cálculo efectuado a través del SPSS

CONCLUSIONES

Aun cuando el diseño y elaboración del instrumento de medición para la identificación de las variables que afectan el clima laboral del área financiera de una IES pública fue una ardua tarea, se logró el consenso de los expertos obteniendo un cuestionario de 40 ítem distribuidos en seis variables.

La validez de constructo se llevó a cabo a través de análisis factorial con el método de extracción, el análisis de los componentes principales, y el método de rotación varimax aplicados a la matriz de estructura de los reactivos. En el primer análisis factorial, al que fue sometido el instrumento de medición, se excluyeron cuatro ítem; en segundo análisis, los 40 enunciados restantes presentaron cargas factoriales superiores a 0.4.

De los resultados de la matriz rotada se desprenden dos acciones a seguir: primero, la necesidad de eliminar del CPCL la variable Desarrollo Laboral dado lo inestable de su estructura factorial, ya que los ítems propuestos cargan para factores distintos e independientes, y segundo, es necesario realizar modificaciones a los ítems que no cargaron satisfactoriamente, como se propone, a las variables Organización y Comunicación.

En relación a la consistencia interna, el CPCL en la prueba piloto, presentó un coeficiente de fiabilidad (α) global aceptable de 0.945, lo cual pone de manifiesto que los ítem que lo conforman se relacionan con el mismo rasgo. Al interior del instrumento, las subescalas del CPCL funcionan suficientemente bien; el resultado más bajo se obtuvo con la variable organización compuesta por 6 ítem con un α de Cronbach de 0.723.

Con base en los resultados se ha modificado el instrumento original, con lo cual se dispone de un instrumento confiable para medir el CL y monitorear el estado de las variables a fin de poder realizar ajustes en caso de ser necesario y así disponer de un CL propicio para la productividad y eficiencia.

Esta propuesta, debe ser considerada como una primera parte de un proceso de evaluación del Clima Laboral de una organización y por consiguiente, deberá realizarse el ejercicio empírico, para corroborar que la propuesta de este nuevo instrumento cumple con las expectativas aquí planteadas.

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LA INTEGRACIÓN DE LA DIRECCIÓN DE RECURSOS HUMANOS CON LA ESTRATEGIA ORGANIZACIONAL EN LAS EMPRESAS AFILIADAS A ASCORT-ASOCIACIÓN COLOMBIANA DE RELACIONES DE TRABAJO

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RESUMEN

Las alternativas estratégicas para las empresas comienzan a mostrar manifestaciones de fatiga y rigidez, cuando estas se fundamentan en aspectos tan relevantes para las organizaciones como la estructura, la tecnología e incluso el precio en los mercados. Tales consecuencias vuelcan las intenciones empresariales y sus esfuerzos en novedosas formas estratégicas relacionadas con los recursos, y día a día es el aporte proveniente del recurso humano el que se instala como núcleo y soporte de las estrategias de empresa. Es pertinente desde una perspectiva teórica y, en lo posible, practica, evaluar el alcance estratégico del recurso humano y la manera como logra articularse con el propósito esencial de las compañías, así como las formas que se diseñan para involucrarlo. En el presente texto se realiza un análisis desde una perspectiva teórica de las actividades usuales relacionadas con el carácter estratégico del recurso humano y se presentan los resultados de un primer acercamiento empírico para la identificación y comprensión de la participación y articulación estratégica del recurso humano con los propósitos empresariales. A la vez se propone el desarrollo humano como criterio estratégico para las empresas y los fenómenos organizacionales que lo explican.

PALABRAS CLAVE: Planeación estratégica, gestión humana y desarrollo humano.

INTRODUCCIÓN

Desde un inicio es pertinente comprender que las organizaciones no son responsables directas del proyecto de vida de su recurso humano en la figura de los sujetos organizacionales, pero al mismo tiempo no pueden ser ajenas al proceso de desarrollo de sus integrantes. Tal apreciación se justifica en la contextualización y conceptualización del desarrollo organizacional como mecanismo y propósito empresarial. El desarrollo organizacional en las empresas se ha relacionado con las posibilidades de progreso, crecimiento, bienestar e inclusive riqueza. Así, el desarrollo organizacional se constituye en un objetivo organizacional y en la oportunidad para alcanzar de manera efectiva sus metas estratégicas. Esto implica la necesidad de gestionar el proceso interno de desarrollo de aquellos elementos que conforman el sistema organizacional, es decir, el desarrollo de sus áreas, procesos y medios de productividad.

De otra parte, la productividad como medida del desempeño organizacional está determinada por múltiples variables, como son las derivadas del capital físico y el trabajo, inversión en recursos y tecnologías, las que tienen que ver con la actividad organizacional y las que determinan por lo tanto la productividad de los recursos, incluyendo entre estos la fuerza de trabajo. Cualquier situación que altere en forma positiva o negativa el desempeño del personal tendrá algún impacto en la productividad de la organización. Así, es necesario evaluar el fundamento y el enfoque estratégico que soporta la gestión de los recursos humanos. Es en esta situación del quehacer organizacional, donde el proceso de desarrollo individual se aparta de discusiones bizantinas respecto del papel y la responsabilidad de las empresas, para situarse en oportunidades estratégicas. Aquellas variables organizacionales involucradas al mismo tiempo en posibilidades personales de realización, terminan constituyendo objeto de intervención empresarial en pro del desarrollo empresarial.

Sin negar la productividad como trasversal a los objetivos organizacionales, y asumiendo las directrices de la gestión organizacional, es claro que la estructura gerencial tradicional está diseñada para apoyar el alcance de las metas organizacionales en función directa de la productividad. Lo novedoso de esta propuesta implica involucrar el paradigma del desarrollo organizacional en función del desarrollo humano entre los objetivos organizacionales (CUMMINGS, 2005). Considerando que la intervención gerencial y el desarrollo de los elementos sistémicos, es decir, la interdependencia de todos los componentes organizacionales, inclusive el recurso humano es condición necesaria para el desarrollo organizacional y para la concepción de sistema organizacional.

Con el fin de entender la manera cómo interactúan la gestión de los recursos humanos y la estrategia organizacional, se hace necesario entender el propósito fundamental de la estrategia del negocio, la cual se refiere a como compite la empresa en un mercado (Bruggeman & Van der Stede, 1993). La forma como se clasifican los tipos de estrategia, en teoría no cambian su fundamento, mientras que el núcleo de la estrategia si esta susceptible a cambios, cuando es necesario garantizar la viabilidad de la planeación y ejecución de esta. Explicar la existencia de relación alguna entre la gestión de los recurso humanos y la estrategia empresarial a partir de los sistemas de indicadores, requiere identificar contextualmente, en términos de tiempo, el proceso evolutivo que ha desarrollado el fundamento de las estrategias empresariales, y que principalmente ha estado influenciado por el fenómeno de internacionalización y globalización de los mercados, al tiempo que condiciona el comportamiento interno de las empresas en cualquier contexto.

REVISIÓN LITERARIA

El Impacto de los Recursos Humanos en el Alcance de las Metas de la Organización

No basta con identificar la forma como la dirección de los recursos humanos interactúa o se integra con la estrategia de la organización. Suponiendo claridad con respecto al tema anterior, resulta de importante relevancia la cuantificación del retorno que de la inversión en prácticas de recursos humanos incurren las organizaciones. Sólo como antecedente genérico, se calcula que el 50% de las grandes empresas y sólo el 10% de las PYMES cuentan con medidas numéricas y económicas del impacto de las prácticas de recursos humanos sobre los resultados de la empresa (SANCHEZ, 2000). Son muchas las razones que tratan de justificar estas cifras, la gran mayoría de ellas originadas por las mismas áreas dedicadas a la administración de los recursos humanos, considerando la necesidad de demostrar el impacto de sus actividades en el alcance de los objetivos de la empresa, aún en algunos casos acompañadas tales apreciaciones de un nivel significativo de subjetividad. En especial llama la atención el hecho de que se piense que lo que no es posible controlar es imposible de medir; asumiendo que comportamientos inherentes al ser humano en el ámbito organizacional como la rotación y ausentismo (SANCHEZ, 2000), aunque se pueden medir, no es posible determinar en que forma o cuanto impactan los resultados de la empresa, y claro esta, asumiendo que éste tipo de comportamientos son determinados tanto por variables relacionadas directamente con el desarrollo de la actividad, como por variables externas a los procesos organizacionales, es decir, que no están incluidas en el vínculo laboral, pero que están íntimamente ligadas a las actitudes del recurso humano. Por lo tanto, no serían susceptibles de ser controlados desde la gestión organizacional.

Resulta imperativo el contar, no solo con programas dirigidos a impactar la conducta humana en función de la labor, sino también el diseñar o encontrar la forma de calcular el impacto que una actividad de este tipo pueda tener sobre el desempeño del trabajador y cómo éste pueda aportar a la productividad y en el mejor de los casos, que tanto valor se desprende de su participación en el proceso, cuando, lo único que está garantizado, incluso sin ser necesario un cálculo, es el cubrimiento de sus propios costos como fuerza de trabajo.

Los planteamientos mencionados en el anterior supuesto no son del todo ciertos, si se tiene en cuenta que en el interior de las organizaciones existen determinantes directos e indirectos del comportamiento humano. Así, el ambiente de trabajo (clima), y la calidad del entorno de trabajo, pueden influir en la manera de hacer las tareas, en forma directa en el trabajo y en forma indirecta a través de comportamientos que al parecer no atañen a las actividades del cargo pero que dependen del estado del individuo que actúa como recurso. En el contexto organizacional, implicaría el equilibrio societal, es decir, el equilibrio entre todas las dimensiones que convergen en el ser humano, reconocidas dimensiones políticas, económicas, religiosas e incluso emocionales, que en el ámbito organizacional daría lugar al sujeto organizacional y necesariamente la convergencia de estas dimensiones y la diversidad que se desprende en cada uno de los trabajadores, impactan obligatoriamente los resultados de las actividades del trabajo.

Desde una perspectiva estrictamente financiera, el manejo de los recursos humanos y su impacto requiere ser medido, y en lo posible controlado. Aceptar que "los costos directos de mano de obra, no solo involucran la inversión directa que se realiza en la consecución de fuerza de trabajo y que es la resultante del vínculo laboral," (JACKSON, 2009,39) sino que también, están incrementados por las actitudes asumidas por los trabajadores, brinda una posibilidad al supuesto trabajado, que el total del valor generado por las compañías incluye resultados del comportamiento humano diferente del que es reconocido cuando actúan las personas como factor de producción.

En el caso en que se pretenda estimar el aporte financiero que se hace a las utilidades empresariales a partir del trabajador, desde el estado de sujeto organizacional diferente al aporte como factor de producción, sería necesario admitir para empezar, que el impacto en los resultados organizacionales desde el desarrollo del sujeto organizacional se haya incluido en el diferencial entre la productividad y los costos de producción, es decir, de entrada sería posible inferir que en el total de utilidades del ejercicio organizacional una parte proviene de las actitudes autónomas de los trabajadores. Otra manera de justificar o contra argumentar lo anterior, sería teniendo la certeza, que a partir de las actividades tradicionales que se desarrollan desde la gestión de los recursos humanos se asegura valor adicional diferente del esperado. Tal rendimiento esperado, de antemano se haya involucrado en los objetivos del área en cuestión. No es nada fácil demostrar que partiendo de actividades tradicionales es posible agregar valor, tanto más, cuando "el sistema de indicadores se basa en medidas de las transacciones de las actividades de los recursos humanos" (WAYNE, 2006, 39), esto sólo hablaría del nivel de ocupamiento del área de recursos humanos. Los actuales sistemas de medición realizan su tarea sólo sobre las funciones de costos, mediante la realización de las actividades de la gestión financiera.

Características Mínimas Estratégicas del Sistema de Gestión Humana

La existencia de un sistema de indicadores de gestión humana exige analizar tanto su pertinencia en relación con la existencia de objetivos estratégicos, como su coherencia con el carácter estratégico, es decir, su capacidad para aportar información relevante para la toma de decisiones. De esta forma es posible inferir el porcentaje de organizaciones que podrían presentar un carácter estratégico en su gestión humana, en la medida que su sistema de indicadores no solo cumple con la función de medir, sino también funciona como medio de evaluación de la información obtenida para soportar el proceso de toma de decisiones. Dado lo anterior la pertinencia de un indicador a la luz del referente conceptual, se entiende como la adecuación del indicador al propósito que se pretende alcanzar mediante los objetivos organizacionales. Esto es, la capacidad que pueda tener el indicador de medir o evaluar lo que se supone deba medir o evaluar. La coherencia tiene dos dimensiones: una interna que se refiere a la coherencia del sistema mismo en términos de que cada uno de los indicadores pueda interactuar e interrelacionarse con el resto de los indicadores que conforman dicho sistema. La otra dimensión, es la coherencia externa y se refiere a la relación justificada entre el objetivo que lo propone como indicador y la función medidora o evaluadora que el indicador desempeña.

DISCUSIÓN DE RESULTADOS

De las 44 empresas participantes 36 aseguran responder a un direccionamiento estratégico, las restantes se dividen en las que reconocen no trabajar en el marco de un plan estratégico y las que se abstienen de responder. De las 36 que responden a un plan estratégico 14, el 45%, privilegian el objetivo de crecimiento, 11, el 35%, la rentabilidad y 6 el 19% la supervivencia. Y esta distribución confrontada con la presencia de objetivos estratégicos de gestión humana donde el 70% no presentan plan estratégico de recursos humanos, infiere que el discurso de fundamentar el logro de los objetivos en el recurso humano es contradictorio. 23 de las 44 empresas que reportaron un sistema de indicadores de gestión humana cumplen con la característica de pertinencia, y por otra parte al evaluar la coherencia 20 de las 44 empresas cumplen la característica. Hasta ahora solo se tiene el cumplimiento de las características por separado, es decir, que probablemente las características no se encuentren conjugadas. Lo que implica la necesidad de un análisis cruzado en el cual se encuentra que 19 empresas, es decir el 43% cumplen con ambas características a la vez.

CONCLUSIONES

Con relación a lo planteado en el objetivo general del trabajo, en el cual se pretendía caracterizar el alcance estratégico de la gestión de los recursos humanos, se encontró que diecinueve de las cuarentaicuatro organizaciones que participaron del estudio, es decir, el cuarenta y tres coma dieciocho por ciento (43,18%), cumplen con las características de pertinencia y coherencia interna y externa, requerimientos que posibilitan la integración de la gestión de los recursos humanos con el direccionamiento estratégico de las organizaciones, lo que permite inferir que este porcentaje de organizaciones puede efectivamente presentar funciones estratégicas en el proceso de dirección de los recursos humanos.

Con relación a la hipótesis de trabajo, que propone que los sistemas de indicadores de gestión humana de las organizaciones partícipes del estudio no reúnen las características mínimas de articulación con el direccionamiento estratégico, y considerando los resultados obtenidos en el análisis descriptivo de la información, además del soporte conceptual del presente estudio, es posible afirmar que para el total de las organizaciones participantes del presente estudio no se acepta la hipótesis, sin embargo, la hipótesis nula planteada en el contraste de hipótesis no es susceptible de ser rechazada, teniendo en cuenta que el resultado de las diferencias de las medias de los criterios evaluados fue diferente de cero.

Con relación al marco teórico se evidenció que los aportes desde los fundamentos tanto teóricos como empíricos durante la década de los noventa, período en que se comienza a discutir el alcance estratégico del recurso humano e incluso en los primeros años de la década del 2000, han tenido como horizonte justificar la importancia estratégica del recurso humano, y poco se ha profundizado en la forma o formas, como éste recurso es capitalizable por las organizaciones. Además, que la mayoría de los autores e investigadores consultados coinciden en afirmar que en el campo estratégico de la gestión de los recursos humanos, es poco lo que se ha avanzado y muy amplio el panorama en lo que hay por lograr.

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EL IMPACTO DE LA INFORMACION PARA EL FORTALECIMIENTO DE LA IMAGEN INSTITUCIONAL: CASO, FACULTAD DE CIENCIAS ADMINISTRATIVAS. UABC

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RESUMEN

Hoy en día el mercado es mas competitivo para nuestros profesionistas y obtener un lugar privilegiado es una ardua tarea, se debe apostar a diferentes acciones y atributos que lleven a la instituciones educativas a la creación de valores agregados y diferenciadores únicos que les den un posicionamiento con sus audiencias objetivo. El presente documento se establece como una investigación, estudio de caso donde se realiza un análisis del área de difusión, buscando establecer a partir de ello una propuesta de mejora, que beneficie al alumno, docente y a la propia Facultad, Universidad y por ende a nuestra Sociedad. Se realizaron entrevistas abiertas aplicadas en los diferentes ámbitos, internos y externos arrojando resultados que se mostraron coincidentes en su mayoría y que en su análisis se detectaron varios rubros a fortalecer en las áreas de comunicación, relaciones públicas e imagen, como parte de un todo. En base a los resultados y al análisis realizado se realizó una propuesta que contiene una serie de estrategias que permitirán fortalecer las áreas de comunicación, relaciones públicas e imagen necesarias en la Facultad y en cualquier institución pública y privada..

INTRODUCCION.

"Las dos cosas mas preciadas de este lado de la sepultura son nuestra reputación y nuestra vida. Pero es para lamentarse que el mas despreciable murmullo puede privarnos de una y ser el arma mas debilitadora de la otra" Charles Caleb Colton.

Hoy en día el mercado es mas competitivo para nuestros profesionistas y obtener un lugar privilegiado es una ardua tarea, se debe apostar a diferentes acciones y atributos que lleven a la instituciones educativas a la creación de valores agregados y diferenciadores únicos que les den un posicionamiento con sus audiencias objetivo.

La reputación va de la mano con el desempeño y el cumplimiento, en una palabra con el comportamiento. La generación de una reputación debe estar basada en información veraz y real de la institución, así como de aspectos de responsabilidad social donde haya concordancia entre filosofía, misión y visión con las acciones que se realizan.

La imagen produce un juicio de valor que empuja a diferentes actitudes de aceptación o rechazo de lo percibido, motivo por el cual merece mantenerse vigilada y en continuo cuidado. El comunicar al exterior de la institución, a través de cualquier medio, la imagen de sus valores, actitudes, responsabilidad social y proceder, influye en el comportamiento y preferencia de personas u organización que se relacionan con esta, de manera que de lo que se percibe se crea un conjunto de ideas que si son positivas, generara un acercamiento o en caso contrario si son negativas, la acción será de rechazo.

Actualmente la reputación es parte del proceso de trabajo día a día, los valores son establecidos por elementos intangibles como la imagen o la filosofía de la institución, a medida que se valora la

importancia de la reputación, se hace evidente que el obtener posicionamiento se logra a través del prestigio, donde la imagen difundida juega un rol principal.

Es aquí donde las relaciones públicas que han sido históricamente utilizadas con fines tácticos, actualmente por naturaleza, se toman mas en cuenta como un recurso estratégico del que las instituciones no pueden prescindir sin correr el riesgo de no contar con el apoyo de la opinión pública.

"Hoy en día podemos definir las relaciones publicas como una disciplina científica que se relaciona y nutre de otras ciencias y que, a partir de un proceso integrativo, se propone posicionar una buena imagen institucional, vinculando y generando valores comunes y compartidos entre una organización y los distintos públicos con los que interactúa" Lic. Antonio E. Di Genova, argentina 2003.

REVISION LITERARIA.

A nivel internacional, se localiza así como otras universidades de su importancia, la Universidad Austral de Chile, quien contempla a nivel directivo la oficina de relaciones públicas y extensión, misma que hace su presentación en el portal Web de su universidad.

En el ámbito nacional encontramos también que tanto organismos públicos y privados así como instituciones educativas, cuentan con oficinas de relaciones públicas, que se relacionan en línea directa con la dirección de cada una de estas.

A) En el Instituto Mexicano del Seguro Social su área de apoyo se encuentra colocado en el organigrama como una coordinación general de comunicación social, de donde depende la coordinación de difusión.

B) La Universidad Juárez Autónoma de Tabasco, cuenta con una dirección de relaciones públicas y difusión en línea directa del Sr. rector
C) La Universidad Tecnológica de Aguascalientes, en su estructura contempla un área de extensión universitaria de donde se desprende la oficina de prensa y difusión institucional

D) En la Universidad Autónoma de Campeche, la dirección de relaciones públicas se encuentra en dependencia directa de las oficinas del rector.

A nivel estatal como ejemplo se tiene al organismo representativo de la administración pública estatal. Gobierno del Estado de Baja California, en su estructura orgánica tiene un área en dependencia directa de la secretaria particular del gobernador, denominada oficina de relaciones públicas y otra con el nombre de oficina de comunicación social, separando las actividades relativas a cada una de estas, pero concatenadas en su interior.

La Universidad Autónoma de Baja California, en su estructura orgánica tiene la secretaria de rectoría e imagen institucional de donde deriva la unidad de relaciones públicas y medios, misma que maneja en forma coordinada las áreas de relaciones públicas y comunicación. Los fundamentos básicos sobre los que se inscriben los objetivos de las acciones de una oficina de difusión y relaciones públicas los podemos encontrar en el Estatuto General de la Universidad Autónoma de Baja California, aprobado por el H. Consejo Universitario en sesión extraordinario celebrada el 2 de julio de 1983.

Como se observa, a nivel internacional, nacional, estatal y municipal, no solo los organismos gubernamentales cuentan con una oficina de relaciones públicas y comunicación, sino también las empresas privadas e instituciones educativas, donde estas áreas se encuentran en línea directa a la dirección y donde si bien en algunas no se encuentran en dependencias una área de la otra, no dejan de estar estructuradas para trabajar en conjunto sus objetivos generales.

METODOLOGIA

En la búsqueda de las directrices a seguir que nos pudieran ofrecer la información sobre las acciones en las cuales se debería trabajar para alcanzar los objetivos planteados, se realizo durante el periodo 2008-1 y 2008-2 una serie de entrevistas, divididas estas en su aplicación una en la parte interna a la universidad y parte en la externa a esta.
En la parte interna participaron (10) docentes con más de 15 años dentro de la facultad y (10) alumnos de semestres avanzados de facultad, así como personal administrativo de oficinas de rectoría y vicerrectoría.

En lo que respecta a la parte externa, participaron 3 funcionarios de gobierno, 2 Directores de programas estatales y 1 Subdirector de Programa de Educación en el estado, todos ellos egresados de nuestra Universidad. Por parte de los organismos privados participo un Coordinador de área de Mercadotecnia y otro Coordinador de obras, residentes establecidos en nuestra ciudad por más de 20 años.

Las entrevistas realizadas fueron entrevistas abiertas, solicitándoles su opinión en primera instancia, respecto al conocimiento de las actividades que realiza el área de difusión actualmente en la facultad, seguida, de cuales en su opinión consideraría los aspectos importantes ó necesarios y que debieran estar integrados a las funciones del área en mención. (Figura 1)

Figura 1: Etapas

Esta figura muestra las etapas para lograr la imagen deseada

RESULTADOS

Los comentarios vertidos por docentes y alumnos de la facultad, coincidieron al manifestar los pocos medios de comunicación existentes en la facultad y solicitar la implementación de estrategias que aporten una mayor difusión del las actividades que se realiza por docentes y alumnos de la facultad en su interior, así como darlas a conocer a la sociedad, donde esta pueda visualizar los conocimientos y experiencias que docentes tienen y que alumnos adquieren, y que en su momento aportaran a la sociedad; de igual Manera manifestaron la falta de indicadores en los espacios que determinen cada una de sus áreas, así como la carencia de una armonía en su estructura y con la naturaleza.

Las personas entrevistadas de las oficinas universitarias externas a la facultad, manifestaron la falta de una imagen estructural armónica y de ubicación que fomente la identidad universitaria en el área, así como la creación de estrategias de conocimiento externo sobre los valores y éxitos que los distinguen, así como de los alumnos o egresados distinguidos de la facultad que fomenten el prestigio de la misma.

Es importante señalar que la observación anterior fue percibida por entrevistados de la parte externa a la universidad, como son funcionarios de gobierno y de organismos privados, aplaudiendo el esfuerzo de

comunicación realizado a partir de los programas de radio y televisión mismos donde sugieren una mayor concentración de temas especializados, y anexando la necesidad de un mayor acercamiento con la institución, así como un portal de interacción sobre oferta y demanda de personal laboral especializado.

Por otra parte, sugirieron una mayor difusión de los programas que realiza la facultad, que son de apoyo social, tecnológico y de asesoría profesional a la comunidad, en el rubro de egresados manifestaron la inquietud de establecer estrategias que vinculen a estos con su alma Mater ayudándolos a crecer profesionalmente, estrategias que fortalezcan la identidad cimarrona de los mismos y estos a su vez la de los alumnos. Sin lugar a duda las entrevistas abiertas que se aplicaron en los diferentes ámbitos, internos y externos, arrojaron resultados que se mostraron coincidentes en su mayoría y que en su análisis se detectaron varios rubros a fortalecer en las áreas de comunicación, relaciones públicas e imagen, como parte de un todo.

CONCLUSIONES

En base a los resultados y al análisis realizado a partir de ellos, llevo a determinar la siguiente propuesta que contiene una serie de estrategias que responderán la inquietud del problema planteado en el presente estudio de caso.   Se propone reestructurar el departamento de difusión creando una misión, visión que este acorde con la de la facultad; presentando en la propuesta siete estrategias que permitirán fortalecer la presencia de la Facultad y lograr la imagen que la proyecte a nivel nacional e internacional

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EFECTOS DE LA CRISIS MUNDIAL EN LA CUENTA DE CAPITAL DE LA BALANZA DE PAGOS EN MÉXICO

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ABSTRACT

Este trabajo hace un recuento acerca de las crisis que han afectado la economía en México, que tanto ha actuado el gobierno en estos tiempos difíciles y como los ciudadanos han sido afectados. Haciendo entrevistas con profesores reconocidos para llegar a una conclusión acerca de esta crisis económica actual.

Palabras clave: crisis, economía, México, gobierno.

INTRODUCCIÓN

En México, como consecuencia de la crisis mundial se han registrado problemas que han afectado tanto las transferencias de capital como las adquisiciones de activo, incluyendo las deudas gubernamentales y privadas. Todo esto ha golpeado a México en el desempleo en maquiladoras y pequeñas empresas, toda la economía sufrió cambios ya que se devalúa el peso frente al dólar y la inflación en los precios se hizo presente, el aumento en los impuestos también llego a golpear un poco más nuestra economía, estando a cualquier nivel social. Refiriéndose a las importaciones y exportaciones disminuyeron constantemente lo cual hizo que los inversionistas pensaran en cambiar sus ideas y buscar nuevos lugares donde invertir su dinero. Debemos hacer un recuento de la historia de nuestro país haciendo hincapié en los años en que hubo movimientos notorios en la economía.

ANTECEDENTES

México ha enfrentado en los últimos 25 años, crisis económicas y financieras ocasionadas por la ineficiencia en la administración pública. Hubo que enfrentar dos períodos presidenciales demasiados populistas, como lo fueron el Presidente Luis Echeverría Álvarez y el Presidente José López Portillo, pensando que de esa manera la nación caminaría por mejores senderos en el campo de la Economía y las Finanzas Públicas, mismas que tendrían un mejor aprovechamiento si éstas se distribuían en mejores condiciones entre los ciudadanos del campo y los grandes grupos de escasos recursos; pero solo se incrementaron los problemas y se debilitaron las finanzas del estado y se tuvo que recurrir a un excesivo financiamiento externo. En 1976 se afrontó una primera devaluación, elevándose la paridad peso –dólar hasta 12.50 por dólar, que a la fecha ya no se ha podido detener, sino por el contrario el deterioro de la moneda se ido incrementando hasta verse influenciado por los diversos movimientos turbulentos de las crisis Asiáticas, en Latino América, en Rusia, en Japón, han hecho de las reservas monetarias de los diversos países.(Núñez Alvarez,1999).

Los intereses bancarios son inestables y sujetos a las constantes alzas, el tipo de cambio es muy vulnerable y el dinero se ha encarecido, por otro lado el financiamiento a las empresas está detenido.
En 1982, el Presidente López Portillo tratando de resolver en parte el problema, anuncia la Estatización de la Banca, establece el control de cambios, cambia la política de intereses y establecen una serie de reglas en materia del Sistema Financiero, partiendo de la base de que buscaba un mejor acceso a los servicios de banca, una mayor distribución de los recursos financieros sin embargo, no funcionó como se esperaba y la crisis se incrementó.

Al tomar posesión como presidente el Lic. Miguel de la Madrid Hurtado, lo primero que hizo fue nombrar una vez más como Director del Banco de México, a Miguel Mancera Aguayo, a fin de regresar a una mayor libertad cambiaria, estableciendo otro tipo de mecanismos cambiarios, que dieran mejores resultados que los tenidos con la estatización, se aprueba vender un treinta y tres por ciento de las acciones bancarias a los antiguos dueños de los bancos rescatados por el gobierno esto da inicio a la apertura comercial y con esto surgen cambios estructurales en el Sistema Financiero Mexicano, que necesitan de un amplio desarrollo en la prestación de servicios; pero se enfrenta a la carencia de experiencia y conocimiento en materia bancaria a los que habían sido designados directores de bancos y se cae nuevamente en problemas y crisis financieras, económicas, se tuvo que afrontar en 1987 un Crack bursátil que deja desprotegidos a muchos mexicanos que creyendo en ganar con el alza de los intereses que la banca y las mismas Casas de Bolsa ofrecían en su momento, las que abusando de la carencia de conocimiento del entorno financiero de los aprendices de inversionistas, hizo que éstos perdieran.

Se afrontó una alza desmedida en los precios y en el mismo año de 1987 se tuvo el porcentaje de inflación que la historia financiera haya reportado, que fue casi del 160% anual, los intereses llegaron a pagarse como tasas pasivas hasta por 172%, cosa que hizo que el Presidente en el mes de diciembre de ese año, decretara alzas de los combustibles y de los servicios que prestaba el Estado y de esta manera se llega a la entrada y firma de México a una amplia y casi completa globalización, con la Firma del TLC.

Por tanto, la globalización, el control férreo por parte de los organismos internacionales hacia nuestras finanzas públicas y privadas, la falta de una competencia en calidad y precio de bienes y servicios, la devaluación de nuestra moneda en el error de diciembre de 1994 y la caída de los precios del petróleo.

La crisis económica de México de 1994 fue una crisis iniciada en México de repercusiones mundiales. Fue provocada por la falta de reservas internacionales, causando la devaluación del peso durante los primeros días de la presidencia de Ernesto Zedillo. En el inicio del proceso de devaluación de la moneda mexicana, el entonces presidente de los Estados Unidos, Bill Clinton, solicitó al Congreso de su país la autorización de una línea de crédito por $20 mil millones de dólares para el Gobierno Mexicano que le permitieran garantizar a sus acreedores el cumplimiento cabal de sus compromisos financieros denominados en dólares.

En el contexto internacional, las consecuencias económicas de esta crisis se denominaron Efecto Tequila. En México, se conoce como el *"Error"* de diciembre, una frase acuñada por el ex presidente mexicano Carlos Salinas de Gortari para atribuir la crisis a las presuntas malas decisiones de la administración entrante de Ernesto Zedillo Ponce de León y no a la política económica de su sexenio.

Teniendo que cumplir con las obligaciones del Tratado de Libre Comercio de América del Norte, México no recurrió a las prácticas tradicionales de los países latinoamericanos en tiempos de crisis (como el control de capitales, lo cual hubiera prolongado la crisis, tal como fue el caso con las crisis sudamericanas del 2001-2002), sino que introdujo controles estrictos en la política fiscal, continuó con su política de libre comercio y libre flotación. El crecimiento acelerado de las exportaciones amortiguó la recesión, y en menos de 10 meses, la tasa de crecimiento mensual del PIB ya era positiva. Para 1996 la economía ya estaba creciendo (llegando a un máximo de casi 7% en 1999), y en 1997 México pagó, por adelantado, todos los préstamos de los Estados Unidos. No obstante, los efectos de la crisis, principalmente causados por las altísimas tasas de interés durante los días de la devaluación (que llegaron hasta el 100%), y que provocaron que millones de familias no pudieran pagar sus préstamos e hipotecas, duraron mucho más tiempo.

Los negocios mexicanos que tenían deudas en dólares, o que se confiaron en comprar suministros de Estados Unidos, sufrieron un golpe inmediato, con un despido masivo de empleados y varios suicidios producto de la tensión de las deudas. Negocios cuyos ejecutivos asistieron a las reuniones en las oficinas

del entonces presidente Zedillo se ahorraron la pesadilla de la crisis - ya que fueron advertidos, compraron rápidamente una inmensa cantidad de dólares y renegociaron sus contratos en pesos. Para empeorar la situación, el anuncio de la devaluación se dio a mitad de semana en un miércoles, y durante el resto de la semana los inversionistas extranjeros huyeron del mercado mexicano sin que el gobierno hiciera ninguna acción para prevenirlo o desalentarlo hasta el siguiente lunes cuando ya todo fue muy tarde.

Grafica 1: Inversión Extranjera
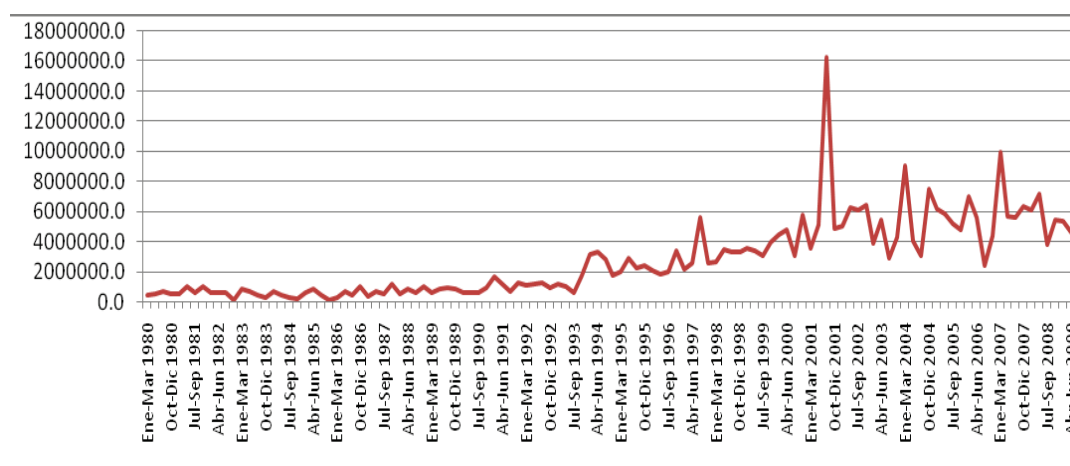
Fuente: Banco de México, 10 de septiembre del 2009. Datos en miles de dólares

México logró recuperarse rápidamente del impacto causado por los atentados del 11 de septiembre pasado en Estados Unidos, al reflejar un crecimiento en el saldo de la inversión extranjera de cartera. Al cierre de octubre, el saldo de capital foráneo en la Bolsa Mexicana de Valores (BMV) se ubicó en 51.8 mil millones de dólares.

Esta cifra representó un aumento de 6.19% en relación con septiembre; sin embargo, el balance acumulado es negativo en 3.49 por ciento. De acuerdo con cifras de la institución bursátil, la participación de extranjeros en acciones de empresas mexicanas ascendió a 51.4 mil millones de dólares, 6.35% superior a la de septiembre.

Esta cifra es equivalente a 43.85% del valor de capitalización del mercado accionario mexicano, el cual concluyó octubre con un monto de 117.1 mil millones de dólares. En el mercado de dinero, el saldo fue de 456.71 millones de dólares, lo cual significó una contracción mensual de 9.44%, que básicamente se debió a adecuaciones contables que realizó el Banco de México. La crisis económica de México de 1994 fue una crisis iniciada en México de repercusiones mundiales. Fue provocada por la falta de reservas internacionales, causando la devaluación del Peso durante los primeros días de la presidencia de Ernesto Zedillo. A unas semanas del inicio del proceso de devaluación de la moneda mexicana, el entonces presidente de los Estados Unidos, Bill Clinton, solicitó al Congreso de su país la autorización de una línea de crédito por $20 mil millones de dólares para el Gobierno Mexicano que le permitieran garantizar a sus acreedores el cumplimiento cabal de sus compromisos financieros denominados en dólares.

Los Estados Unidos intervinieron rápidamente comprando pesos del mercado para evitar una mayor depreciación del peso, sin embargo esta medida no era suficiente. El presidente estadounidense Bill Clinton solicitó al congreso enviar un paquete de rescate. El congreso votó en contra de la aprobación de fondos de rescate. No obstante, algunas personas dentro del Tesoro norteamericano encontraron una vía legal para enviar el rescate por medio del Fondo de Estabilización de Divisas, la cual no requería la

aprobación del Congreso de los Estados Unidos. Así, se enviaron de los Estados Unidos $20 mil millones de dólares, a los cuales se les añadieron casi $30 mil millones más: $17 mil millones del Fondo Monetario Internacional, $10 mil millones del Bank for International Settlement, mil millones del Banco de Canadá en forma de swaps de corto término y mil millones más provenientes de diversos países latinoamericanos (entre ellas Argentina y Brasil cuyas economías eran severamente afectadas por los efectos de la crisis mexicana). El dólar se estabilizó a un precio de 6 pesos, y por los siguientes dos años, antes de ser afectado por la crisis financiera asiática de 1998, se mantuvo entre 7 y 7.7 pesos.

El crecimiento acelerado de las exportaciones amortiguó la recesión, y en menos de 10 meses, la tasa de crecimiento mensual del PIB ya era positiva. Para 1996 la economía ya estaba creciendo (llegando a un máximo de casi 7% en 1999), y en 1997 México pagó, por adelantado, todos los préstamos de los Estados Unidos. No obstante, los efectos de la crisis, principalmente causados por las altísimas tasas de interés durante los días de la devaluación (que llegaron hasta el 100%), y que provocaron que millones de familias no pudieran pagar sus préstamos e hipotecas por un largo periodo de tiempo.

Por crisis económica de 2008 y 2009 se conoce a la crisis económica mundial que comenzó ese año, originada en los Estados Unidos. Entre los principales factores causantes de la crisis estarían los altos precios de las materias primas, la sobre valorización del producto, una crisis alimentaria mundial, una elevada inflación planetaria y la amenaza de una recesión en todo el mundo, así como una crisis crediticia, hipotecaria y de confianza en los mercados.

Desde 2008 el peso mexicano entró en una serie de devaluaciones frente al dólar estadounidense que lo llevaron a perder alrededor del 25% de su valor hacia 2009. Entre las medidas que se tomaron para contener la devaluación del peso se aplicó la subasta de una parte de la reserva de divisas internacionales, lo que llevó al país a gastar más de 20 mil millones de dólares estadounidenses sin lograr los resultados esperados.

METODOLOGÍA

Este estudio es longitudinal ya que se dio un seguimiento desde 1980 hasta el año 2009, analizando las causas que han originado las crisis en la historia económica de México, durante ese periodo. Se elaboraron entrevistas con fundamento en una revisión analítica y se hizo mediante una técnica de entrevistas por vía correo electrónico y con la asistencia al foro llamado "Análisis del paquete económico 2010", donde participaron expositores reconocidos por la Universidad Autónoma de Ciudad Juárez, realizando de manera conjunta entrevistas a Docentes Investigadores de la Universidad.

ANÁLISIS DE RESULTADOS

Como se observa se marca el año de 1994, como una crisis muy trascendental en México, ya que hubo devaluación del peso y muchos otros factores que dieron como efecto dicha crisis, pero aun así y desde otra perspectiva, en ese tiempo se firmo el Tratado de Libre Comercio, que de buena manera abrió una puerta mas a México para recibir inversiones extranjeras, este gran incremento del comercio alentó la inversiones extranjera y el movimiento internacional de capitales. Para 1997, se ve un pequeño repunte en las inversiones ya que estas superan los 7.600 millones de dólares y colocan a México como el segundo país receptor de capital externo. Siendo el sector manufacturero y la industria maquiladora los más beneficiados.

En el periodo del 2001 se disparan las inversiones extranjeras en el momento en que Citigroup, grupo estadounidense, adquirió Banamex por 12 mil 500 millones de dólares, momento en el cual se reinvierten todas las utilidades.

En el 2007 hay un crecimiento moderado del 20.8%, conformadas por un 43.8% por nuevas inversiones, 38.5% entre compañías y el 17.7% por reinversiones de las utilidades. "El 2007 fue un año de resultados positivos en materia de inversión extranjera directa, lo que significa empleos bien remunerados y confianza en la administración federal, dijo Eduardo Sojo Garza-Aldape, titular de la Secretaría de Economía."

La crisis actual que se está viviendo en México y que en cierto marco se dice que ya toco fondo tendrá repercusiones en los 2 o 3 años siguientes, ya que se está teniendo un nivel de ingreso parecido al de 1994 y no se podrá hablar de una reactivación política tratando de aumentar impuestos o afectando económicamente a las empresas que ya han sido llevadas a una quiebra.
Se podría hablar de una recuperación para los próximos 10 años y a un paso lento, también se debe pensar en una reestructuración tributaria y política.

CONCLUSIONES

Las crisis que se han vivido en México oscilan desde 1975 a 1994, siendo esta ultima a la consideración de algunos la peor crisis en el país. No podemos dejar de lado que en el año 2008 se volvió a vivir una depresión económica muy fuerte debido a distintas causas a nivel mundial que vinieron a repercutir en nuestro país, tal seria el ejemplo en las inversiones extranjeras que se vieron muy afectadas, ya que al momento existen países más redituables para invertir y que México a pesar de su mano de obra barata y de las opciones que hay para establecer una empresa, se ha visto demasiado afectado por distintos factores como las malas decisiones del gobierno que nos han arrastrado a niveles muy grandes de desempleo y de una crisis tanto de niveles altos hasta los más bajos de la sociedad.

La más reciente crisis que empieza a principios del año 2008 y que tiene su origen en los Estados Unidos, se piensa que ya toco fondo pero tendrá una recuperación demasiado lenta, siendo hasta dentro de aproximadamente dos o tres años una expectativa para tener por lo menos un crecimiento por debajo del promedio.

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¿Qué años han sido los peores para la economía mundial?	Considero que la economía mexicana ha estado en un estado de bajo crecimiento acompañado de recesiones temporales severas que inició a principios de los 80´s y se ha mantenido a lo largo de más de dos décadas.	Desde octubre de 1929 hasta agosto de 1945	1936-1939 2008-2009	1930-1933 2008-2009	En los años en que ha habido guerra	Hay un rango entre los años 1910 y 1945, siendo periodos en guerra, seguidos por una crisis.	
¿Cual considera ha sido la peor crisis en México? ¿Por qué?	Si se va a resolver.	Hemos vivido en crisis (al menos yo) desde 1973 hasta 1977, desde 1982 hasta 1989, pero la peor ha sido en mi opinión la de 1995	1994-1995 por que México no estaba preparado para enfrentar un reto tal.	La del 94 por la devaluación que hubo y la actual porque se han presentado tasas negativas de crecimiento.	1994, por la devaluación tan fuerte que sufrió y por la creación de las UDI's que solo fueron para "calmar" a la población, ya que en apariencia la deuda se reducía	1994, ha sido la peor crisis en México	En los años 80's empeza ron las recesio nes tempor ales
La crisis actual en México, ¿cómo podría resolverse?	Las inversiones en el país han disminuido	Bajando los impuestos, no subiéndolos, hacer que desaparezcan todos, pero todos los regímenes especiales de tributación y exención, cortando muchísimos gastos y burocracia que no solo no producen nada y está corrompidísima y obstaculiza la producción sana de bienes y servicios y a la educación	Con cambios estructurales profundos y con voluntad política para lograrlos	Es muy complejo, pero se debe alentar el crecimiento, alentar la formación educativa y aumentar empleos, debe apoyarse a las empresas, las inversiones públicas y privadas.	Haciendo una buena reestructurac ión en los impuestos, sin agregar más claro	Se deberían hacer una reestructura ción de los impuestos, sin subir ni anexar nuevos, así como cambios políticos.	

En su opinión, ¿Cómo se han visto afectadas las inversiones en el país?	Las inversiones en el país han disminuido	Terriblemente, veamos a los países del sureste asiático, hace dos décadas eran mucho más subdesarrollados que nosotros y ahora nos han rebasado por mucho, porque aquí se le obstaculiza y se le castiga al inversionista que arriesga y se premia al delincuente y al político traidor, en general, a los parásitos.	De manera drástica, pues no se ha podido obtener los niveles de inversión de años pasados, dado que el origen de la inversión es también de países que experimentan una crisis	Han tenido un impacto gigantesco, cayó la demanda en la inversión sobre todo en el 2009.	La verdad no estoy al tanto de las inversiones y cómo funcionan	Las inversiones han disminuido de una manera muy drástica y aun no se han podido recuperar debido a la crisis.
Usted piensa que la crisis ya toco fondo, ¿Cuánto tiempo pasara para una recuperación?	Sí, ya toco fondo. La expectativa actual es que el crecimiento económico en los próximos años (2010 y 2011) será moderado (por debajo de la tasa "natural" o promedio de crecimiento en México).	No, y si se aprueba el engendro fiscal propuesto para el 2010, menos. La verdadera recuperación se dará si regresamos a la mayoría de indicadores que teníamos hasta 1970, época de crecimiento sostenido en casi todos los aspectos. Mientras no se limpie el país de tantos cánceres que nos carcomen, no nos compondremos, y eso tardaría décadas y generaciones.	No, aún no! por que la crisis a las familias llegará en su punto más álgido si se aprueban las propuestas del presidente actual. La recuperación se dará a mediados del 2010, pero muy lenta… creo que la política económica que se quiere implementar no es la más acertada	Los signos actuales indican que ya toco fondo, pero tocar fondo no significa que desaparezca, la crisis actual tendrá repercusiones en los próximos dos o tres años.	No creo que haya tocado fondo. LA recuperación será demasiado lenta como todo en México	La crisis en México aun no toca fondo, empezara en el 2010 pero de una manera lenta.

LA COMPETITIVIDAD SISTÉMICA A NIVEL MICRO COMO ESTRATEGIA PARA EL SECTOR METALMECÁNICO EN TECATE B.C. MÉXICO

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RESUMEN

Los retos actuales exigen de las empresas desarrollar mecanismos para mantenerse en constante evolución, adaptarse a cambios y responder a las necesidades del mercado donde a partir de las consideraciones en nuestro país y el estado de Baja California sobre la importancia del sector metalmecánica se considera oportuno llevar a cabo un análisis sobre su competitividad a nivel micro. Lo cual es oportuno si consideramos por un lado que este sector ocupa el tercer lugar en el estado, con una generación de más de 37 000 empleos directos. El presente trabajo presenta una descripción de los resultados parciales obtenidos a través de una encuesta realizada a las empresas del sector metalmecánica en el Municipio de Tecate, Baja California cuyo objetivo fue identificar y evaluar las variables consideradas a nivel micro con un enfoque de competitividad sistémica.

Palabras claves: Sector metalmecánico, competitividad sistémica, Tecate B.C.

INTRODUCCIÓN

Las exigencias actuales de las empresas obligan a desarrollar estrategias para mantenerse en constante evolución, buscando mejores desempeños. Por ello, la administración efectiva y la competitividad, son en realidad uno de los logros más importantes para conducir el posicionamiento estratégico en el nuevo contexto global.

Miguel Sastre Castillo y Eva M. Aguilar Pastor (2000), afirman que la competitividad se ha convertido en una exigencia para la supervivencia, donde las empresas compiten a nivel global con procesos actuales de transnacionalización que, como comenta Carolina Tkachuk,(2004) requiere de las empresas transformaciones tecno-productivas y en el caso de las pymes, una especialización flexible y polivalente con una nueva concepción de factores competitivos que desarrolle la capacidad innovadora con el uso de nuevas tecnologías, donde además de desarrollar la capacidad de generar y aprovechar economías de alcance, se logre la eficiencia derivada de la cercanía geográfica entre productos de bienes complementarios o se compartan los activos tangibles o intangibles.

Según Salvador García de León Campero, La inserción de México en el contexto Internacional se inicia a finales de los 80's y continua profundizándose hasta la actualidad, destacándose la apertura comercial y reducción de aranceles con firma de acuerdos y tratados comerciales con diferentes países. Además de una disminución de restricciones a inversionistas con capitales extranjeros, con lo que se ha generado en el país niveles de competitividad con fuentes de ventaja y rivalidad competitiva, afectando favorablemente a unos sectores y desfavoreciendo a los eslabones más débiles de la economía mexicana, como es el caso de las Pymes. Por tal motivo se requiere de un esfuerzo articulado para elevar el nivel de desempeño y la competitividad con una interacción compleja y dinámica donde se involucren las organizaciones, el Estado, las instituciones intermedias y las empresas como lo plantean Klaus Esser, Wolfang Hillebrand, Dirk Messner y Jörg Meyer-Stamer, incorporando los cuatro niveles de un sistema nacional: meta, macro, meso y micro. Así mismo es aplicable a todos los sectores incluyendo el

metalmecánico el cual se encuentra en desarrollo pleno y que al dedicarse a la fabricación de productos de acero impacta en la elaboración de herramientas, artefactos para el hogar y fabricación de maquinarias. En México esta industria se dedica principalmente al ensamblaje, pero un porcentaje importante de este sector es de manufactura extranjera y de gran apoyo para la industria automotriz con gran impacto en el sector industrial.

Sector Metalmecánico.

Según informes de Bancomex: (2008) el entorno internacional para este sector se caracteriza por una creciente competencia en los mercados mundiales, en donde las exigencias de alta calidad y costos competitivos, son elementos fundamentales para el éxito de estas empresas. La industria metalmecánica en México es un eje fundamental de la actividad económica del país, ya que de ella se desprenden diversas ramas que sostienen la actividad industrial, como son la minería, la pesca, agroindustria, industria eléctrica- electrónica, siderúrgica, metalúrgica, petrolera y automotriz. Donde el sector manufacturero en general, aportó el 19% del PIB en el periodo del 2000-2004, mientras que la industria metalmecánica en el mismo periodo logro el 29%. Aquí, el sector manufacturero ha fortalecido al sector metalmecánico con la compra de herramienta, maquinaria y equipo para el trabajo mecánico, siendo el sector automotriz, el de mayor impacto.

Los productores nacionales, sin embargo, debido a las fuertes presiones del mercado internacional se ven fuertemente obligados a tomar medidas de organización, adquirir equipo usado o remanufacturado donde, según datos de la Asociación Mexicana de Distribuidores de Maquinaria (AMDM), en México del 40 al 60% de la industria adquiere equipo nuevo. La ventaja de los últimos años se ha asentado en la compatibilidad con diversos equipos utilizando partes estandarizadas y listas para adaptarse a las necesidades cambiantes de las empresas, además de la flexibilidad de devolución y compra en equipo y partes que se ofrecen.

Gracias al TLC, el sector metalmecánico ha podido agilizar los procesos de importación y exportación logrando con esto su consolidación. Ahora las exportaciones se han incrementado en dos terceras partes por el sector automotriz y equipo para mobiliarios y construcción, y el resto lo componen principalmente las exportaciones en estructuras metálicas, contenedores de gas a presión, equipos de agricultura, electricidad, entre otros. Sin embargo, aunque las exportaciones se ven favorecidas con los beneficios del TLC y otros convenios y acuerdos tanto con Japón y la Comunidad Económica Europea, las importaciones siguen inhibiendo fuertemente el crecimiento ya que los productos extranjeros siguen dominando el mercado y vemos, cada vez más, sucursales de empresas extranjeras situadas en el país al igual que plantas productoras que llegan con inversión transnacional directa.

La industria automotriz y de equipo para mobiliarios y construcción, son las ramas que han impactado más fuertemente al sector manufacturero y metalmecánico, todo esto de manera acelerada, ya que con la creación de empresas en diversas zonas geográficas de México, se han generado polos de desarrollo regional que han impactado a las economías locales.

El sector Metalmecánico en Baja California.

El impacto del sector metalmecánico en el desarrollo de cualquier país y en particular en el crecimiento industrial es fundamental. La presencia de las industrias metalmecánicas es de gran importancia por las aportaciones que generan a la economía.

Las empresas pertenecientes a la industria metalmecánica dentro Baja California están situadas en cuatro municipios del Estado, con un total de 182 plantas. Ofreciendo al mercado de trabajo regional más de 37,000 empleos directos (producen: 2008).

La manufactura metalmecánica está basada en la transformación de materias primas y en la elaboración de productos mediante la aplicación de procesos propios; tales como forjado, estampado, formado y maquinado, comúnmente usados para darle forma a piezas de metal. Otros procesos como la soldadura y ensamble, son utilizados para unir piezas.

METODOLOGÍA

Para llevar a cabo este trabajo de investigación se utilizó el esquema metodológico descrito a continuación:

1. Sujetos de investigación: Empresas del sector metalmecánico del Municipio de Tecate, Baja
        California, México.
2. Método de investigación: Encuesta que considera los elementos de la competitividad sistémica desde la perspectiva micro. Las variables consideradas a nivel micro son calificación de personal, capacidad de gestión, estrategias empresariales, gestión de la innovación, mejores prácticas, integración en redes de cooperación tecnológica, logística empresarial y procesos de aprendizaje.

El instrumento de medición quedó integrado por 110 ítems La técnica de escalamiento utilizada en el instrumento es tipo Likert. Adicionalmente, se manejan otros niveles de medición en cada ítem que son: nominal, ordinal y de razón. Las mediciones nominales solo implican clasificación de categorías las mediciones ordinales mantienen posiciones de menos a más y permiten conocer la percepción de los empresarios sobre las variables estudiadas; mientras que las de razón muestran un rango más amplios de valores. La investigación de campo se encuentra en proceso, y aquí se muestran los resultados del análisis descriptivo de algunas de las empresas de la muestra piloto.

RESULTADOS

Desde la perspectiva de calificación de personal, en general el 70% de los trabajadores pertenecen al área de manufactura, el 10% a servicios administrativos y el 20% a logística y distribución.
Donde los del área de manufactura poseen, el 15% licenciatura, el 15 % Bachillerato, el 60% cuentan con estudios de secundaria y el 10% tienen primaria.
En cuanto a la calificación del personal del área de producción: La calidad de los estudiantes universitarios la califican como fuerte al igual que la calidad de los egresados de escuelas técnicas o universidad y en cuanto a la capacidad para aprender nuevas habilidades, la capacidad para trabajar con tecnologías de la información, la capacidad para trabajar en equipo, así como la ética de trabajo, iniciativa y disciplina laboral, la califican como regular.

De acuerdo a las necesidades en las organizaciones encuestadas en orden de importancia las áreas disciplinarias en que contrata a su personal son: en primer lugar, Ingeniería Industrial, seguido de Ingeniería Mecánica, Ingeniería Mecatrónica, Ingeniería en Producción, Ingeniería en Sistemas, Administración, Contaduría, Ingeniería Electrónica y por ultimo Comercio Exterior.

Las características que se consideran que debe tener el personal de las empresas encuestadas son por orden de importancia, en primer lugar toma de decisiones, herramientas de manufactura, (para el manejo de Six Sigma, Lean Manufacturing, etc.), ética, disciplina, idioma, conocimiento de certificaciones, manejo de personal, creatividad e inventiva, trabajo bajo presión, capacidad de aprendizaje, comunicación oral y escrita.

En cuanto a las destrezas consideradas para el personal de su empresa por orden de importancia son: primeramente, mentales seguida de Visuales, de Precisión, Manuales Auditivas y de Fuerza física.

En cuanto al porcentaje de los gastos, se destino a capacitación y desarrollo de los empleados en los últimos doce meses en promedio del 10% de su presupuesto, haciéndose énfasis en el proceso multiplicador de la capacitación y en promedio en el año de 2008 se proporcionaron de 17 a 40 hrs de capacitación.

En las empresas encuestadas no existe un plan de carrera para los empleados y manifiestan que se favorece más la promoción interna que el reclutar gerentes externos y las decisiones de los ascensos de puestos gerenciales se toman a nivel corporativo, estando de acuerdo que los puestos más altos de la empresa son ocupados por gerentes que trabajaron para esa compañía con anterioridad.

Capacidad de gestión.: La capacidad interna de gestión se da altamente para programas de producción, programas de desarrollo gerencial, dirigido al desarrollo de altos directivos, diversificación de productos, capacidad de vincularse con otros actores sociales (gobierno, cámaras, instituciones educativas etc.), administración del recurso financiero. Así mismo se tiene capacidad media para la capacitación y desarrollo en general, con programas de reclutamiento de personal y estudio para la expansión de mercados en el país y en cuanto a la capacidad para establecer programas de inversión en investigación y desarrollo o gestión para el crecimiento de la planta la manifiestan como nula

Estrategias empresariales: En cuanto a la capacidad de la organización para implementar estrategias empresariales se califican con alta capacidad y pericia para el manejo de planes organizacionales, y establecimiento de estrategias para el manejo del costos de los insumos y costos de producción, se califican con capacidad media para implementar estrategias en cuanto a Aspectos legales (empleo, tránsito de mercancías, aranceles), productos en el mercado, costos de distribución, estrategias de seguridad del personal.

Gestión de la innovación: La empresa ha realizando en los últimos 12 meses gestión amplia en la formalización de relaciones con instituciones de investigación e instituciones académicas, gestión media en cuanto a programas de movilidad del personal a la matriz o filiales para fortalecer las capacidades innovativas y ha gestionado con baja capacidad el diseño e implementación de un plan de investigación y desarrollo, en cuanto ha inversión en infraestructura para la innovación también ha sido baja y no se han registrado patentes ni se ha tenido acceso a recursos públicos para investigación.

Aunque no como actividad principal, las empresas si cuenta con un responsable para organizar y administrar las actividades de innovación, lo cual se incluye en la coordinación de proyectos, considerándose en general que la gestión de la innovación de la empresa es de capacidad media.
Mejores Prácticas: En este sentido las empresas están involucrándose con esquemas de eficientización de la producción, como son Kaisen, DFT, y están en proceso de certificación de ISO en algunas de sus áreas.

Integración en redes de cooperación tecnológicas: Las empresas forman parte de redes de cooperación tecnológica únicamente con las universidades de la localidad y el estado manifestando además en todas; el manejo del esquema de Outsourcing, y relaciones con organismos intermedios como CANACINTRA.

Logística Empresarial: Se consideran con una completa eficiencia en cuanto a entregas a clientes, con alta eficiencia en cuanto a distribución, relaciones con la filial de sus empresas, tramites gubernamentales y aduanas, y se considera con poca eficiencia en cuanto a la logística de los proveedores.

Procesos de aprendizaje: Las empresas no cuentan con esquemas o modelos que fomenten el aprendizaje formal o académico para el buen desarrollo de sus empleados y los cambios más significativos en el comportamiento de un empleado en referencia a su desempeño dentro de la empresa después de seis meses de su contratación son en cuanto al desarrollo de habilidades y capacidades hacia su tarea y en

menor medida, el desarrollo del trabajo en equipo, mejora en el idioma extranjero y la evaluación del personal es en base a resultados.

CONCLUSIONES

Después de la revisión documental del estado del arte para identificar los elementos de la competitividad dentro del sector metalmecánica al considerar las variables a nivel micro como son calificación de personal, capacidad de gestión, estrategias empresariales, gestión de la innovación, mejores prácticas, integración en redes de cooperación tecnológica, logística empresarial y procesos de aprendizaje, queda claro que el éxito de una empresa dependerá de la ventaja competitiva que desarrolle internamente para lograr competir en el mercado bajo condiciones de competencia generando ingresos por encima del promedio de las empresas de la industria.

En este sentido algunos de los resultados encontrados en las empresas consideradas las cuales pertenecen al sector maquila se concentran con mayor énfasis al proceso productivo, por lo que cobra fuerza para el personal del área de producción el manejo de personal y el buen manejo en la herramientas de manufactura, la estrategia actual de capacitación por cuestiones económicas se ha reducido y la estrategia actual consiste en promoverla con el personal interno de la empresa. La capacidad de gestión promueve la promoción interna lo que favorece la expectativa del trabajador y el involucramiento de estos en los procesos. Sobre todo los concernientes al área de producción, ya que cuestiones como inversiones para investigación, desarrollo o innovaciones al producto como estrategias empresariales, solo se dan a nivel corporativo, lo que limita la gestión en innovación quedando para esto la colaboración dentro de los programas de movilidad del personal a la matriz o filiales para fortalecer las capacidades innovativas, en cuanto a mejores prácticas predomina la certificación en ISO, además del Kaisen y la incorporación de DFT en una de las empresas, en cuanto a la integración de redes de cooperación tecnológica la relación con las universidades y el pertenecer a organismos intermedios son los que tienen preponderancia, dejando a un lado la colaboración con centros de investigación, o entidades gubernamentales, y dependiendo cada vez más del outsourcing, la logística empresarial tiene mayor eficiencia hacia la entrega a clientes, y es poco eficiente hacia los proveedores en lo referente a procesos de aprendizaje las empresas no cuentan con esquema o modelos que fomenten el aprendizaje formal o académico para el bueno desarrollo de sus empleados, y es aquí donde con las redes de cooperación con las universidades encuentran un potencial el cual con mayor gestión podría redirigirse en beneficios mutuos y de desarrollo local, con lo anterior se observa que existen grandes oportunidades que se pueden capitalizar en fortalezas, como el hecho de que las empresas tengan acceso a mercados estadunidense lo que favorece la producción y los planes de consolidación cuando se logra desarrollar productos mexicanos competitivos.

Asimismo, hay que atender algunas debilidades como los altos costos de fletes y servicios, insumos y materias primas, además de la carencia de registro de marcas y patentes.

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CREACIÓN DE UN MODELO DE COMPETENCIAS PARA UNA CORPORACIÓN DE CIENCIA Y TECNOLOGÍA PERTENECIENTE A LA INDUSTRIA NAVAL, MARÍTIMA Y FLUVIAL DE COLOMBIA

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ABSTRACT

Concebidas las competencias como la sumatoria de conocimientos, habilidades y actitudes presentes en una persona que le permiten mostrar un desempeño exitoso en el trabajo, es interés de la ponencia presentar de manera general la propuesta de un modelo de competencias que se desarrolló para una Corporación perteneciente a la industria naval, marítima y fluvial, en el marco de un proceso investigativo. Dicho modelo se formuló con el fin de conducir a la empresa a la optimización de sus procesos de gestión humana como reclutamiento, selección, desarrollo y evaluación del desempeño y a su vez al logro de una mayor productividad y competitividad organizacional.

Palabras claves: Competencias, modelo de competencias, competencias organizacionales, competencias de nivel jerárquico y competencias de cargos.

INTRODUCCION

La Gestión por Competencias juega un papel fundamental dentro de la organización, ya que se presenta como un modelo que brinda las directrices necesarias para identificar las capacidades desde el punto de vista de conocimientos, habilidades, aptitudes y actitudes que se requieren en el Talento Humano para generar valor agregado y ventaja competitiva.

Para que un modelo de gestión por competencias sea exitoso debe estar alineado con la visión, la misión, los objetivos y metas estratégicas de la organización. Por tanto, el diseño del modelo de competencias es un componente fundamental de la gestión del conocimiento en la organización, ya que permite identificar de forma estructural todas las competencias que debe tener cada persona que hace parte de la empresa, para tener un desempeño exitoso en su puesto de trabajo y aportar al mejoramiento y fortalecimiento de la capacidad innovadora, investigativa y competitiva de la Corporación, que la lleven a ser líder en estos temas dentro la industria naval marítima y fluvial.

En el documento que se presenta a continuación, se establecen las bases conceptuales de la gestión por competencias y describe también la metodología utilizada para el diseño, el levantamiento de las competencias y por último el modelo de competencias con sus respectivos componentes, a nivel organizacional, por niveles jerárquicos y cargos.

REVISION LITERARIA

En el contexto de la Corporación se definieron las Competencias como el conjunto de características propias de la persona, evidenciadas en los aspectos del ser (Actitudes), saber (Conocimientos) y saber hacer (Habilidades o destrezas), las cuales le permiten mostrar un desempeño superior en su puesto de trabajo y en su entorno laboral. En este sentido las competencias son un compendio de conocimientos, destrezas, valores, hábitos y motivos permanentes de la persona, que se ponen de manifiesto cuando se ejecuta exitosamente una tarea, actividad o se realiza un trabajo, sea laboral o personal; tienen una relación causal con el rendimiento laboral y pueden ser generalizables a mas de una actividad.

Las competencias son una herramienta de Gestión de Recursos Humanos, pues a partir de la identificación de sus características y términos de conducta que llevan a cabo los empleados, se logran los mejores resultados, es una referencia que puede constituirse en un modelo para: seleccionar personas (tanto selección interna como externa), formar o desarrollar al personal, elaborar planes de sucesión, favorecer una cultura de cambio, definir y valorar puestos de trabajo, evaluar el desempeño, o incluso, establecer criterios de retribución.

Tabla 1. Definiciones de Competencias

Autor	Definiciones
1973. David McClelland	Son los pensamientos y/o comportamientos de una persona que hacen que su desempeño sea superior comparado con el desempeño promedio.
1982. Boyatzys.	Una competencia es una característica subyacente de una persona que le permite tener un desempeño superior en un empleo, puesto o situación dada.
Dennis McCartin.	Son capacidades que la persona debe poseer, además de los conocimientos con que debe contar. Incluyen conocimientos, destrezas, habilidades y atributos personales.
2000. Mertens Leonard	Conjunto de atributos de la persona que no se limitan al conocimiento, si no que incluyen las habilidades, actitudes, comunicación y personalidad, es decir define a la formación de manera integral.
2005. DAFP. Decreto No. 2539.	Las competencias laborales se definen como la capacidad de una persona para desempeñar, en diferentes contextos y con base en los requerimientos de calidad y resultados esperados en el sector público, las funciones inherentes a un empleo; capacidad que está determinada por los conocimientos, destrezas, habilidades, valores, actitudes y aptitudes que debe poseer y demostrar el empleado público.

Esta tabla muestra las definiciones que diversos autores presentan sobre Competencias

METODOLOGIA PARA EL DISEÑO DEL MODELO DE COMPETENCIAS

El trabajo realizado fue de carácter descriptivo analítico, por cuanto parte de la descripción de competencias y la construcción del modelo. Se utilizaron principalmente fuentes de información primaria (empleados) y revisión documental y las técnicas de recolección de información fueron básicamente la técnica del panel de expertos y el cuestionario.

Para la identificación, definición, validación y estandarización de las competencias que hacen parte del modelo, se diseñó una metodología ajustada a las necesidades y el contexto de la Corporación, de tal manera que el modelo de competencias estuviera alineado con los objetivos y metas estratégicas y a los requerimientos actuales y futuros contemplados en los componentes del modelo de Gestión del Talento Humano basado en Competencias. A continuación se detallan cada una de las etapas que se llevaron a cabo dentro la metodología.

Análisis de la Documentación

El análisis de documentos fue el primer paso para el diseño del modelo, la identificación y definición de la Competencias. Tuvo como objetivo conocer aspectos claves que se debían tener en cuenta al momento de diseñar un modelo de competencias requeridas a nivel organizacional, por niveles jerárquicos y cargos.

Definición de los tipos de Competencias

Una vez revisada la información conceptual sobre el tema de competencias y de conocer el direccionamiento estratégico de la Corporación, se decidió escoger los siguientes tipos de competencias

para construir el modelo: 1. Competencias Organizacionales, 2, Competencias por niveles jerárquicos, 3. Competencias de áreas y/o cargos

En este sentido, para la identificación de las competencias se tuvieron en cuenta sus características como Corporación de Ciencia y Tecnología y su reto de alcanzar un alto nivel de productividad, competitividad y capacidad de innovación dentro de la industria naval, marítima y fluvial.

Recolección de información a través de la Conformación de Paneles de expertos

Para la escogencia del panel de expertos, se tuvo en cuenta el alto grado de conocimiento del Direccionamiento, Plan Estratégico, Metas, Objetivos, amplia experiencia en las áreas y demostrar un desempeño exitoso.

De acuerdo con la identificación y definición de los tipos de competencias, se efectuaron treinta paneles de expertos, relacionados con los tres tipos de competencias mencionados anteriormente (Organizacionales, de Nivel Jerárquico y áreas/ Cargos) establecidas para el modelo de la Corporación.

Tabla 1. Conformación de Paneles de Expertos para Identificación de Competencias.

TIPO DE PANEL	CONFORMACIÓN	TIPOS COMPETENCIAS	NÚMERO DE PANELES
Panel de Expertos Competencias Organizacionales	Equipo directivo (Vicepresidente y directores)	Organizacionales	1 (9 personas)
Paneles de expertos competencias por niveles Jerárquicos	Conformados por las personas de mejor desempeño y mayor reconocimiento en cada nivel jerárquico (Directivo, Ejecutivo, Profesional y Técnico Administrativo y Operativo).	Competencias Directivos, Ejecutivo, Profesional y Técnico	4 (38 personas)
Panales de expertos competencias por cargos	Los paneles estuvieron conformados por los jefes de departamentos, División y algunos Profesionales y Técnicos dueños de los procesos.	Competencias por áreas y cargos	25(50 personas)

Una técnica importante utilizada para la identificación de competencias en una organización es el panel de expertos. Para la Corporación se realizaron los paneles descritos en la tabla 4.

Identificación, Definición y Validación de Competencias Organizacionales

El panel de expertos para la identificación y definición de competencias organizacionales estuvo conformado por el nivel Directivo (Vicepresidente y Directores) quienes con su amplia visión, experiencia y conocimiento de las Metas, Objetivos y retos Estratégicos brindaron elementos claves para el análisis y determinación de las competencias requeridas para la Organización.

Identificación, Definición y Validación de Competencias de Nivel Jerárquico

El panel de expertos para la identificación de éste tipo de competencias, contó con la participación de representantes de cada nivel jerárquico de la Corporación: Ejecutivo, profesionales y técnicos (administrativos y operativos), quienes se seleccionaron por tener claridad frente a su rol y un desempeño sobresaliente en cada uno de sus áreas.

Elaboración del Diccionario de Competencias Organizacionales y de Nivel Jerárquico.

El diccionario de competencias elaborado contenía la siguiente información: nombre y definición completa de las competencias organizacionales y de nivel jerárquico que la Corporación determinó como necesarias y frecuentes en la ejecución de las actividades organizacionales. Es importante resaltar que dichas competencias se definieron utilizando un lenguaje sencillo, comprensible fácilmente para todas las personas en la empresa señalando aquellos elementos visibles que la hacen identificable.

Identificación de Competencias del Saber y Saber Hacer por áreas y /o cargos

El objetivo fundamental de estos paneles era identificar todos aquellos conocimientos (saber) y habilidades (saber hacer) y actitudes (ser), que debían poseer cada una de las personas que ocupen un cargo dentro de la organización. La información recolectada se consolidó en un formato de archivo plano. Las competencias del ser, saber o saber hacer, comunes en los cargos que conformaban un departamento o división se agregaron como competencias de área.

Consolidación de las Competencias

Luego que todas las competencias del ser, saber y saber hacer fueron validadas, la información se migró a una base de datos diseñada para tal fin, en la que se encuentra detallado el perfil de competencias para cada cargo. Esto con el fin de que puedan ser administradas y aplicadas en los proceso de gestión humana por competencias como: reclutamiento y selección, evaluación y gestión del desempeño, entrenamiento, capacitación y formación.

RESULTADOS GLOBALES OBTENIDOS

La Identificación y definición de las competencias organizacional es le permitió a la Corporación alinear los conocimientos, habilidades y actitudes con su plataforma y direccionamiento estratégico. Las competencias organizacionales escogidas a través de la técnica de panel de expertos fueron: Orientación al cliente, Trabajo en equipo, Investigación, Innovación, Comunicación efectiva y Orientación a resultados.

La Identificación y definición de las competencias de nivel jerárquico, áreas y cargos requeridos le brindó la oportunidad a la empresa de poder detectar los requerimientos para la obtención de un desempeño superior en los niveles mencionados. Después de realizar la consolidación de los paneles de nivel, áreas y cargos, se hicieron las respectivas validaciones de los resultados con el Vicepresidente y expertos de la Corporación. Los resultados se describen a continuación.

Tabla   2 Consolidado de Competencias para la Corporación

NIVEL	COMPETENCIAS
DIRECTIVO	Pensamiento Estratégico
	Inteligencia Emocional
	Liderazgo
	Toma de Decisiones
	Gestión Administrativa
	Negociación
EJECUTIVO	Pensamiento Estratégico
	Inteligencia Emocional
	Liderazgo
	Toma de Decisiones
	Gestión Administrativa
PROFESIONAL	Aprendizaje continuo y Experticia
	Flexibilidad
	Iniciativa
TECNICO	Aprendizaje continuo y Experticia
	Flexibilidad
	Orden y calidad
AREAS /CARGOS	Pensamiento analítico
	Pensamiento conceptual

Después de realizar los distintos paneles de expertos, por consenso se identificaron y definieron las competencias presentadas en la tabla 5.

La Generación de una plataforma de competencias que le posibilita gestionar el talento humano por competencias a través de los procesos de reclutamiento, selección, desarrollo y evaluación.

Los hallazgos del trabajo dan cuenta de la transferencia de conocimientos a través de la aplicación de las teorías planteadas por los autores consultados en materia de competencias, en especial Martha Alles y Mariella Díaz.

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LOS RENDIMIENTOS CRECIENTES Y SU RELACIÓN CON EL CRECIMIENTO ECONÓMICO REGIONAL EN MÉXICO 1980-2004

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ABSTRACT

Las enormes divergencias en tasas de crecimiento entre las regiones de México plantean la necesidad de identificar factores que influyen en el crecimiento económico, a fin de proponer políticas regionales que ayuden a reducir las diferencias observadas y contribuyan al desarrollo del país. El modelo de Kaldor es uno de los modelos favorecidos con la evidencia empírica como capaz de explicar las diferencias en tasas de crecimiento al plantear un proceso de crecimiento acumulativo a través de la ley de Verdoorn y los rendimientos crecientes dinámicos. El objetivo es estimar la ley Verdoorn a fin de explicar la heterogeneidad en tasas de crecimiento en México, argumentando que los estados especializados en actividades con mayores rendimientos a escala y con menores coeficientes Verdoorn, son los que más han crecido. Bajo la hipótesis que las diferencias en tasas de crecimiento en México se explican por el patrón de especialización, tal que las entidades industrializadas cuya estructura productiva se orienta hacia actividades con mayores rendimientos a escala, muestran una tasa de crecimiento más alta que aquéllas que se especializan en actividades primarias y manufactureras de tipo tradicional.

INTRODUCCION

Las regiones de México se han caracterizado por su gran heterogeneidad en niveles de crecimiento y desarrollo económico hecho que ha sido ilustrado y estudiado desde distintos enfoques. Algunos estudios han demostrado que solo se puede observar convergencia entre las regiones de México en el período 1940-1960 y ésta ha sido muy lenta conforme a lo que se podría esperar por las enormes diferencias observadas, mas también se ha observado que a partir de ese período no hay evidencia alguna de convergencia (Esquivel, 2000), lo que indica que en lugar de reducirse las diferencias en crecimiento entre regiones éstas se han mantenido o han tendido a incrementarse.

Velásquez afirma que las diferencias regionales en México son parte de un proceso histórico y que el Tratado de Libre Comercio de América del Norte ha tendido a perpetuar y aumentar las diferencias. La observación de estas diferencias en el crecimiento y desarrollo regional entre los Estados del país caracterizándose por un norte muy dinámico con un ingreso per capita por encima de la media nacional que contrasta con un sur con un sector industrial poco desarrollado donde predomina el sector primario y con un crecimiento económico muy por debajo de la media nacional, plantean la necesidad de identificar los factores que influyen en el crecimiento económico, a fin de estar en condiciones de proponer políticas regionales que ayuden a reducir las diferencias observadas y contribuir al desarrollo conjunto del país.

El objetivo de este trabajo es estimar los coeficientes de Verdoorn a fin de explicar la heterogeneidad en tasas de crecimiento en México, argumentando que los estados especializados en actividades con mayores rendimientos a escala y con menores coeficientes Verdoorn, son los que más han crecido. a fin de identificar los industrias que presentan mayores rendimientos a escala.

REVISIÓN LITERARIA

En esta línea del pensamiento económico se puede ubicar el modelo de causación acumulativa circular propuesto por Myrdal (1957), el cual explica las desigualdades económicas observadas entre países desarrollados y subdesarrollados así como la tendencia a la ampliación de éstas, debido a la causación circular de un proceso acumulativo en la forma de "circulo vicioso".

Este planteamiento de Myrdal fue refinado y complementado por Kaldor (1950,1970) y Dixon y Thirlwall (1975), en donde el crecimiento acumulativo es generado por las economías de aglomeración y los rendimientos crecientes a escala contenidos en la ley Verdoorn, por lo que un cambio exógeno en la demanda provoca incrementos en la productividad, la cual disminuye los salarios de eficiencia y esto provoca un incremento adicional en la producción a la vez de nuevo incremento en la productividad y así el crecimiento es acumulativamente reforzado (Ros 2004).

El ciclo acumulativo se ha observado principalmente en el sector manufacturero o actividades del sector secundario debido a la disminución de costo de producción unitaria (o incremento de la productividad del trabajo) cuando se expande la producción a gran escala esto seguido por un incremento en la demanda, o la relación positiva entre tasas de crecimiento de la productividad del trabajo y tasa de crecimiento de la producción denominada Ley de Verdoorn, y a la elasticidad precio de la demanda que provoca que la demanda se expanda mas allá de la reducción de los precios relativos (Thirlwall, 1983).

En el modelo de Kaldor la expansión de la demanda favorece el crecimiento económico futuro por el incremento en el uso de la capacidad productiva y fomento a la inversión. La demanda se expande como resultado del progreso técnico causado por rendimientos a escala. Kaldor utiliza esta concepción, basado en el trabajo de Verdoorn (1949) y explica el crecimiento económico por economías de escala dinámicas asociadas con el progreso técnico, y el proceso de "learning by doing" derivado de los niveles de especialización atados a la expansión de la producción. El modelo de Kaldor predice el siguiente circulo virtuoso: crecimiento de la demanda incrementa la productividad, y el incremento de la productividad induce el crecimiento de la competitividad que dirige a un incremento adicional en la demanda. (Pons-Novell y Viladecans-Marsal, 1998)

La Ley Kaldor-Verdoorn

La ley es una generalización empírica de porqué algunos países han crecido más rápido y han tenido un ritmo más acelerado de aumento de la productividad. Originalmente la ley se formuló para la producción manufacturera relacionando producción manufacturera y productividad y PIB y productividad. La ley se discutió originalmente en términos de las diferencias en el crecimiento de la productividad de los países avanzados, la ley ahora se reconoce tiene un significado más amplio para el proceso de crecimiento y desarrollo económico.

Desarrollo del modelo

Verdoom (1956) plantea una relación estable de largo plazo entre productividad y el producto de una economía, expresada como:

$$p = c + dq \tag{1}$$

Donde p y q representan las tasas de crecimiento de la productividad y del producto, respectivamente, en cuanto c y d son constantes con d > 0. Si p y q están dados en forma logarítmica, encontramos el coeficiente d, el cual sería una medida de la llamada elasticidad productividad-producción (η), que representa la llamada Ley de Verdoorn, pues:

$$\eta = dp/dq = d \tag{2}$$

Kaldor utilizó la ecuación planteada por Verdoorn para probar rendimientos crecientes a escala en el sector industrial, pero a fin de evitar la correlación existente entre productividad (p) y producción (q), el planteó la ecuación e = c +d q asociando el empleo (e) al crecimiento de la producción, partiendo de la identidad básica de que p ≡ q – e, es decir, de que la productividad es igual al producto menos el empleo, así la ecuación fue denominada como la Ley Kaldor-Verdoorn.

Así mismo, tenemos que:

$$e = c + dq \tag{3}$$

El parámetro d representa la elasticidad productividad-producción o coeficiente de Verdoorn, siendo 0 < d < 1. Esta restricción para el parámetro d será, conforme Kaldor (1975), una condición suficiente para la presencia de economías de escala estáticas y dinámicas. Estáticas a través de la división del trabajo y especialización y dinámicas por el progreso técnico, los efectos de la curva de aprendizaje, etc.

Una importante debilidad de esta especificación es que no considera la contribución del capital a los rendimientos crecientes, pero como Fingleton y Mc Combie(1998) han argumentado esta omisión no es tan seria si se asume constante la razón capital-producto, lo cual es válido para los países desarrollados ya que se ha demostrado que la razón capital-producto es constante en el largo plazo, por lo que esta ecuación es válida sólo para el conjunto del sistema económico y para largo plazo. Sin embargo también se argumenta que la razón capital-producto muestra una tendencia creciente en los países en desarrollo por lo que una especificación más adecuada para realizar el análisis sectorial de México debiera incluir k (Ocegueda, 2003).

$$e = c + dq + gk \tag{4}$$

Diversos estudios empíricos entre ellos Bairam (1987) han estimado esta ecuación encontrando que k no es estadísticamente significativo y que presenta signo contrario, lo cual se explica por el hecho de que si existen restricciones de demanda k no puede ser incluida como regresor, es decir, no puede asumirse k exógena, pues como plantea el modelo el crecimiento el stock de capital es endógeno, en el sentido de que esta principalmente determinado por el crecimiento de la producción, entonces como Kennedy y Foley (1978) han sugerido una mejor especificación de la Ley Verdoorn es utilizar el crecimiento total de los factores en lugar del empleo como variable dependiente, así ambos crecimiento del empleo y del capital son funciones del crecimiento del producto. Ellos especifican la ley Verdoorn como:

$$f = \lambda + \theta q \tag{5}$$

Donde f = (α'k +β'e) y α' + β' = 1

F es el crecimiento conjunto de los factores de producción y q la tasa de crecimiento del producto. En este caso el coeficiente θ es un estimado de recíproco del grado de los rendimientos a escala.

METODOLOGÍA

Se estimará el coeficiente de Verdoorn para las 32 entidades mediante mínimos cuadrados ordinarios.

Descripción de los datos y fuentes de información

Las series de datos de la industria manufacturera de los 32 Estados de México, para las variables: Valor agregado bruto, número de unidades económicas, formación bruta de capital fijo, activos fijos netos y el personal ocupado son obtenidos de los Censos Económicos de INEGI para el periodo de 1985 al 2004. Los datos del PIB Nacional y estatal y participaciones, así como el índice de Precios al Consumidor fueron obtenidos del Sistema de Cuentas Nacionales de INEGI.

Las variables fueron deflactadas con el índice nacional de precios al consumidor base 2000=100. En los cálculos de las tasas de crecimiento del PIB por entidad federativa y por región se utilizaron los datos de INEGI de la página de internet y se utilizó la fórmula exponencial.

Para la estimación de la función $f = \lambda + \theta q$, la f que representa la tasa de crecimiento de los factores totales de cada uno de las entidades federativas de la industria manufacturera se obtuvo sumando los factores totales (f) es igual a: w e + (1-w)k, es decir, el empleo multiplicado por w que corresponde a la participación del empleo de cada entidad federativa dentro del empleo total y el capital multiplicado por (1-w), como aproximación del stock de capital se utilizo la tasa de crecimiento de la variable Activos Fijos Netos. q que es igual a la tasa de crecimiento del valor agregado bruto en cada una de las entidades federativas para la manufactura.

La función a estimar es:
$f = \lambda + \theta q$

f = es la tasa de crecimiento de los factores totales de cada uno de las entidades federativas de la industria manufacturera. La cual es igual a: w e + (1-w)k, donde w es la participación del empleo, e empleo, k capital y (1-w) el peso del capital, q es la tasa de crecimiento del producto λ es igual a a/η y θ es igual a 1/η, como fue derivado anteriormente.

La ley Verdoorn será estimada utilizando el método econométrico de mínimos cuadrados ordinarios para realizar el estimado de la Ley de Verdoorn para cada una de las entidades federativas de México.

RESULTADOS

Se observa que todos los coeficientes de pendiente son estadísticamente significativos y con el signo esperado por la teoría, con excepción de Chiapas, Distrito Federal, Veracruz y Oaxaca, cuyos parámetros no son estadísticamente significativos, lo cual se aprecia en el valor de la t-student que se encuentra entre paréntesis. En lo que se refiere a los coeficientes del intercepto se puede observar que en 10 de las 32 entidades federativas éstos tienen el signo esperado y el resto no, pero la mayoría resultan poco significativos**.** En lo que se refiere al R^2 o coeficiente de correlación el cual nos indica la proporción de la varianza de f (variable dependiente) que está asociada a la varianza de q (variable independiente) se puede apreciar un valor aceptable para más del cincuenta por ciento de las estimaciones, lo que sugiere una buena bondad de ajuste y nos indica que las variables tienden a variar juntas. Sin embargo se observa que muchas entidades federativas presentan un valor de la R^2 bajo lo cual no es tan malo, pues si se somete adecuadamente a prueba una hipótesis basada en una teoría económica a priori, un valor bajo de R no es tan malo (Dutta, 1982). En lo que se refiere al estadístico F se puede observar que en todas las entidades los modelos son relevantes estadísticamente en el sentido de que contribuyen a explicar el comportamiento de la variable dependiente, con excepción del Distrito Federal, Michoacán y Oaxaca.

Tabla 1. Resultados de la Estimación de la Ley de Verdoorn por Entidad Federativa de México

Entidad Federativa	Λ	θ	F	R2	D.W	1/ θ	Rendimientos
Aguascalientes	2.58	0.7	9.04	0.36	2.12	1.43	Crecientes
	(0.46)	(3.01)					
Baja California	1.43	1.1	66.83	0.66	2.11	0.91	Decrecientes
	(0.44)	(8.18)					
Baja California Sur	0.53	0.53	5.89	0.16	2.95	1.89	Crecientes
	(0.08)	(2.43)					
Campeche	1.4	0.74	26.3	0.48	2.15	1.35	Crecientes
	(0.37)	(5.13)					
Coahuila	-0.45	0.53	6.62	0.16	2.63	1.89	Crecientes
	(-0.16)	(2.57)					
Colima	0.45	1.01	40.25	0.58	3.1	0.99	Decrecientes
	(0.11)	(6.34)					
Chiapas	2.13	0.61	5.59	0.16	2.47	1.64	Crecientes
	(0.54)	(2.36)					
Chihuahua	-1.82	0.7	40.73	0.55	2.97	1.43	Crecientes
	(-0.7)	(6.38)					
Distrito Federal	-4.5	0.13	1.01	0.03	1.91	7.69	Crecientes
	(-2.47)	(1.01)					
Durango	-0.42	0.2	4.74	0.12	2.34	5.00	Crecientes
	(-0.13)	(2.18)					
Guanajuato	1.95	0.5	12.93	0.28	2.06	2.00	Crecientes
	(0.84)	(3.6)					
Guerrero	2.96	0.61	29.4	0.46	3	1.64	Crecientes
	(0.72)	(5.42)					
Hidalgo	1.68	0.36	5.26	0.13	2.78	2.78	Crecientes
	(0.43)	(2.29)					
Jalisco	-0.29	0.77	38.4	0.53	3.03	1.30	Crecientes
	(-0.170	(6.2)					
México	-2.06	0.51	17.31	0.34	2.66	1.96	Crecientes
	(-1.8)	(4.16)					
Michoacán	-0.28	0.36	2.92	0.1	1.5	2.78	Decrecientes
	(-0.11)	(1.71)					
Morelos	1.72	-0.4	15.23	0.31	2.36	-2.50	Crecientes
	(1.13)	(-3.9)					
Nayarit	0.25	0.83	80.93	0.75	2.32	1.20	Crecientes
	(0.18)	(9)					
Nuevo León	-0.7	0.94	14.47	0.3	2.81	1.06	Crecientes
	(-0.3)	(3.8)					
Oaxaca	1.29	0.2	2.13	0.06	1.88	5.00	Crecientes
	(0.38)	(1.46)					
Puebla	0.12	1	54.71	0.62	2.5	1.00	Constantes
	(0.05)	(7.4)					
Querétaro	-0.95	0.34	13.1	0.28	2.88	2.94	Crecientes
	(-0.43)	(3.62)					
Quintana Roo	2.81	0.5	17	0.37	2.11	2.00	Crecientes
	(0.93)	(4.12)					
San Luis Potosí	-2.27	0.64	81.58	0.71	2.94	1.56	Crecientes
	(-1.06)	(9.03)					

Entidad Federativa	Λ	θ	F	R2	D.W	1/ θ	Rendimientos
Sinaloa	0.72	0.75	20.81	0.44	2.53	1.33	Crecientes
	(0.21)	(4.98)					
Sonora	4.71	1.63	9.05	0.21	1.54	0.61	Decrecientes
	(0.57)	(3.01)					
Tabasco	1.12	0.53	16.7	0.36	1.6	1.89	Crecientes
	(0.52)	(4.09)					
Tamaulipas	3.9	0.34	7.51	0.18	3.1	2.94	Crecientes
	(0.97)	(2.74)					
Tlaxcala	2.51	0.62	5.94	0.19	1.64	1.61	Crecientes
	(0.57)	(2.44)					
Veracruz Llave	0.26	0.22	3.22	0.09	2.17	4.55	Crecientes
	(0.14)	(1.8)					
Yucatán	1.64	0.49	14.97	0.31	2.36	2.04	Crecientes
	(0.55)	(3.87)					
Zacatecas	-2.38	0.86	175.11	0.85	1.87	1.16	Crecientes
	(-1.2)	(13.18)					

Esta tabla presenta los resultados de las estimaciones de los coeficientes de Verdoorn de las entidades federativas de México. Los valores entre paréntesis representan los t- estadísticos.

En lo que se refiere a las consideraciones teóricas que aportan los resultados obtenidos, como podemos apreciar casi todas las estimaciones nos arrojan un coeficiente θ menor que 1 y estadísticamente significativos, lo cual como se ha mencionado anteriormente es condición suficiente para la presencia de rendimientos crecientes como plantea la Ley Verdoorn. En el caso del Distrito Federal, Durango y Veracruz cuyo coeficiente θ es muy bajo e indicaría muy altos rendimientos dicho coeficiente resulta no significativo estadísticamente. En los que respecta a las estimaciones para Baja California, Colima, Sonora y Michoacán presentan rendimientos decrecientes, para el caso de Michoacán se debe considerar el hecho de que dicho coeficiente resulta poco significativo.

Los resultados obtenidos nos permiten afirmar que sí existe una relación positiva entre el crecimiento sobresaliente de las entidades en términos del PIB para el período 1980-2004 y los rendimientos crecientes de mayor magnitud obtenidos a través de las estimaciones. Este comportamiento se observa claramente en los estados de Aguascalientes, Baja California sur, Chihuahua, Coahuila, Tamaulipas, Querétaro, San Luis Potosí, Quintana Roo, Tlaxcala y Yucatán, pues éstos muestran tasas de crecimiento muy por encima del promedio nacional que es 2.07, todas con excepción de Tamaulipas con 2.59, presentan una tasa de crecimiento por arriba de 3% promedio para este período y rendimientos por encima de 1.4. Mientras que Nayarit, Zacatecas, Jalisco, Sinaloa, presentan rendimientos crecientes de menor magnitud y tasas de crecimiento por debajo del promedio nacional, al mismo tiempo Michoacán presenta rendimientos decrecientes y una tasa de crecimiento del PIB por debajo del promedio. Contrastando con esta relación claramente observada se encuentran las entidades de Sonora, Colima y Baja California que presentan rendimientos decrecientes pero observan tasas de crecimiento por encima del promedio principalmente Baja California con una tasa de crecimiento del PIB de 3.96. Al igual que el caso de Puebla la única entidad con rendimientos constantes que observa una tasa de crecimiento también por encima del promedio.

Tabla 2. Tasas de Crecimiento del PIB por Entidad Federativa de México

	1980-2004	1980-1985	1985-1993	1993-1998	1998-2004
00 Nacional	2.08	0.55	1.27	2.33	4.89
01 Aguascalientes	5.08	2.72	5.48	5.85	5.98
02 Baja California	3.96	1.38	3.24	6.33	5.54
03 Baja California Sur	3.74	0.17	4.58	2.79	6.85
04 Campeche	6.20	53.29	-11.38	0.50	7.66
05 Coahuila de Zaragoza	3.08	1.09	1.99	5.79	4.39
06 Colima	2.60	3.17	1.55	2.23	4.33
07 Chiapas	0.09	-2.61	-1.62	1.16	4.98
08 Chihuahua	3.90	1.31	4.54	4.40	4.88
09 Distrito Federal	1.47	-3.11	2.69	1.08	4.37
10 Durango	2.24	3.58	-0.22	2.58	5.08
11 Guanajuato	2.97	2.30	1.88	3.39	5.21
12 Guerrero	2.11	1.31	2.11	0.12	4.94
13 Hidalgo	1.44	0.79	1.19	0.29	3.69
14 Jalisco	1.89	0.78	1.10	2.03	4.35
15 México	1.46	0.79	0.52	2.17	3.13
16 Michoacán de Ocampo	1.77	-0.05	1.42	2.10	3.94
17 Morelos	3.11	2.41	3.91	0.70	4.82
18 Nayarit	0.56	1.18	-0.81	-0.92	4.01
19 Nuevo León	3.05	0.72	2.07	3.66	6.62
20 Oaxaca	4.34	5.25	0.57	-0.10	15.41
21 Puebla	2.45	0.65	1.24	4.79	4.20
22 Querétaro de Arteaga	4.63	6.27	2.57	7.13	4.30
23 Quintana Roo	8.21	5.32	12.22	3.00	9.40
24 San Luis Potosí	3.01	3.28	1.93	2.05	5.68
25 Sinaloa	1.86	1.74	1.79	-1.43	5.51
26 Sonora	2.45	1.53	1.48	3.06	4.55
27 Tabasco	-2.75	-6.84	-6.82	0.84	5.75
28 Tamaulipas	2.59	-0.67	1.30	3.57	7.40
29 Tlaxcala	3.00	7.52	-1.34	2.83	6.80
30 Veracruz Llave	0.66	0.06	-1.20	0.82	4.55
31 Yucatán	3.00	0.10	3.03	2.46	6.51
32 Zacatecas	1.84	3.69	0.07	1.54	3.52

Esta tabla presenta los cálculos de tasas de crecimiento de los estados de Mexico durante el periodo 1980-2004

La importancia de los resultados obtenidos que prueban la validez de la Ley de Verdoorn, la relación positiva entre el crecimiento del producto de la industria y la productividad, radica en que se identifica el tipo de rendimientos que predominan en la industria manufacturera de los Estados de México, lo que ayuda a identificar en que estados se está presentando un mayor grado de rendimientos crecientes y de esta manera poder aprovechar los efectos positivos que esto tiene sobre el crecimiento económico.

Aguascalientes, Baja California, Coahuila, Chihuahua, Guanajuato, Hidalgo, Nuevo León, Puebla, Queretaro, Tlaxcala. Por otro lado es también evidente que los estados cuya razón PIB manufacturero / PIB estatal es menor son también los que tienen una tasa de crecimiento menor destacando ubicándose por debajo de la línea de tendencia en este caso destacan los estados de Tabasco, Chiapas, Nayarit, Veracruz. Estos resultado nos permiten afirmar que la especialización manufacturera tiene un impacto positivo en la tasa de crecimiento del producto, esto también coincide con los planteamientos de diversos autores que han analizado la situación de divergencia regional en México que han sido mencionados a lo

largo de este apartado en el sentido de que afirman que las regiones que más han crecido son las del norte y el centro y dicho crecimiento lo han asociado a un sector industrial más dinámico.

CONCLUSIONES

La observación de enormes divergencias regionales en México, nos plantea la necesidad de determinar los factores influyen en el crecimiento económico, a fin de estar en condiciones de proponer políticas regionales que ayuden a reducir las diferencias observadas y contribuir al desarrollo conjunto del país.

Dentro de este marco la ley de Verdoorn que relaciona positivamente el crecimiento de la productividad con el crecimiento del producto se presenta como un instrumento idóneo para explicar dichas divergencias pues forma la base de los modelos de crecimiento económico de causación acumulativa, los cuales con la introducción de una restricción de balanza de pagos, han avanzando en la explicación de la persistencia de disparidades en las tasas de crecimiento en las economías avanzadas

El propósito principal de este trabajo fue mostrar la relación que existe entre los rendimientos crecientes y el crecimiento regional a través de la estimación del coeficiente de Verdoorn en la industria manufacturera a nivel estatal para el periodo 1985-2004, a fin de explicar la heterogeneidad en tasas de crecimiento de las entidades federativas de México sosteniendo la hipótesis de que las diferencias en tasas de crecimiento entre los Estados de México se explican por el patrón de especialización, tal que las entidades industrializadas cuya estructura productiva se orienta hacia actividades modernas con mayores rendimientos a escala, muestran una tasa de crecimiento más alta que aquéllas en donde la especialización se concentra en actividades primarias y manufactureras de tipo tradicional.

En términos generales y de acuerdo a las estimaciones podemos afirmar que los resultados son consistentes con la ley Verdoorn encontrándose rendimientos crecientes en la industria manufacturera, y que efectivamente las entidades federativas que presentan coeficientes de Verdoorn menores (mayores rendimientos a escala) son las que más han crecido. Este hecho también ha quedado demostrado al observar las tasas de crecimiento de las entidades federativas y compararlas con los resultados obtenidos en las estimaciones.

La evidencia encontrada en este trabajo y muchos otros dentro del marco de los modelos de crecimiento acumulativo sugieren la necesidad de fomentar el desarrollo industrial a fin de lograr reducir diferencias entre países y regiones y alentar el crecimiento económico por lo que el presente reto para los gobiernos es implementar políticas regionales que apoyen el desarrollo de industrias consideradas potenciales para lograr dicho fin.

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EL USO DE PLANES DE NEGOCIOS EN APOYO A MICROEMPRESARIOS COMO ESTRATEGIAS DE APRENDIZAJE EN ESTUDIANTES UNIVERSITARIOS

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RESUMEN

El desarrollo de una cultura emprendedora es una parte medular en los estudiantes de las áreas económico – administrativas; es por esto que tanto la Universidad Autónoma de Baja California en Tecate México, como los de la Universidad Tecnológica de Tijuana, implementaron en el 2009-1 como estrategia de aprendizaje, vivir la experiencia de colaborar con Microempresarios que solicitaron apoyos financieros para la consolidación de sus negocios y cuyo requisito principal era la presentación de un plan de Negocios. El presente estudio tiene como objetivo conocer el sentir de los estudiantes, y de los microempresarios beneficiados, ¿Que experiencias se vivieron por ambos lados?, ¿Que habilidades y actitudes se requirieron?, ¿Qué dificultades se presentaron?, Conocer las respuestas a estas y otras preguntas, permitirán incorporar esta estrategia como mecanismo de acercamiento de los estudiantes a experiencias reales de negocio, impactando así en su percepción sobre el mundo de los negocios y contribuyendo en el desarrollo de la economía regional.

PALABRAS CLAVES: estrategia de aprendizaje, plan de negocios, emprendedor

ABSTRACT

The development of an entrepreneurial culture is a central part the the students economic administrative area, therefore, not only has the Autonomous University of Baja California in Tecate but also the Technological University of Tijuana, implemented this for 2009-10 as a learning strategy; to experience the collaboration with micro-entrepreneurs who requested financial support for the consolidation of their enterprises and whose principal requirement was the presentation of a business plan. The present study has as its objective to get to know the feelings of the students and of the benefited micro-entrepreneurs. What experiences did each side undergo? What skills and aptitudes were required? What difficulties arose? Knowing the answers to these questions and others will allow us to incorporate this strategy as a mechanism of bringing students closer to real life business situations, thus making an impact on their perception of the professional world and contributing to the development of the regional economy.

KEYWORDS: learning strategy, business plan, entrepreneur

PLANEACIÓN ESTRATÉGICA PARA LA MEJORA DE LA COMPETITIVIDAD ACADÉMICA, CASO FCAT

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RESUMEN

Derivado de las políticas internacionales, particularmente de las establecidas por la UNESCO durante la Conferencia de París y las del Banco Mundial, la ANUIES (Asociación Nacional de Universidades e Instituciones de Educación Superior) elaboró el documento denominado "La Educación Superior en el Siglo XXI. Líneas estratégicas de desarrollo", el cual propone que: "...el sistema de educación superior debe transformarse radicalmente, de tal forma que responda con oportunidad, equidad, eficiencia y calidad, al conjunto de demandas que le plantean tanto la sociedad mexicana como las transformaciones de los entornos nacional e internacional...".

PALABRAS CLAVE: Competitividad, Planeación estratégica, Educación superior, Esquemas de calidad, Gestión educativa.

INTRODUCCION

Las nuevas demandas de calidad educativa exigen a las instituciones superiores ubicarse en un contexto de gran competitividad, mejorar la gestión, reubicarse en un escenario globalizado, con los cambios que requiere esta situación, a saber: ejercicio de la interdisciplinariedad, dominio de lenguas extranjeras, movilidad de docentes y estudiantes, y sistemas compartidos de acreditación (Miguel Zabalza, 2002).

El caso de estudio circunscribe el espacio de trabajo de la Facultad de Contabilidad y Administración campus Tecomán de la Universidad de Colima, ubicada en el municipio de Tecomán Colima, México, el cual se encuentra delimitado al sur por la costa del océano Pacífico, a 60 Kms., del puerto de Manzanillo –enlace a Asia y la Cuenca del Pacífico-, a 45 Kms de la capital, Colima. Cuenta con una población urbana aproximada de 110 000 hab. y sus tierras son ricas en la producción de limón, mango, papaya, sandia, melón, plátano y coco. Pasaporte Turístico H. Ayuntamiento de Tecomán. 2008. Tecomán, es conocido como La Capital Mundial del Limón, ya que la calidad y cantidad producida en cítricos es considerable.

Con esta investigación se pretende conocer, cuantificar y analizar la Competitividad Académica de la Facultad de Contabilidad y Administración de Tecomán (FCAT) de la Universidad de Colima. Para ello se plantearon como objetivos específicos:

- *Analizar y evaluar la Competitividad Académica de la FCAT, en función de las variables estratégicas de aprovechamiento escolar de los alumnos.*
- *Cuantificar y clasificar los resultados educativos que debe alcanzar la FCAT para ser considerada una institución de calidad de acuerdo al gobierno de México (lineamientos de la SESIC-SEP).*
- *Proponer y dar seguimiento a un plan para mejorar la competitividad académica de la FCAT.*

Finalmente, consideramos de vital importancia contribuir a la mejora de la competitividad académica de las instituciones de educación superior por medio de una metodología para la administración escolar: la

planeación estratégica. De esta manera, podemos abordar las problemáticas de competitividad académica por medio de un plan de desarrollo de las carreras, para mejorar la calidad y eficiencia de los servicios educativos. Este enfoque parece responder mejor que muchos otros a la necesidad de encontrar un punto de convergencia promisorio entre aprovechamiento escolar de calidad y rendición de cuentas.

PLANTEAMIENTO DEL PROBLEMA

La investigación se inició porque para los criterios de calidad concebidos por los lineamientos de la SEP-SESIC, la FCA Tecomán presentaba problemas de competitividad académica por su bajo desempeño en los históricos de resultados educativos estratégicos: la DES FCAT no tenía ningún programa educativo (PE) reconocido como de buena calidad por evaluadores externos.El primer paso fue definir las problemáticas para la buena calidad educativa que se presentaban en la FCA Tecomán y las variables que por lo tanto se necesitaban monitorear a mediano plazo. Se encontró que las variables líderes de eficiencia de la administración escolar principalmente son: la tasa de titulación de cada PE, la eficiencia terminal y la retención de alumnos de primero a tercer semestre. Es conveniente señalar que estas variables se tomaron en cuenta también porque son consideradas esenciales para la administración escolar, tanto por la SESIC-SEP como por los Comités Inter-institucionales para la Evaluación de la Educación Superior (CIEES).En la problemática de la eficiencia en la atención a alumnos de la FCA Tecomán, se encontraron bajos indicadores relacionados con el buen aprovechamiento escolar de los estudiantes. Por esta razón se decidió investigar variables de resultados educativos que dieran seguimiento a las principales consecuencias de los casos de reprobación y deserción. Finalmente para realizar la investigación se consideró como prioridad la gestión educativa. El análisis condujo a plantear la urgente necesidad de aplicar planeación educativa estratégica como herramienta metodológica.

JUSTIFICACION

La presente investigación es importante porque las dependencias de educación superior (DES) del país, requieren una mayor eficiencia y eficacia, así como una mejor rendición de cuentas a la sociedad mexicana. En este contexto la FCAT se planteó ofrecer PE innovadores, flexibles, con calidad reconocida por evaluadores externos en la formación de profesionales integrales en las áreas de Informática, Administración, Contabilidad, y Agro negocios, comprometidos con el desarrollo armónico de la sociedad, en su entorno regional, nacional e internacional.Para lograr la calidad educativa en sus procesos escolares, se planteó realizar la investigación y aplicar una metodología que permita en el mediano plazo atender los problemas de competitividad académica. La necesidad de hacer más eficiente la formación de profesionales para una DES implica proporcionar procesos formativos que favorecen el desarrollo integral de sus estudiantes, propicien su crecimiento personal, el auto aprendizaje y el desarrollo de competencias para la solución creativa de las necesidades del entorno. El análisis del caso de estudio de la FCA Tecomán contribuye al conocimiento de como mejorar el desempeño escolar y profundiza los procesos metodológicos de gestión educativa. Así las DES del país pueden contar con herramientas metodológicas para tener programas y procesos administrativos que por su eficiencia y eficacia permitan una rendición de cuentas a la sociedad, infraestructura y espacios físicos adecuados y suficientes para ofertar servicios educativos de calidad.

HIPOTESIS

Implementando planeación estratégica se asegura de manera realista verificar la articulación entre variables de competitividad académica de manera que hagan posible se cuente con un proyecto factible para la Facultad de Contabilidad y Administración de Tecomán, y resolver sus áreas problema para el logro de su visión a 2012. Además nos permitirán establecer un proceso claro de seguimiento y rendición de cuentas hacia los ciudadanos.

Tabla1: Resumen de metas compromiso basadas en indicadores de competitividad académica.

1	**1.1**	***Incremento de un 5% en la tasa de titulación*** en los PE de la DES, ciclo agosto 2008-agosto 2009.	**1.1.1**	Proveer los medios informativos actualizados y suficientes para la realización de los trabajos de Investigación de Seminario I y II de los cuatro PE de la DES.
			1.1.2	Proporcionar el software de aplicaciones necesario a los alumnos de Seminario I y II de los cuatro PE de la DES para el desarrollo de los proyectos de investigación.
			1.1.3	Proveer de herramientas computacionales necesarias para el desarrollo de los proyectos de investigación de los alumnos de las asignaturas de Seminario I y II, de los cuatro PE de la DES.
			1.1.4	Proveer de los espacios e infraestructura suficiente para el desarrollo de los proyectos de investigación de los alumnos de Seminario I y II, de los cuatro PE de la DES.
	1.2	***Incremento de un 5% en la tasa de eficiencia terminal*** en los PE de CP y LIA, ciclo agosto 2008-agosto 2009.	**1.2.1**	Impartir talleres de formación docente a los profesores de la DES para actualizar a los profesionales de la educación en las metodologías de enseñanza.
			1.2.2	Capacitar a profesores en el uso de instrumentos apropiados y confiables para la evaluación de los aprendizajes con métodos innovadores, y lograr un mayor aprovechamiento en el proceso de aprendizaje.
			1.2.3	Impartir cursos de métodos de estudio a los alumnos de los PE de la DES para proporcionarles herramientas eficientes de aprendizaje.
			1.2.4	Fortalecer el programa de tutoría al 100% de los estudiantes de los PE de CP y PAIA con riesgo de deserción y reprobación de 4º a 9º semestre.
	1.3	***Mantener por encima del 80% la tasa de retención*** de 1° a 3° en los PE de la DES, ciclo agosto 2008-agosto 2009.	**1.3.1**	Proporcionar asesoría al 100% de los estudiantes de los PE CP y LA en riesgo de deserción y reprobación de 1º a 3º semestre.
			1.3.2	Proporcionar asesoría al 100% de los estudiantes de los PE PAIA y LIA en riesgo de deserción y reprobación de 1º a 3º semestre.
			1.3.3	Brindar apoyo motivacional al 100% de los estudiantes de los PE de la DES en riesgo de deserción y reprobación de 1º a 3º semestre.
			1.3.4	Dar tutoría al 100% de los estudiantes de los PE de la DES con riesgo de deserción y reprobación de 1º a 3º semestre.
	1.4	***Elevar al 100% de PE en nivel 1 de CIEES*** en la DES FCAT, ciclo agosto 2008-agosto 2009.	**1.4.1**	Someter al proceso de evaluación al PE de LIA por parte del comité de los CIEES.
			1.4.2	Realizar un estudio de autoevaluación del PE de LIA como insumo para la evaluación por parte del comité de los CIEES
			1.4.3	Incorporar a los PE de LIA y PAIA, a asociaciones reconocidas por sus estándares educativos de calidad.

Para el progreso en la atención a estudiantes, así como en el funcionamiento de la DES, se considera factible alcanzar las mejoras que se plantea como compromisos, entre otras políticas y estrategias para alcanzar la visión al 2012. Asimismo, se consideran congruentes las políticas y estrategias para mejorar la capacidad académica, y cumplir con las metas compromiso de PTC con posgrado, que impartan tutoría, y que cuenten con Perfil Deseable reconocido por el PROMEP SES, y que colaboren en redes.

MARCO TEORICO

La Planeación Estratégica

El concepto de estrategia proviene del griego "strategea" que es el arte o ciencia de ser general, de dirigir, por lo que se dice que tiene conceptos de planeación y de toma de decisiones o acciones conjuntamente. La estrategia es un acto creador, innovador, lógico y aplicable que genera un grupo de acciones coherentes de asignación de decisiones tácticas y recursos, todo esto encaminado a que la empresa, organización o destino según sea el caso, alcance una posición competitiva ventajosa en el entorno donde se desenvuelve y mejorar la eficiencia de la gestión. Un Plan es un curso de acción definido conscientemente, como una guía para enfrentar diversas situaciones. Para Quinn (1991) una estrategia es un plan que integra las metas mayores de una organización hacia una posición "Única y viable", basada

en sus competencias relativas internas, anticipando los cambios en el entorno y los movimientos contingentes de los oponentes inteligentes. Steiner (1991) define a la Planeación Estratégica como el proceso de determinar cuáles son los principales objetivos de una organización y los criterios que presidieran la adquisición, uso y disposición de recursos en cuanto a la consecución de los referidos objetivos. Este proceso de planeación engloba misiones y propósitos, determinados previamente, así como los objetivos específicos buscados. La planeación estratégica no solo trata de planear o prever un camino a seguir, sino que busca anticipar su rumbo, si es posible cambiar su destino, realizar de forma ordenada un amplio número de actividades con un uso adecuado de recursos humanos y materiales. Estas definiciones centran algunas similitudes que en esencia indican: "Un plan estratégico expresa la visión del estado deseado a alcanzar en un futuro", (enfoque sistémico en factores internos de la organización con su entorno).

MARCO REFERENCIAL

La importancia de la evaluación de la calidad de la educación superior ha sido señalada por diversos autores. En el caso de nuestro país, el principal marco de referencia para la planeación y mejora de la educación superior lo constituye el plan sectorial de educación, en el que se expresan los objetivos que definen la dirección del sector educativo. México a pesar de ser un país con un alto desempeño económico, presenta graves rezagos en educación en comparación con sus competidores comerciales. Por ejemplo, en nuestro territorio, aún la mayoría de los jóvenes son grupos marginados que no asisten a la universidad o la tienen que abandonar. Particularmente en las zonas rurales de México, donde frecuentemente sus situaciones particulares afectan el derecho de los jóvenes de terminar una formación universitaria. De ahí la importancia de atender estos problemas en las instituciones de educación superior para mejorar las oportunidad profesionales de los jóvenes. El sistema educativo en México presenta serias deficiencias, con altos índices de reprobación y deserción de los alumnos, y bajos niveles de aprovechamiento. La formación escolar prevaleciente, como lo han demostrado las pruebas nacionales e internacionales aplicadas en la educación básica y en la media superior, no logra todavía desarrollar plenamente en los estudiantes las habilidades que les permitan resolver problemas con creatividad y eficacia, y estar mejor preparados para los desafíos que les presentan la vida y la inserción en el mercado laboral. Lo anterior lo plasma el Programa Sectorial de Educación, elaborado tomando como punto de partida la Visión México 2030 y el Plan Nacional de Desarrollo, así como los resultados de una amplia consulta con actores relevantes del sector educativo que han aportado elementos de diagnóstico y de acción. De acuerdo a los lineamientos del Programa Sectorial de Educación, los objetivos de la Educación en México son seis:

- *Elevar la calidad de la educación para que los estudiantes mejoren su nivel de logro educativo, cuenten con medios para tener acceso a un mayor bienestar y contribuyan al desarrollo nacional.*
- *Ampliar las oportunidades educativas para reducir desigualdades entre grupos sociales, cerrar brechas e impulsar la equidad.*
- *Impulsar el desarrollo y utilización de tecnologías de la información y la comunicación en el sistema educativo para apoyar el aprendizaje de los estudiantes, ampliar sus competencias para la vida y favorecer su inserción en la sociedad del conocimiento.*
- *Ofrecer una educación integral que equilibre la formación en valores ciudadanos, el desarrollo de competencias y la adquisición de conocimientos, a través de actividades regulares del aula, la práctica docente y el ambiente institucional, para fortalecer la convivencia democrática e intercultural.*
- *Ofrecer servicios educativos de calidad para formar personas con alto sentido de responsabilidad social, que participen de manera productiva y competitiva en el mercado laboral.*

- *Fomentar una gestión escolar e institucional que fortalezca la participación de los centros escolares en la toma de decisiones, corresponsabilice a los diferentes actores sociales y educativos, y promueva la seguridad de alumnos y profesores, la transparencia y la rendición de cuentas.*

En este contexto uno de los indicadores principales es el porcentaje de matricula de en programas de educación superior de calidad, que en 2006 en nuestro país era de 38.3%. El programa contribuye también al logro de las metas de cobertura educativa, calidad educativa, desarrollo tecnológico, prosperidad, equidad entre regiones, competitividad y transparencia de la Visión 2030. La eficiencia terminal en educación superior en 2006 era de 62.9% y el Porcentaje de instituciones de educación superior cuyas comunidades participan en la elaboración del Programa de Fortalecimiento Institucional era del 61%.

CASO DE ESTUDIO

La DES Facultad de Contabilidad y Administración de Tecomán (FCAT), ofrece cuatro PE: Contador Público (CP), Licenciado en Administración (LA), Licenciado en Informática Administrativa (LIA) y Profesional Asociado en Informática Administrativa (PAIA). Los PE de la DES son de tipo presencial y de modalidad semestral, método de evaluación de tipo formativa y sumativa. Su planta docente está conformada en su mayoría por profesionales con amplia experiencia en sus disciplinas. La DES FCAT en su política de calidad educativa, se sujeta a las recomendaciones de organismos de evaluación y certificación externa (CIEES, CENEVAL, CACECA, ANFECA), así como la evaluación anual del profesorado: ESDEPED y perfil deseable PROMEP. En la elaboración del ProDES trabajaron de manera colegiada la Dirección de la DES, Coordinadores Académicos (*supervisores*), PTC, Asesora Pedagógica y Asesoría de la Dirección General de Planeación (*estadísticas y asesoría*). Se tomaron como insumos del PIFI: el Plan Nacional de Educación 2007-2012, Plan Institucional de Desarrollo (PIDE 2006-2009), Indicadores Estadísticos de la DES, y Plan de Desarrollo de los Cuerpos Académicos, así como las Proyecciones Estadísticas de Acervo, Matrícula y Profesorado 2008-2012. Una vez obtenidos y graficados los indicadores estadísticos de la DES se planteó un cronograma y equipos de trabajo, se llevó a cabo el análisis documental de procesos y resultados educativos, así como de análisis FODA, priorización de problemas y planeación estratégica de la FCAT. Para la elaboración del ProDES el equipo de trabajo se reunió durante 21 sesiones colegiadas de 3 horas, hasta el término del proyecto.De esta manera, la DES FCAT asume un Proyecto Integral enfocado al mejoramiento de la Competitividad de los PE, al Cierre de Brechas al interior de la DES, y la Atención a Estudiantes, así como del reconocimiento de la buena calidad de los PE, por parte de organismos externos. La correspondencia de los perfiles disciplinarios de los PE son acordes con los objetivo de las LGAC ya que los planes de estudios permiten que el estudiante cuente con las bases teórico-prácticas en diferentes áreas disciplinares y se integren o propongan proyectos de investigación con relación a las LGAC de los CA.

COMPETITIVIDAD ACADÉMICA DE LA DES

Análisis de la Competitividad Académica de la DES

En 2004 ninguno de los PE tenía calidad reconocida por evaluadores externos, esperando contar con el 100% de PE en nivel 1 de CIEES para Diciembre de 2008. Los PE de la DES cuentan con un currículo flexible, un paquete de asignaturas optativas e integradoras (seminarios de integración en los 8 semestres), esto le da al alumno una visión holística en la solución de problemas y en la aplicación integral de sus conocimientos. En los últimos tres semestres, se ofrecen asignaturas optativas de acuerdo a las disciplinas y competencias que quieran desarrollar. Respecto al modelo de enseñanza, la DES pretende en el presente proyecto la adopción de modelos centrados en el estudiante, y el empleo de las TICS: Innovación educativa será punto de énfasis con visión a 2012.

Tabla 2: Caracterización de las LGAC de los CA de la DES: Facultad de Contabilidad y Administración de Tecomán

Clave del CA	Nombre de las LGAC que cultiva	Área del conocimiento	Objetivos de las LGAC	PTC que participan
UCOL-CA-20	I. Modelos administrativos que favorezcan el desarrollo de las empresas. II. La contabilidad en materia financiera y fiscal en las empresas de México.	Ciencias Sociales y Administrativas	I.Establecer estudios que puedan involucrar una o más de las áreas operativas que constituye la empresa o la institución, con el fin de determinar cuales son sus mejores opciones de optimización administrativa. II. Análisis e interpretación de los estados financieros en apoyos a las Pequeñas y Medianas Empresas de México	**(1a)** **5 PTC** **(1b)** **3 PTC**
UCOL-CA-64	I. Aplicación de la Informática en los Modelos Administrativos.	Ciencia y Tecnología.	I. Establecer estudios que puedan involucrar una o más de las áreas operativas que constituye la empresa o la institución, con el fin de determinar cuales son sus mejores opciones de optimización administrativa.	**(2a)** **4 PTC**

COMPETITIVIDAD ACADÉMICA DE LA DES

Análisis de la Competitividad Académica de la DES
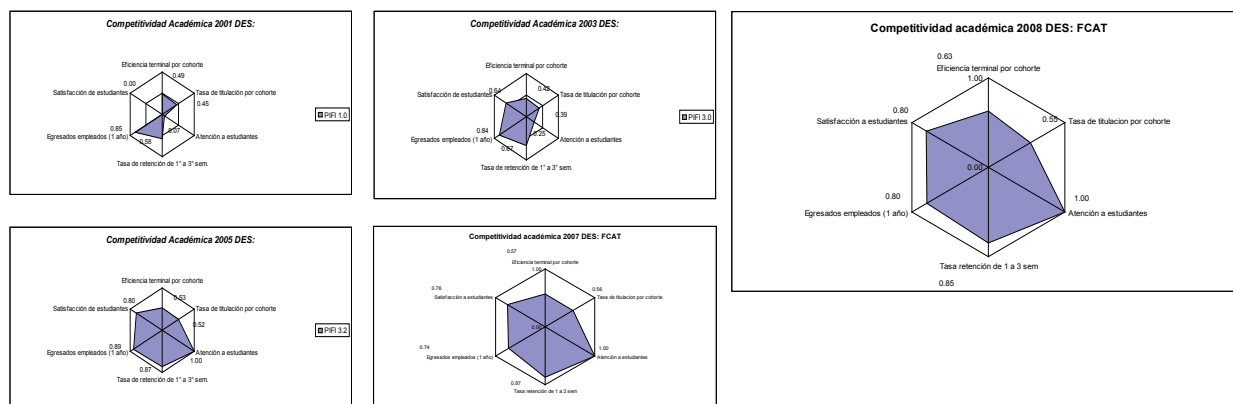
Competitividad Académica de la DES FCAT: Evolución 2001-2008

La demanda de 2001 a 2008 ha permanecido creciente, lo cual indica una aceptación de los PE por la sociedad y los empleadores. En 2004, la DES FCAT no contaba con espacios físicos propios, compartiendo instalaciones con la Facultad de Medicina Veterinaria y Zootecnia en el campus Tecomán. Se plantó contar con edificio propio para 2007 para el buen desempeño de las actividades educativas para atender al total de la matricula de los cuatro PE. Fortalecer a la DES en este rubro, impactará positivamente en la atención a la comunidad estudiantil, profesorado, padres de familia y demás entidades externas. En lo que respecta a evolución en los indicadores de resultados educativos estratégicos (REE), encontramos mejoras considerables: Retención de 58% en 2001 a 84.83% en 2008, Eficiencia Terminal

de 49% en 2001 a 63% en 2008, Titulación por Cohorte 45% a 54.74% (considerado para este PIFI 2008-2009, dentro de las prioridades en la problemática de la DES). Es necesario destacar que en los dos últimos años: 2006 y 2007 se implementaron estrategias para evitar la deserción entre nuestra población estudiantil, tales como la tutoría personalizada, los círculos de lectura y la toma de desiciones basada en la información de los exámenes parciales. Actualmente un 75% de los PE han alcanzado el nivel 1 de CIEES (88.1% Inst.), se espera tener el 100% en diciembre de 2008. La matrícula atendida por PE de buena calidad es de 89.53%, (94.8% Inst.). Se alcanzó un índice de Satisfacción del 64% en 2003 y de 80% en 2008, (2001 SD). En Atención a Estudiantes se avanzó de un 70% en 2001 a un 100% en 2008 (Se tomaron medidas para dar tutorías al total de la matrícula en riesgo de deserción y reprobación). Para el índice de Egresados Empleados1 año, se avanzó en un 6.10% (73.90% en 2001 a un 80% en 2008). Respecto de la infraestructura con que cuenta la DES de 2006 a 2008 conservamos 144 PCS para uso de los estudiantes teniendo una razón de 4.2 alumnos por PC (5.6 Inst). Lo cual denota una necesidad urgente para proveer de herramienta de estudio y trabajo a nuestra población estudiantil. Se cuenta con una antena de radio omnidireccional para atender necesidades de conectividad de los usuarios de la DES. Dos módulos de cómputo equipados con cañón (96 y 48 PC) respectivamente. En la capacidad instalada se tienen 14 aulas con capacidad para 45 alumnos c/u, además de 14 cubículos para PTC y coordinadores administrativos. Actualmente la DES FCAT requiere de la instalación de software actualizado: sistema operativo de red, software de ofimática, diseño grafico, bases de datos, contable y administrativo. Así como también actualizar 30 PCS y 24 monitores. A la fecha, el acervo bibliográfico es de 5,672 títulos y 9,823 ejemplares (4244 ejemplares en 2006), y se tiene la siguiente prospectiva a 2012:

Tabla 3: Prospectiva de adquisición bibliográfica para la comunidad estudiantil de la DES.

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	AÑO
534	555	614	586	620	586	594	602	616	617	638	650	MATRICULA
							5922	6172	6422	6672	6922	TITULOS
							10072	10573	11073	11573	12073	EJEMPLARES
							7	7	7	7	7	REVISTAS

En la presente tabla se muestra el crecimiento de la matrícula en su evolución de 2001 a 2007, además de la prospectiva de 2008 a 2012 (este periodo incluye el acervo que la DES proyecta necesitar para su desempeño académico).

Se concluye que la DES FCAT ha avanzado en resultados educativos (Retención, Eficiencia terminal y Titulación). Sin embargo, los retos de la DES para 2008-2009 son continuar con políticas y estrategias orientadas al aseguramiento de la calidad educativa, que le permitan el reconocimiento del 100% sus PE ante CIEES, así como una mejora integral en su política de servicio a la comunidad estudiantil, tanto administrativos como educativos.

Avances en la Incorporación de Innovaciones Educativas y Modelos Educativos Centrados en el Aprendizaje

Implementar enfoques centrados en el aprendizaje e innovación educativa, son prioridad de este PIFI 2008-2009 y por supuesto, de la visión a 2012. La FCAT ha trabajado en los Círculos de Lectura: Informática y de cultura general, además de talleres de motivación y de capacitación técnica para los PE, todos ellos de gran utilidad en los trabajos de tesis y proyectos académicos. Los PE de PAIA y LIA tiene un valor agregado con la certificación de reconocimiento internacional CCNA de la empresa CISCO SYSTEMS. El Programa Universitario de Inglés y los CAAL, tienen una cobertura del total de la matrícula de la DES, ya que la asignatura es de carácter curricular y requisito para completar el total de los créditos de los PE. En la DES se lleva tutoría personalizada para los alumnos que presentan una problemática de reprobación, ya que se implementaron acciones orientadas a detectar, atender y revisar, a la matricula con problemas de aprovechamiento. Tenemos una atención del 95% de tutorías grupales y las tutorías y asesorías personalizadas de los casos antes mencionados. En el programa Universidad Saludable se tiene una cobertura del total de la matrícula, ya que la comunidad estudiantil cuenta con el seguro facultativo. Las Actividades Culturales y Deportivas se cubren al 100% ya que forman parte de las obligaciones crediticias de los PE.

Vinculación e Internacionalización de Procesos Académicos Asociados a los PE de la DES

El programa de movilidad e intercambio académico ha tenido poco impacto en los alumnos de la DES FCAT, sin embargo, se espera celebrar un convenio con CA de Sussex Inglaterra, de la U. Católica de Chile y un convenio nacional con un CA de CUCEA en Guadalajara Jal. Consideramos que se debe atender este rubro promocionando el intercambio académico entre la comunidad desde y hacia la FCAT.

La DES cuenta con convenios con sector productivo con las siguientes empresas y organismos de nuestro entorno: Cruz Roja Mexicana, COEPLIM, CNOP, Ayuntamiento de Armería, CANACO Tecomán, COMAPAT, Agencias Aduanales de Manzanillo, Restaurantes Turísticos de las playas de Armería Colima, Productores de Limón del Valle de Tecomán y H. Ayuntamiento de Tecomán, Col. La FCAT para asegurar la calidad de los PE y perfiles de egreso pertinentes, empleará políticas que coadyuven en la integración de la DES, al fortalecimiento de vínculos con otras instituciones educativas y de manera mas vigorosa con el sector productivo. En lo que respecta a evolución en los indicadores de resultados educativos estratégicos, encontramos mejoras considerables: tasa de retención 58% en 2001 a 84.83% en 2008, en la eficiencia Terminal 49% en 2001 a 63% en 2008, titulación por cohorte 45% a 54.74% (considerado para este PIFI 2008-2009, dentro de las prioridades en la problemática de la DES).

PLAN GENERAL DE ACCIÓN DE LA DES FCAT, PIFI 2008-2009.

Para el presente PIFI y su Proyecto Integral, la DES FCAT, basada siempre en análisis de indicadores y su evolución de 2003 a la fecha, ha formulado las siguientes líneas de acción:

1. Buscar el reconocimiento del 100% de sus PE por los CIEES, (solo falta la acreditación de un PE), es decir pasar del 75% al 100%. Para posteriormente buscar la acreditación ante organismos reconocidos por COPAES, en nuestro caso CASECA.
2. Abatir el rezago que en titulación se tiene y elevar la tasa actual del 45.42%. Para ello se plantea la habilitación de un espacio físico, cuya función sea la de proveer al alumno la infraestructura necesaria para desarrollar sus proyectos de investigación: Espacios físicos, Acervo y Equipo de cómputo. A la par, se plantea dar seguimiento al alumnado en las asignaturas de Seminario de investigación I y II, reforzando el programa de asesoría, así como también, mejorar la eficiencia en los trámites de titulación, y los resultados del EGEL.
3. Desarrollar a los CA mediante la formación de redes con CA nacionales e internacionales. Incrementar PTC con perfil PROMEP, mediante productos académicos de calidad, e impactar positivamente en el sector productivo, celebrando convenios estratégicos en la entidad.
4. Mejorar la planta docente en su labor de enseñanza-aprendizaje, incorporándolos en los nuevos enfoques educativos, capacitándolos también en sus respectivas disciplinas. Para esto se programarán cursos de capacitación en ambos sentidos: nuevos enfoques de enseñanza-aprendizaje y mejoramiento disciplinar.
5. Incrementar los procesos certificados por normas similares a las de ISO. Para esto se plantea que los PTC se incorporen a cursos de capacitación, en los cuales se les certifique en un área o norma técnica. Buscando también el impacto en el sector productivo y sobre todo para el beneficio y aprovechamiento de los alumnos de todos los PE de la DES.
6. Implementar las TICS en los procesos de educación, con la finalidad de aprovechar los recursos tecnológicos en beneficio del alumnado y profesorado. Porque consideramos que la correcta amalgama de educación-procesos-tecnología, son de gran utilidad para toda la comunidad académica de la DES.
7. Mejorar la gestión académica y la integración de la DES. En este rubro, se tiene la urgente necesidad de construir y adecuar espacios físicos para la función administrativa (Oficina administrativa, Archivo y Bodega de materiales), esta acción beneficiará la gestión de la dirección, de la coordinación

académica, la secretaría técnica administrativa, al personal secretarial, asistentes de apoyo, profesores y alumnos de la facultad.

Tabla 4: Evolución de indicadores educativos críticos de la DES FCAT

	2001	2002	2003	2004	2005	2006	2007	2008
TITULACION	45	60	42	50	52	48	52	54.74
EFIC.TERMINAL	49	63	42	52	53	61	57	63.04
RETENCION	58	68	67	59	74	75	86.8	84.83

Tabla 5: Análisis FODA de la DES para el período 2008-2010

Principales fortalezas en orden de importancia						
Importancia	Capacidad académica	Competitividad académica (PA y Licenciatura)	Competitividad académica (Posgrado)	Innovación educativa	Gestión académica	Otras fortalezas
1		PE en nivel 1 de CIEES (75%)				
2	PTC con Posgrado (91.66%)					
3				PE con currícula de asignaturas integradoras y optativas		
4					LGAC Ínter disciplinares favorecen la vinculación con el sector productivo	
5						DES con edificio propio: (aulas y cubículos de PTC)
Principales problemas priorizados						
Prioridad	Capacidad académica	Competitividad académica (PA y Licenciatura)	Competitividad académica (Posgrado)	Brechas de calidad	Gestión académica	Otros problemas
1		Baja tasa de titulación en los PE (45.42%)				
2				Rezago en Titulación y Eficiencia terminal entre PE (15% y 10% respect.)		
3	PTC con perfil PROMEP (debajo del promedio institucional) CA de la DES con escasa					
4	consolidación de redes de investigación					

En el presente proyecto PIFI 2008-2009, se plantean políticas, metas y estrategias encaminadas a contribuir a la mejora de los procesos y resultados educativos, eficientando en todo momento, los recursos humanos y financieros que de este se deriven, subsanando así, los rezagos en materia de calidad educativa.

MISIÓN, VISIÓN Y OBJETIVOS DE LA DES A 2012

Misión de la DES

La Facultad de Contabilidad y Administración de Tecomán es una institución de vanguardia que forma profesionales en las áreas Contabilidad, Administración e Informática, con sentido creativo, innovador, humanista y altamente competitivos, comprometidos en el desarrollo armónico de la sociedad, en su entorno regional, nacional e internacional.

Visión de la DES al 2012

La DES FCAT se visualiza como una institución con alto reconocimiento social, de sus pares académicos y con clara proyección nacional e internacional, dedicada a la formación integral de profesionales en administración, contabilidad e informática, y al impulso científico de estas áreas de conocimiento, con estructuras y procesos de calidad. Ofertando PE de nivel Licenciatura y de Posgrado innovadores, flexibles, acreditados ante CACECA CONACYT por su calidad en la formación de profesionales. Empleando procesos formativos que favorezcan el desarrollo integral de sus estudiantes, propician su crecimiento personal, el autoaprendizaje y el desarrollo de competencias para la solución creativa de las necesidades del entorno. CA en consolidación, organizados de manera colegiada y vinculados a redes académicas nacionales e internacionales, y LGAC que permiten el desarrollo disciplinario de frontera y la atención a las necesidades sociales prioritarias. Procesos de gestión y toma de decisiones eficientes basados en órganos colegiados, así como la vinculación con el sector público y organizaciones no gubernamentales para la promoción del desarrollo social con equidad y justicia. Programas y procesos administrativos que por su eficiencia y eficacia permiten una rendición de cuentas a la sociedad, infraestructura y espacios físicos adecuados y suficientes que le permitan a la DES cumplir con sus funciones de ofertar servicios educativos de calidad.

Objetivos Estratégicos de la DES al 2012

Mejorar la competitividad académica, Mejorar la capacidad académica, Cerrar brechas de calidad al interior de la DES, Impulsar la innovación educativa y creación de nuevos PE.

POLÍTICAS DE LA DES PARA ALCANZAR LA VISIÓN Y LOGRAR LAS METAS COMPROMISO AL 2012

Para mejorar la competitividad académica
1. Atender las recomendaciones de los CIEES para lograr la acreditación de los PE de la DES.
2. Incrementar la tasa de titulación de egresados con una sólida formación y amplia aceptación social.
3. Incrementar la tasa de retención de 1 a 3 semestre.
4. Detectar las problemáticas de aprendizaje en las diversas asignaturas a través del trabajo tutorial, proporcionando servicios oportunos para atención individual y en grupo de los estudiantes.
5. Contar con un currículo actualizado y pertinente, que incorpore enfoques centrados en el aprendizaje y en el estudiante.

Para cerrar brechas de calidad al interior de la DES.
1. Fortalecer la cultura de la mejora de la competitividad de los PE de la DES para lograr su acreditación.
2. Lograr el reconocimiento de nivel 1 de los CIEES de los PE que no han sido evaluados.
3. Abatir la reprobación y deserción en los PE de Contador Público y Licenciado en Administración.

Para impulsar la innovación educativa y creación de nuevos PE

1. Determinar los requisitos de infraestructura moderna y suficiente para apoyar el trabajo académico de profesores y alumnos.
2. Actualizar de manera continua, los currícula para que sean pertinentes de acuerdo a los avances en el requerimiento de competencias profesionales e incorporando enfoques centrados en el aprendizaje y en el estudiante.
3. Implementar un módulo de investigaciones con infraestructura necesaria para que los proyectos de las LGAC de los CA sean integradores y sinérgicos.
4. Fomentar la cooperación académica en los niveles regional, nacional e internacional, dando impulso a la movilidad de profesores y alumnos, con el fin de que realicen estancias académicas y de este modo fortalecer los vínculos de cooperación con otras instituciones ya sea de enseñanza y/o de investigación.

CONCLUSIONES

La presente investigación se gestó con la participación conjunta de los integrantes de la DES Facultad de Contabilidad y Administración de Tecomán: Directivos, cuerpos académicos, asesoría pedagógica, profesorado por horas, alumnos y asesoría de la Dirección de Planeación de la Universidad de Colima.

Los resultados en competitividad académica mejoraron considerablemente de 2001 a 2007 como lo muestran las gráficas e indicadores respectivas al interior del ProDES, sin embargo falta incrementar, mantener y asegurar la calidad en todos los aspectos y factores de nuestra institución educativa y ofertar nuevos PE. Destaca que en el 100% de los PE se ha logrado el reconocimiento de nivel 1 de CIEES y para el presente ProDES 2008-2009 se plantea como meta compromiso lograr el reconocimiento del 100% de PE como programas de calidad.

Se considera de vital importancia tener claridad de los objetivos que como DES pretendemos alcanzar; así como la certeza de conocer las fortalezas y problemáticas más apremiantes. Lo anterior con la finalidad de alcanzar la visión a 2012. Así, con una participación intensa y un trabajo colegiado, analítico y crítico sobre los resultados educativos; y por ende nos encontramos en la posibilidad de proponer soluciones congruentes a la problemática al interior de la DES.

Para que la FCAT se mantenga a la vanguardia se considera ofrecer nuevos PE pertinentes como la incorporación a mediano plazo de la Licenciatura en Agro Negocios Internacionales, ya que es fundamental ubicar a los PE en los niveles y estándares de calidad que se demandan en la actualidad, y mejorar los procesos y resultados educativos mediante la certificación de los mismos por organismos externos.

Para ello, los procesos educativos se deben someter a una actualización continua, basada en la mejora de los indicadores de competitividad académica y en la innovación educativa, la oferta de nuevos PE pertinentes, así como en la atención y formación integral del estudiante.

De esta manera, bajo un marco de trabajo objetivo y congruente, políticas de mejora continua en los procesos educativos, la adopción de una cultura de aseguramiento de la calidad basada en la transparencia y rendición de cuentas, se concluyen los trabajos de planeación del presente ProDES FCAT 2008-2009.

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PIDE UCOL

SEP-SESIC, Normatividad

LAS ESTRATEGIAS DE DIRECCIÓN Y SU RELACIÓN CON EL USO DE LA TIC´S EN LAS PEQUEÑAS EMPRESAS DE LA REGIÓN CENTRO DEL ESTADO DE COAHUILA

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RESUMEN

El presente trabajo tiene como objetivo analizar la relación que existe entre las estrategias adoptadas por los empresarios al dirigir sus empresas en el proceso de adaptarse al medio ambiente y el uso de las tecnologías de información y comunicaciones (TIC´s) como un factor competitivo. La metodología empleada consistió en obtener información cuantitativa de 137 pequeñas empresas (Pymes) de la región centro del Estado de Coahuila, México, mediante un cuestionario estructurado. Los datos que se obtuvieron fueron procesados posteriormente con el software estadístico SPSS. El resultado de la prueba estadística Cross Tabs, muestra que el coeficiente de contingencia obtenido no es significativo a un nivel de confianza del 95%; por tanto, no se puede afirmar que existe una relación entre el tipo de estrategia adoptada por los empresarios en el proceso de adaptación al medio ambiente y el uso de las TIC´s por parte de las Pymes de la región centro del Estado de Coahuila.

PALABRAS CLAVE: Pymes, estrategias de dirección, TIC´s.

INTRODUCCIÓN

La presente investigación se encuentra dentro del marco de un proyecto institucional realizado por varios investigadores de la Universidad Autónoma de Coahuila, denominado: "Análisis estratégico para el desarrollo de las Pymes del Estado de Coahuila"; las autoras se han centrado en el estudio de las estrategias adoptadas por los empresarios al dirigir sus empresas en el proceso de adaptarse al medio ambiente, por lo que este trabajo forma parte de una serie de análisis desarrollados por las mismas sobre el tema. El contexto en el cual se ubica esta investigación es en el Estado de Coahuila de Zaragoza, localizado en la parte central del norte de México y está conformado por 38 municipios divididos en seis regiones socioeconómicas que son: Sureste, Laguna, Centro, Carbonífera, Norte y Desierto. Es en la región centro de Coahuila donde se enfoca este estudio, específicamente en las Pymes de esa región.

Entre los temas más investigados en el área administrativa, se encuentra lo relacionado con la competitividad de las Pymes (Velarde y Araiza, 2008a), la cual se considera de suma importancia para su desarrollo. Las Pymes en la actualidad se enfrentan a un reto muy grande: pasar de un mercado local a hacer frente a un mercado globalizado (Serna y Delgado, 2007); para lograrlo, los empresarios deben adoptar estrategias que les permitan impulsar su desarrollo, ya que la estrategia de la empresa tiene como objetivo crear ventaja competitiva (Morales y Pech, 2000). Monge *et al.* (2005) y Orozco *et al.* (2007) mencionan que desde la segunda mitad de la década de los 90s se ha producido una importante revolución económica basada en el uso intensivo de la Internet y otras tecnologías de información y comunicación (TIC´s), las cuales se constituyen en una herramienta fundamental para mejorar la competitividad en todos los niveles de la sociedad contemporánea, particularmente en el sector productivo. Su uso ha facilitado el incremento de las transacciones comerciales, presionando a los países y a sus empresas a ser más competitivas, en especial a las pequeñas y medianas empresas (Pymes), representando una parte muy

importante para el desarrollo sostenible de las regiones del mundo, ya que "generan la mayoría del empleo y del producto interno bruto (PIB) en países desarrollados y en desarrollo" (Díaz *et al*. 2005, citados por Araiza *et al*. 2007). En México las Pymes representan el 99.1% del total de las empresas, sobre cuyas espaldas se asienta el 60% del valor agregado en el PIB del país, el 7% de la oferta exportadora y el 70% del empleo. (Universo Pyme).

Lo anterior resalta la importancia de realizar estudios sobre las estrategias adoptadas por los empresarios al dirigir sus empresas; de manera específica, este estudio pretende obtener evidencia empírica de si estas estrategias se relacionan con el uso de las TIC´s en las empresas.

REVISIÓN LITERARIA

Esta investigación se realiza a través de la perspectiva de la teoría de recursos y capacidades y de la teoría de costos de transacción; la primera asume que los recursos de la firma son fortalezas que pueden ser controladas y usadas para crear e implementar sus estrategias en aras de lograr una ventaja competitiva (Barney, 1991); mientras que la segunda indica que la decisión de que las transacciones se organicen hacia el interior de una empresa o entre empresas autónomas, es una variable que va a depender de los costos de transacción de cada alternativa (Williamson, 1985). La discusión se centra desde la óptica de la planeación estratégica en el análisis de la inversión y uso de las TIC´s en las Pymes, vista como una estrategia adoptada por los empresarios para ser competitivos.

La estrategia es definida por Mintzberg (1977, 1978) como un patrón o modelo en una corriente de decisiones o acciones, constituido de un producto de cualquier estrategia intencionada (planeada) y de cualquier estrategia emergente (no planeada). Acorde a Karami (2007) el concepto de estrategia corporativa es definido por Andrews (1971) como el patrón de objetivos, los propósitos o las metas y las políticas y los planes importantes para alcanzar estas metas, con el fin de definir en qué negocio está la compañía o debería estar y la clase de compañía que es, o debería ser.

Después de efectuar un análisis bibliográfico (Miles *et al*.1978; Mintzberg, 1973; Frese *et al*. 2000; Velarde y Araiza, 2008b) de los aspectos relacionados con las estrategias que los empresarios adoptan con el fin de que sus empresas se adapten al medio ambiente en busca del éxito, las autoras determinaron utilizar la tipología de Miles *et al*. (1978), ya validada empíricamente (Aragón y Sánchez, 2003 y 2005) y que considera a la organización como un sistema completo e integrado en interacción dinámica con sus ambientes. A continuación se describe la mencionada tipología:

La exploradora: su capacidad principal es la de encontrar y explotar nuevos productos y oportunidades de mercado. La analizadora: las organizaciones con este tipo de estrategia intentan minimizar el riesgo y a la vez maximizar las utilidades.

La defensiva: tiene poca capacidad para localizar y explotar nuevas áreas de oportunidad; no está interesada en las modificaciones, sino que se concentra en la mejora continua del trabajo dentro de su campo de actuación. Reactiva: (sin estrategia definida) la organización con este tipo de estrategia carece de mecanismos de respuesta a un ambiente con cambios continuos.

Las TIC en las Pymes

El acceso, uso y adopción de las TIC´s por parte de las Pymes, constituye una importante innovación que podría mejorar su productividad y competitividad, siempre y cuando se adopten otras políticas que combatan los obstáculos o restricciones que enfrentan estas empresas para su desarrollo. El uso y adopción de las TIC´s generan ganancias de índole económica, no sólo para las empresas involucradas, sino también para la economía en general (Kaushik y Singh, 2003). En un comprensivo estudio sobre los

beneficios económicos de la Internet en los Estados Unidos, Reino Unido, Francia y Alemania, Varian, Litan, Elder y Shutter (2002) identificaron y midieron los ahorros en costos e incrementos en ingresos de las empresas asociadas con la inversión que ellas han llevado a cabo, en lo que los autores denominan soluciones de negocios basadas en la Internet (Internet Business Solutions—IBS—). Es decir, cualquier iniciativa que combine la Internet con redes (networking), software y computadoras (hardware) para incrementar o mejorar los procesos del negocio o crear nuevas oportunidades de negocios. Los resultados del citado estudio señalan que la adopción de IBS está ocurriendo en todas las empresas y no sólo en las grandes compañías. Y de acuerdo al Reporte Global de Tecnologías de Información del Foro Económico Mundial, publicado el 28 de marzo de 2007, se realiza anualmente una medición del desarrollo de TIC´s, la cual indica que existe un 85% de correlación entre la adopción de las TIC´s y la prosperidad económica y financiera de una nación.

Existe evidencia de que el acceso y uso de las nuevas tecnologías ligadas a internet permite a las empresas "competir en un mercado cada vez más abierto y competitivo, generar autonomía y aumentar el aprendizaje colectivo, entender mejor el entorno y por tanto adaptarse y aprovechar mejor las oportunidades que este ofrece" (Tetteh y Burn, 2001, citados por Aragón y Rubio, 2005). Derivado de lo anterior, en esta investigación se busca una posible asociación entre el uso de las TIC´s y las estrategias que utilizan los empresarios al dirigir sus empresas en el proceso de adaptación al medio ambiente.

METODOLOGÍA

El enfoque cuantitativo se consideró apropiado para esta investigación, por lo que se obtuvo la información efectuando entrevistas cara a cara con los empresarios de las Pymes. Para esto se utilizó un cuestionario estructurado proporcionado por los investigadores españoles el cual fue piloteado en el Estado de Coahuila, para posteriormente efectuar las adaptaciones conducentes. En base a la población de Coahuila de 8,934 empresas, para determinar el tamaño de la muestra de empresas a entrevistar se consideró el estratificarla por región, con un error muestral global del 4% con un nivel de significancia del 95%, habiéndose obtenido lo siguiente: Muestra para el Estado de Coahuila: 551 empresas. Muestra para la región centro del Estado de Coahuila: 137 empresas. Se recolectó la información de marzo a mayo de 2007, realizando posteriormente el análisis cuantitativo utilizando estadística descriptiva con ayuda del paquete estadístico SPSS, así como tablas de contingencia para establecer una posible asociación entre las variables de interés.

RESULTADOS

Los resultados que se presentan en este apartado fueron calculados en base a los datos obtenidos de las entrevistas efectuadas a las 137 empresas de la muestra para la región centro del Estado.

Caracterización de las Pymes de la Región Centro del Estado de Coahuila y del Perfil de los Empresarios que las Dirigen.

En este apartado se presentan la caracterización de las Pymes de la región centro del Estado de Coahuila así como el perfil de los empresarios que las dirigen.
Del total de 137 empresas el 58.4% son micros, el 36% son pequeñas y el resto son medianas empresas; el 47.4% está integrada como sociedad mercantil y el 89.8% tiene un control mayoritario de la empresa de tipo familiar; en promedio las empresas tienen una antigüedad de 14 años. En relación al perfil de los empresarios que dirigen las empresas éstos tienen en promedio 48 años de edad; de un total de 137 de ellos, 100 son de sexo masculino y el resto femenino; la caracterización de los empresarios de acuerdo al nivel de formación se presenta de la siguiente manera: estudios universitarios y de posgrado 60.6%, en el nivel medio (preparatoria y carrera técnica) 27.8%, y en los niveles de primaria y secundaria un 11.6%.

Estrategias Adoptadas por los Empresarios de las Pymes de la Región Centro del Estado de Coahuila para Adaptarse al Medio Ambiente.

Los resultados obtenidos sobre el tipo de estrategia adoptada por los empresarios para adaptarse al medio ambiente se presentan en la tabla 1.

Tabla 1: Tipo de estrategia adoptada por los empresarios de las Pymes de la región centro del Estado de Coahuila para adaptarse al medio ambiente

Tipo de empresa según estrategia	Número de empresas	%
Exploradora	37	27.0
Analizadora	51	37.2
Defensiva	44	32.1
Reactiva	5	3.6
Total	**137**	**100.0**

Caracterización de las Pymes de acuerdo al tipo de estrategia adoptada por los empresarios

Se observa que el 86.4% de los empresarios adopta algún tipo de estrategia para adaptarse al medio ambiente, siendo la estrategia de tipo analizadora la más utilizada. Tan sólo el 3.6% de los empresarios utiliza una no estrategia (tipo reactiva).

Uso de las TIC´s en las Pymes de la Región Centro del Estado de Coahuila

En promedio el 57% de las empresas utilizan las TIC´s, de las cuales el 85.92% utiliza el correo electrónico para comunicarse entre ellos, así como con sus clientes y proveedores. Entre las aplicaciones personales informáticas más usadas se encuentran los procesadores de textos (85.4%), utilizados principalmente para la redacción de documentos, así como la hoja de cálculo (85.4%), la cual es una herramienta muy poderosa que se utiliza para realizar gran cantidad de cálculos (matemáticos, estadísticos, financieros, lógicos, etc.), entre otras cosas. En cuanto a las aplicaciones especiales, los paquetes más usados son los de contabilidad, almacén y facturación con un 60.7%. Así mismo se encontró que solo el 21.92% cuentan con una página Web. En términos generales y atendiendo el uso de las TIC, se puede decir que las empresas medianas cuentan con un mayor uso de estas herramientas 87%, seguido de las pequeñas con un 71% y por último las micros con un 46%.

Relación entre las Estrategias Adoptadas por los Empresarios y el Uso de las TIC´s que Realizan las Pymes de la Región Centro del Estado de Coahuila.

Para determinar si existe alguna relación entre el uso de las TIC´s en las Pymes de la región centro del Estado de Coahuila y el tipo de estrategia adoptada por los empresarios en el proceso de adaptación al medio ambiente se aplicó la prueba de tablas de contingencia encontrándose lo siguiente:
Para cada uno de indicadores que se utilizaron en el uso de las TIC´s (uso de correo electrónico, página Web, relaciones con proveedores y clientes a través de Internet, mercadotecnia por Internet, procesador de textos, bases de datos, paquetes gráficos, software de fax, de almacenes y facturación, de contabilidad, laboral y fiscal), el coeficiente de contingencia obtenido no es significativo a un nivel de confianza del 95% en relación con el tipo de estrategia adoptada por los empresarios (exploradora, analizadora, defensiva y reactiva); por lo tanto, no se puede afirmar que existe una asociación entre el tipo de estrategia adoptada por los empresarios en el proceso de adaptación al medio ambiente y el uso de las TIC´s en las Pymes de la región centro del Estado de Coahuila. Lo anterior difiere de lo encontrado en otros estudios.

CONCLUSIONES

De acuerdo a los resultados obtenidos en este estudio, se ha llegado a las siguientes conclusiones:
El grado de implantación y utilización de las TIC´s en las empresas de la región centro es relativamente bajo. Sin embargo, en general las Pymes utilizan las TIC´s para soportar su desarrollo en las tareas de cada una de sus áreas, específicamente están recurriendo al uso del correo electrónico, como una herramienta de comunicación eficaz y de bajo costo y por otro lado, están usando aplicaciones informáticas personales como son, el procesador de textos, y la hoja de cálculo. Las TIC´s menos utilizadas son, mercadotecnia por Internet, software de fax y páginas Web, la cual en caso de utilizarlos les ayudaría a que sus clientes potenciales lleguen a su sitio, y los que lleguen, compren y los que compren, vuelvan. Las aplicaciones más directamente relacionadas con la administración de la empresa, como paquetes de contabilidad, laboral y fiscal, son utilizadas por un poco más de la mitad de las empresas de la muestra. Una gran mayoría de los empresarios de las Pymes en estudio adopta algún tipo de estrategia para adaptarse al medio ambiente, siendo la estrategia de tipo analizadora la más utilizada; es un porcentaje mínimo de empresas con "estrategia reactiva" que de acuerdo a los autores en realidad no aplican ningún tipo de estrategia. No se puede afirmar que existe una asociación entre las estrategias adoptadas por los empresarios al dirigir sus empresas en el proceso de adaptarse al medio ambiente y el uso de las TIC´s en las mismas.
Como líneas de investigación futuras se sugiere la elaboración de estudios con esta temática para el total del Estado y posteriormente comparativos con los otros Estados de la República en donde se ha aplicado el mismo instrumento, buscando encontrar generalizaciones que generen conocimiento que pueda clarificar la forma entorno a cómo suceden las cosas en las Pymes mexicanas, en aras de tener una repercusión práctica que permita fortalecerlas y hacerlas competitivas.

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LA IMPORTANCIA DE LA COMPETITIVIDAD DE LAS MIPYMES

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RESUMEN

El objetivo de este trabajo consiste en plantear la importancia de las micro, pequeñas y medianas empresas para la competitividad, las MiPyMES constituyen el pilar de la economía nacional por la aportación que hacen a la producción nacional y a la generación de empleos, las micro, pequeñas. Según la Secretaría de Economía en el año 2003 existían en México 3'005,157 empresas, de las cuales el 99.8 por ciento son MiPyMES, estas generan el 52 por ciento del Producto Interno Bruto y contribuyen con el 72 por ciento de los empleos formales. Su importancia no sólo radica en su participación económica en el país, sino en su relación con la competitividad necesaria para generar productividad de manera sustentable, lo que podría generaría inversión que fortalecerá y desarrollará el mercado interno en un mundo en donde el mercado global ha modificado las estructuras de negocio y de operación de las empresas.

PALABRAS CLAVE: Competitividad, MiPyMES, productividad.

The objective of this paper consists in proposing the importance of the competitiveness inside the micro, small and medium – company that constitutes today the pillar of the National economy, the input they make to the national production and the jobs generation, the micro and small – companies. According to the Mexican Ministry of Economics (SE) in the year 2003 there were in Mexico 3'005,157 companies, from which the 99.8 percent are MiPyMES, this generate the 52 percent of the Gross Domestic Product and contributes with the 72 percent of the formal jobs (SE, 2009). Their importance not only resides in their economic participation in the country, but also in their competitiveness, as only with it the productivity and the investment will increase, and the internal market will be strengthened and will develop in a World where the global market had modified the entrepreneurial manners.

Las MiPyMES, son organizaciones que se denominan empresas dedicadas a las actividades industriales y de servicios, combinan capital, trabajo y medios productivos para obtener un bien o servicio que se destina a satisfacer diversas necesidades en un sector determinado y en un mercado de consumidores (Palmerín Cerna & Mercado Vargas, 2007), en México constituyen el pilar de la economía nacional por la aportación que hacen a la producción nacional y a la generación de empleos. Según la Secretaría de Economía en el año 2003 existían en México 3'005,157 empresas, de las cuales el 99.8 por ciento son MiPyMES, estas generan el 52 por ciento del Producto Interno Bruto y contribuyen con el 72 por ciento de los empleos formales (Secretaría de Economía, 2009).

De acuerdo con el Plan Nacional de Desarrollo 2007-2012, que señala como uno de sus objetivos lograr una economía competitiva mediante el aumento de la productividad, de la inversión en infraestructura, del fortalecimiento del mercado interno y de la creación de condiciones favorables para el desarrollo de las empresa, (especialmente las micro, pequeñas y medianas); se consideró necesario: establecer una estratificación partiendo del número de trabajadores considerando el criterio de las ventas actuales con la finalidad de evitar la discriminación en contra de las empresas intensivas en mano de obra, además de considerar a las empresas que tienen ventas significativamente altas para que participen en programas

diseñados para las micro pequeñas y medianas empresas (Secretaría de Hacienda y Crédito Público, 2009), lo que permite la siguiente clasificación (ver Tabla 1).

Tabla 1: Clasificacion Según Secretaría de Hacienda y Credito Público

TAMAÑO	SECTOR	RANGO DE NÚMERO DE TRABAJADORES	RANGO DE MONTO DE VENTA ANUAL ES (MDP)	TOPE MÁXIMO COMBINADO
MICRO	TODAS	Hasta 10	Hasta $ 4	4.6
PEQUEÑA	COMERCIO	Desde 11 hasta 30	Desde $ 4.01 Hasta $ 100	93
	INDUSTRIA Y SERVICIOS	Desde 11 hasta 50	Desde $ 4.01 Hasta $ 100	95
MEDIANA	COMERCIO	Desde 31 hasta 100	Desde $ 100.01 Hasta $ 250	235
	SERVICIOS	Desde 51 hasta 100		
	INDUSTRIA	Desde 51 hasta 250	Desde $ 100.01 Hasta $ 250	250

*Tope México Combinado= (Trabajadores) x 10% +(Ventas Anuales)x 90%. Fuente: DOF del 30 de Junio de 2009

En la clasificación las Micro y pequeña empresa (MyPES) son consideradas como aquellas empresas con hasta diez trabajadores y cuyo monto de ventas anuales no supere los 303 mil dólares; en de las pequeñas y medianas empresas (PyMES), se deberá contar con un rango de empleados de 11 a 30, con ventas anuales de 303,001 hasta 7,5 millones de dólares. En cuanto a las PyMES del sector industrial y de servicios, serán aquéllas con entre 11 y 50 trabajadores, con ventas en un rango de 303,001 hasta 7.5 mdd. Por otra parte, las medianas empresas serán aquéllas con ventas anuales de 303,001 hasta los 19 mdd. En el área de comercio el rango de trabajadores será de 31 hasta 100; en el de servicios de 51 a 100 y en la industria de 51 a 250 empleados. (Hospitalitas) (Cámara Nacional de la Industria de Restaurantes y Alimentos Condimentados, 2009).

Las Pymes en México enfrentan una serie de dificultades que frenan su desarrollo, como la falta de internacionalización, además de la desvinculación con los sectores económicos más dinámicos; el 94.3 por ciento de las exportaciones en México están concentradas en 312 grandes empresas nacionales y extranjeras acaparando los mercados, en este sentido, las micro, pequeñas, y medianas empresas difícilmente pueden competir con las grandes empresas, quedando rezagadas a un mercado nacional elemental, esta dificultad frena el desarrollo del mercado interno.

A la problemática mencionada de le suma la falta de financiamiento, las elevadas tasas de interés; las restricciones bancarias han ocasionado que sólo el 22.5 por ciento de las MiPyMES cuenten con créditos comerciales tal y como se menciona en el informe presentado por el Banco de México titulado "Evolución del financiamiento a las empresas durante el trimestre enero-marzo de 2009", en el que se menciona que durante el primer trimestre de 2009 los motivos señalados por las empresas encuestadas que no utilizaron crédito bancario (71.8 por ciento del total) fueron: el deterioro en la situación económica actual y/o esperada del país (49.8 por ciento de las empresas), las mayores restricciones en las condiciones de acceso al crédito bancario (49.1 por ciento), el aumento en las tasas de interés bancarias (38.5 por ciento), la disminución en la demanda actual y/o esperada de productos o servicios (20.1 por

ciento), el aumento en los montos exigidos (15.4 por ciento), en suma: las mayores dificultades para el servicio de la deuda bancaria (5.5 por ciento) y otros factores (6.6 por ciento) (Banco de México, 2009).

Figura 1: Motivo para no Utilizar Crédito Bancario
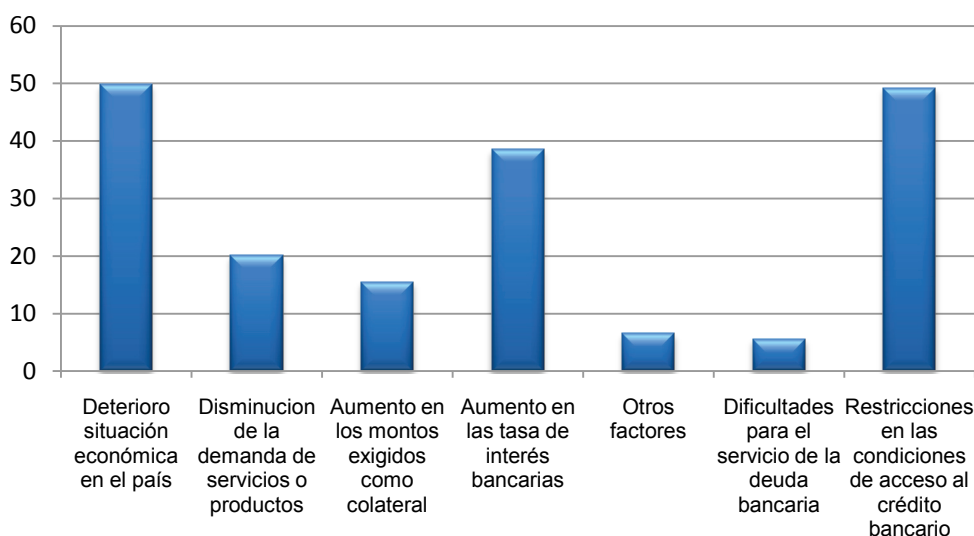
Fuente: Banco de México. Comunicado de Prensa, 8 de mayo de 2009.

Los alcances financieros de las MiPyMES son limitados, sin una política gubernamental agresiva y eficaz que fomente fuentes alternas de financiamiento, así las empresas seguirán rezagadas y marginadas: un fenómeno que afecta en cascada a la economía del país. La carga fiscal excesiva que desalienta la formación de nuevas empresas, --y estrangula a las existentes--, parece no tener aprecio por la generación de empleos; castiga a la productividad y abre la brecha económica y social. Según el Consejo Nacional de Evaluación de la Política de Desarrollo Social (Coneval) que se publicó el 18 de julio del 2009, (entre 2006 y 2008 los dos primeros años de la actual administración federal), el número de pobres en México aumentó en 5.9 millones de personas, hasta alcanzar 50.6 millones, el 47.4 por ciento de la población total del país (González Amador, 2009); además no se fomenta el empleo a través de cargas fiscales bondadosas y razonables en las PyMES.

Los Programas de apoyo a las MiPyMES del gobierno federal, --(si bien existen diversos Programas de Apoyo)-- no tienen la suficiente difusión, el 22 de mayo del 2009 se lanzó el Programa de Apoyo para la Productividad, que pretende contribuir a la competitividad de la economía, beneficiando a más de 105 mil trabajadores con capacitación en la materia, esto permitirá a los pequeños y medianos empresarios contar con asesoría técnica de especialistas en el sector, que acudirán a sus empresas para brindar las herramientas necesarias para fortalecerlas (Monterrosas Figueiras, 2009).

Las barreras de acceso a las tecnologías se refleja en la utilización de las aplicaciones administrativas, su baja complejidad, así como la pérdida en la inversión tecnológica ocasionada por una capacitación elemental que no cubre las necesidades reales de la micro, pequeña y mediana empresa, --(fenómeno que va de la mano con la falta de capacitación que tienen los empresarios en México, por tratarse en muchas ocasiones de empresas familiares que no cuentan con apoyo profesional)--, resalta la inefectividad gubernamental para implementar programas de capacitación entendida como el proceso de enseñanza-aprendizaje que propicia la adquisición y desarrollo de conocimientos, habilidades y actitudes requeridas para el desempeño de una función o funciones productivas al interior de una empresa, lo que deja sin competencias profesionales o laborales a trabajadores y administradores de empresas, sin esta capacitación no se pueden cubrir las necesidades de conocimientos en un mercado globalizado. Por otro

lado, la escasa mano de obra calificada que adolece de una cultura laboral para estimular el crecimiento de empleos mejor remunerados.

La capacitación es una estrategia para "enmendar y corregir" la ausencia de los conocimientos, habilidades y actitudes que los trabajadores no tienen y que una empresa necesita para cumplir con sus objetivos; las habilidades que no aprendieron en la escuela por la velocidad del cambio en los hábitos del consumidor, por la innovación tecnológica y otros aspectos que en los contenidos de los programas académicos no cuentan con la actualización con la misma velocidad que el cambio exige ya que los ajustes en los contenidos académicos son más lentos.

Los alumnos de cualquier nivel y carrera se enfrentan en el mercado laboral a una realidad diferente y en desventaja cuando se incorporan al sector laboral, costos que el empresario asume en actividades que no son la "razón de su negocio" (aún cuando sí lo son de carácter legal), y que el sector educativo debería atender para proporcionar mano de obra calificada en los diferentes niveles de las empresas para cumplir con la vinculación del sistema educativo y las empresas, la incongruencia de la evolución entre los programas de estudio y las habilidades de los trabajadores que la empresa requiere es en menor o mayor grado, dependiendo del nivel y tipo de institución, por lo que es urgente analizar y actualizar con más velocidad los programas de estudio de la primaria, secundaria, carrera técnica, bachillerato, licenciatura y posgrados, se trata de disminuir la brecha de diferencias entre los conocimientos y las necesidades de la empresa en nuevos escenarios, sin afectar el carácter científico y social de la educación, pero con la intención de generar competitividad.

Los posibles escenarios para "la escuela del mañana", según la OCDE se clasifican en:

1.- Instituciones que se aferran a la situación actual: el sistema escolar con el modelo burocrático que da la seguridad del control y el cumplimiento de la normatividad.

2.- Instituciones que impulsan la "reescolaridad": sistemas escolares centrados en el aprendizaje para desarrollar centros sociales, el rediseño y el uso de la tecnología para la eficiencia y eficacia en el proceso y sobre todo para bajar los costos.

3.- Instituciones que se orientan a la "desescolaridad": sistemas que extienden el modelo hacia donde marca el mercado, con redes de aprendizaje, la educación sometida al modelo predominante, lo "útil" de la educación que se refleja en la participación en el mercado.

4.- Instituciones que se desintegran: sistemas que propician beneficios lentos por el éxodo de los maestros a la empresa, con apertura para que los empresarios estén en las aulas, una combinación generoso donde el sistema rechaza el análisis profundo, considerado poco productivo y que busca un proceso "práctico", sistema que aprecia lo práctico a costa de lo científico.

Ante estos escenarios, los empresarios están buscando alternativas como el de las universidades para empresas, los casos de COPARMEX, CFE, BANCOMER, han creado un puente entre las empresas y las universidades públicas y privadas como la UAC, la UNAM, el ITESM, la Universidad la Salle, la Universidad ANAHUAC, la UIA, la UANL, estas Instituciones educativas y COPARMEX han establecido convenios específicos para atender la demanda de conocimientos específicos para cada giro de las empresas interesadas en desarrollar el Capital Humano, no se reconoce "la brecha", pero si se establece "un puente" para que los egresados de las instituciones educativas cuenten con los conocimientos y habilidades que las empresas desean y que por alguna razón en las instituciones educativas no se les proporcionó.

Existen sectores en México que reconocen su rezago como el gráfico que durante el foro internacional sobre educación dual (escuela-empresa) en la industria grafica: Una visión global", se reconoce que este "adolece de un proceso de capacitación y entrenamiento formal para sus cuadros base, medios y superiores congruente con la filosofía mantenida hasta el momento de generación del empleo" (CANAGRAF, 2005). Si se desea contar con un apoyo real y efectivo para la productividad a través de la educación formal, y si de verdad se acepta que el Capital Humano es importante para la economía nacional, sobre todo para la generación de empleos, entonces se debe actuar con urgencia, las acciones concretas que se pueden realizar en las instituciones educativas públicas y privadas de manera formal y sin tratar de sustituir los programas de capacitación son:

1.- Diseño de programas específicos para garantizar la competitividad:
Los cursos que requieran los trabajadores de acuerdo al giro de la empresa deben considerar los cambios del entorno y sobre todo monitorear las tendencias para actualizar los contenidos.

2.- Fomentar las especialidades y cursos técnicos en el nivel medio superior con los mismos propósitos que se citan en el inciso anterior.

3.- Acreditar formalmente los estudios del programa, así la flotación del trabajador acreditado se vuelve apreciado en el mercado laboral por las empresas y facilita el proceso de selección.

4.- Fomentar y agilizar en la Secretaría de Educación Pública y en la Secretaría del Trabajo y Previsión Social un acuerdo para el registro de los estudios específicos para las necesidades de las empresas.

La vinculación de las instituciones educativas con el sector productivo ha sido de vital importancia para la productividad, los programas de actualización, diplomados y cursos a la medida son muy importantes, pero una alternativa más específica para las empresas es pertinente, la actualización de los contenidos y el análisis de los cambios en el futuro son parte del diseño de los contenidos de los programas de estudio que se imparten a los alumnos y futuros trabajadores del nivel medio y superior de la educación formal en beneficio de las empresas que los incorporan.

Las empresas recibirían más apoyo si el sector educativo les proporciona mano de obra calificada para los diferentes niveles, trabajadores con estudios básicos, técnicos o profesionales que demanden menos gastos de capacitación para que se incorporen más rápidamente a los estándares de productividad necesarios para integrarse a los procesos de innovación que faciliten asimilar los cambios del entorno, tengan talento emprendedor asimilado así como eficiencia colectiva. (ver figura 2)

Las competencias profesionales que se desarrollan a través de los estudios, son competencias entendidas como "la posibilidad de movilizar un conjunto integrado de recursos, (saberes, saber-hacer y saber-ser), para resolver una situación-problema" que se relacionan con el sector productivo, la competencia se integra por un conjunto de conocimientos, habilidades y destrezas que se requieren para realizar una función productiva y que al ser verificados en las situaciones de trabajo, permiten determinar si la persona ha alcanzado el tipo y nivel de desempeño esperado por el sector productivo.

Las competencias desarrolladas en una Institución Educativa se vinculan con la sociedad a través de los contenidos de los Programas diseñados en un marco regional sin perder de vista el impacto más allá de las fronteras geográficas de una región o país determinado. En los "programas de calidad", se garantiza la participación de catedráticos reconocidos de diferentes Universidades, lo que disminuye la amenaza de la endogamia académica con sus efectos negativos en los egresados.

Figura 2: Proceso

Fuente: Elaboración propia

En este sentido, se establecen los "puentes de actualización y retroalimentación" necesarios para la evolución permanente de las competencias profesionales en los egresados, competencias que demanda el proceso de modernización y globalización que presiona al sistema educativo para que en el proceso de enseñanza-aprendizaje se desarrollen esas competencias que generan valor a los procesos de negocio.

En cuanto a la gestión de la innovación en la MiPyMES debe admitirse lo irracional, tanto el pensamiento lateral y como el divergente son fuente de creatividad e innovación, pero no es lógico, por lo tanto en la empresa hay contradicción, cómo generar innovación en un ambiente lógico sin que esto implique que se rompan las reglas o ocasionen conflictos. La innovación debe ser Incremental, radical y tecnológica de tal forma que la producción sea combinada o suplantada en forma dinámica incorporando al mercado productos que por sí mismo sean capaces de generar una nueva categoría de productos que sirvan para recuperar el mercado local llegar a nuevos mercados inclusive internacionales. La innovación no puede limitarse a una sola área, debe incluir a toda la organización para que los procesos incidan en los productos, estos en los negocios y en los mercados.

Esta nueva visión empresarial para las MiPyMES generara valor agregado que mediante acciones conjuntas desarrollará eficiencia colectiva dentro de la misma MiPyMES. El conjunto de acciones debe involucrar al Gobierno Federal, Estatal y Municipal, a las Instituciones de Educación Superior, a las Instituciones Financieras, a las diversas Cámaras de Comercio, a los Laboratorios de Innovación y de Incubación, a las Redes Educativas, Comerciales, Sociales y del Conocimiento que mediados por asesores, académicos, investigadores, inventores, extensionistas, líderes y capacitadores coadyuven a la vinculación en pro de la competitividad de las MiPyMES, desarrollando tecnología, facilitando rutas que articulen la producción y den acceso a nuevos mercados y al tan buscado y difícilmente encontrado financiamiento. Para poder al final impactar en el entorno en forma de cadena con valor que integre al país en torno de un progreso sustentable.

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TIPOLOGÍA DE LA COOPERACIÓN INTEREMPRESARIAL ATENDIENDO A LAS NECESIDADES QUE IMPULSAN A LAS EMPRESAS A COLABORAR: CASO DE LA INDUSTRIA METALMECÁNICA REGIÓN CENTRO DEL ESTADO DE COAHUILA

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ABSTRAC

Tomando en cuenta las necesidades que impulsan a las empresas a colaborar, en el presente artículo se presenta la tipología de la cooperación que realizan las pequeñas empresas de la industria metalmecánica de la región centro del Estado de Coahuila en México. La metodología empleada consistió en una revisión documental que permitió definir distintos tipos de cooperación entre empresas para posteriormente obtener información empírica que fue contrastada contra las definiciones efectuadas. La recolección de los datos se efectuó entre 50 empresas del sector en estudio mediante un cuestionario estructurado, para enseguida procesarlos en el software estadístico SPSS. Atendiendo a las necesidades que impulsan a las empresas del sector en estudio a realizar diversas actividades de colaboración, los resultados encontrados permitieron identificar cuatro diferentes tipos de cooperación: cooperación para producir, cooperación para mercado, cooperación para administrar y cooperación para innovar.

Palabras claves: cooperación interempresarial (CI), pequeñas empresas (PyMES), industria metalmecánica.

INTRODUCCIÓN

En el presente, al igual que en el pasado, la manera de hacer negocios es a través de la competencia; sin embargo, se ha cambiado de paradigma, ahora las empresas ya no compiten solas, sino compiten en conjunto: cadena empresarial vs. cadena empresarial, cluster vs. cluster, región vs. región. Como indica Ireland *et al.* (2002), la competencia progresivamente ocurre ahora entre conjuntos de empresas aliadas, más que entre firmas individuales. Las formas de asociación y cooperación pueden tener diferentes esquemas, siendo uno de ellos la formación de redes de PyMES que colaboran entre sí y se encuentran articuladas a una gran empresa.

En el Municipio de Monclova, principal localidad de la región centro del Estado de Coahuila , se ubica Altos Hornos de México, S.A. de C.V. (AHMSA), la fundidora de acero más importante del país y motor del desarrollo de la región, a la cual se encuentran articuladas las PYMES de la industria metalmecánica, ya que en la cadena productiva se vinculan tanto hacia adelante, como hacia atrás; dicha vinculación les representa ventajas y desventajas, dado el hecho de que esta industria responde positivamente y de inmediato al crecimiento de la economía en general, pero en cuanto una actividad relacionada (industria siderúrgica) sufre una baja en su demanda, impacta de inmediato y de manera negativa en la industria metalmecánica.

Ahora bien, la cooperación es un proceso difícil de lograr, ya que en las PyMES se percibe una baja inclinación a la asociación y cooperación. Según la Comisión Europea (2003) la mitad de las PyMES europeas no realizan ningún tipo de colaboración, en México, Equihua (1999) apunta que, el 89% de las empresas, principalmente PyMES, no están agrupadas ni asociadas a ningún organismo y por su parte Ken y Chan Ceh (2008) indican que la escasa cooperación y excesiva rivalidad que existe entre ellas, dificulta su integración. A pesar de ésto, aunque de manera aislada, se han dado ya algunas formas de cooperación en México, como la industria mueblera en Puebla (Domínguez, 2002) y la de producción florícola en el Estado de México (Vargas y Mochi, 2008), y se percibe la preocupación de los estados por desarrollar la economía regional a través de polos regionales de desarrollo o *clusters*.

Atendiendo esta preocupación, el presente estudio pretende contribuir a generar conocimiento sobre la cooperación interemprearial (CI) en México, específicamente mediante la creación de una tipología de la CI atendiendo a las necesidades que impulsan a las empresas a colaborar. La información que se presenta se encuentra organizada conforme a lo siguiente: en el siguiente apartado se presenta la revisión de literatura efectuada sobre el tema, enseguida se presenta la metodología empleada en el estudio para posteriormente presentar los resultados y las conclusiones del mismo.

REVISIÓN LITERARIA

Las formas de asociación y cooperación de las PYMES pueden tener diferentes esquemas, lo cual ha sido motivo de múltiples estudios donde la unidad de análisis es la aglomeración de empresas en un mismo lugar geográfico, en esta época, Corrales (2007) menciona que el análisis del desarrollo regional se hace desde la perspectiva del *cluster* (CL).

Fernández y Vigil (2007) por su parte, ubican al *cluster* en una posición dominante, aunque, con base en un enfoque crítico efectuado identifican tres "fallas de origen", por lo que redefinen el marco teórico de CL y sugieren nuevos desarrollos metodológicos orientados: i) a la identificación y delimitación de los *clusters*, ii) situar a los CL en el cambiante contexto multiescalar y iii) el examen interno de los CL. En relación a éste último, demandan profundizar la comprensión de la dinámica de los mismos entorno a las redes globales de producción e intercambio y sugieren entre otras, leer la efectividad de la dinámica colectiva interna y definir quienes y para que tipo de actividades utilizan la cooperación.

Esta investigación se encuentra enmarcada en el concepto de aglomeración de empresas en un mismo lugar geográfico (Becattini, 1992) y se ubica en el estudio de su dinámica (Fernández y Vigil, 2007), específicamente en relación a la cooperación entre los empresarios regionales (Schmitz y Navdi, 1999), respecto a las prácticas cooperativas que desarrollan a través de la subcontratación y otras relaciones horizontales entre empresas Corrales (2007), así como para que tipo de actividades utilizan la cooperación (Fernández y Vigil, 2007).

En base a la caracterización para el análisis de la cooperación dada por Escribá et al. (2003) atendiendo al campo de actuación del acuerdo y de López y Lugones (1988) atendiendo al plano en el que se efectúa las interacciones entre las firmas así como a los objetivos en común como factor principal que afecta al funcionamiento de la empresa integradora según Madero y Quijano (2006), se efectuó una adaptación propia del tipo de CI que efectúan las empresas (ver Tabla 1) para posteriormente, atendiendo a las necesidades que impulsan a las empresas a cooperar, efectuar las definiciones para cada una de ellas (ver Tabla 2).

Las definiciones que se efectuaron se hicieron extensivas para tipificar a las necesidades que impulsan la cooperación entre las empresas, a saber: necesidades de producción, necesidades de mercado, necesidades de administración y necesidades de innovación.

METODOLOGÍA

La estrategia metodológica, se basó en un estudio secuencial de dos fases con método mixto, en la primera fase se realizó una exploración cualitativa acerca de los tipos de CI, y en la segunda, se realizaron las encuestas (año 2007) entrevistando a los empresarios de las 50 empresas que conformaron la muestra por conveniencia de una población de 153 empresas. Los datos cuantitativos obtenidos, se procesaron a través del paquete estadístico SPSS para medir, en base al grado de importancia otorgado por los empresarios (escala de 1 a 5), las necesidades que impulsan la colaboración entre las empresas y los tipos de CI que se presentan, para posteriormente determinar si existe asociación entre ellos. Finalmente, se efectuaron las conclusiones y recomendaciones del estudio y se definieron las líneas futuras de investigación.

Tabla 1: Tipos de Cooperación Empresarial

López y Lugones (1998)	Escribá et al. (2003)	Madero y Quijano (2006)	Adaptación propia (2007)
Acuerdos de producción	Plano de la producción	Abatimiento de costos	Cooperación para producir
Acuerdos de I+D	Plano de la innovación [a]	Tecnología	Cooperación para innovar
Acuerdos de marketing	Plano de la comercialización	Nuevos mercados	Cooperación para mercado
Acuerdos de actividad múltiple [b]			_____
		Capacidad de gestión	Cooperación para administrar

Esta tabla muestra un comparativo de diversas tipologías de cooperación efectuadas por varios autores, en base a las cuales se efectuó una adaptación propia para el presente estudio.
a Dentro de éste plano los autores incluyen también los procesos vinculados a lo "organizacional", en esta adaptación se le nombra por separado como cooperación administrativa.
b En este acuerdo los autores consideran aquellos que conllevan dos o más acuerdos de los anteriores. En esta adaptación se omite por considerar que en el estudio se podrán ver las asociaciones en los resultados obtenidos acorde al manejo de los datos y sin perder la información sobre el tipo de acuerdo efectuado.

Tabla 2: Definiciones de los Tipos de Cooperación Interempresarial

Tipo de Cooperación	Definición
Cooperación para producir	Vínculos de colaboración que se establecen para la obtención de economías de escala, disminuir costos y mejorar la calidad y productividad de las PYMES
Cooperación para innovar	Vínculos de colaboración que se establecen entre las Pymes para disminuir riesgos, costos y tiempo principalmente asociados a propiciar y desarrollar su potencial innovador.
Cooperación para mercado	Vínculos de colaboración que se establecen entre las Pymes para la búsqueda y acceso a mercados; difusión, promoción y distribución de sus productos; obtención de economías de escala para acceder a mercados y reducción de costos.
Cooperación para administrar	Vínculos de colaboración que se establecen entre las Pymes para desarrollar la capacidad empresarial Y tener conocimientos prácticos de gestión y acceso a información sobre instrumentos de crédito y financiamiento e incentivo fiscales así como efectuar el entrenamiento de trabajadores.

En esta tabla se presentan las definiciones elaboradas para cada uno de los tipos de cooperación utilizados en este estudio.

RESULTADOS

De las 50 empresas encuestadas en este estudio, sólo el 78% de ellas reconoce haber realizado algún tipo de cooperación, por lo que los resultados que se presentan están determinados con base en los datos recabados de las 39 empresas que colaboran. En la Tabla 3 se presentan las necesidades que impulsan a las empresas a colaborar y en la Tabla 4 se muestra, de manera específica, los diferentes tipos de cooperación encontrados entre las empresas del sector.

Tabla 3: Necesidades de Cooperación Interempresarial

Necesidades que impulsan la CI	Tipos de necesidades	No. de empresas	Media	Desviación Estándar
39 de 39 empresas (100%) Media = 3.9 Desv.Est.=0.8	Necesidades de producción	37	4.0	0.9
	Necesidades de innovación	26	3.5	0.9
	Necesidades de mercado	23	4.1	0.8
	Necesidades de administración	23	4.1	0.9

En esta tabla se presentan las necesidades que impulsan a las empresas a realizar actividades de colaboración

Asociación Entre las Necesidades de Cooperación y la Cooperación Interempresarial que Realizan las PyMES

Se encontró asociación entre las necesidades de cooperación con la CI, con un valor de X^2 .611, n (39) y un nivel de significancia de 0.000, la relación se da conforme a lo siguiente: las empresas que asignan un alta importancia a las necesidades que impulsan la cooperación también asignan una alta importancia a las actividades de CI que realizan. Lo encontrado coincide con Gulati (1998), quien basado en la teoría de recursos y capacidades, sugiere que las empresas seleccionan a sus socios, en función de la interdependencia existente entre los recursos poseídos por cada uno de ellos y con Eisenhardt y Schoonhoven (1996) y Boscherini *et al.* (1998), quienes mencionan que las empresas recurren a las alianzas por la cooperación estratégica, cuando son vulnerables en su posición por la carencia de recursos, buscando acceder a mayores recursos sin llegar a fusionarse.

Finalmente, cabe comentar, que en el caso de las necesidades de innovación, no se puede establecer la existencia de asociación con ningún tipo de cooperación, lo cual difiere de (Eisenhardt y Schoonhoven, 1996; Hoffman y Schlosser, 2001), quienes encontraron que el grado de innovación se manifiesta como el elemento fundamental que determina la necesidad de cooperar. Esta diferencia puede ser explicada en términos de la falta de un ambiente local positivo para la innovación (Lemos, 2001), ya que aunque se tienen algunos de los elementos identificados por Boscherini et al. (1998) para propiciar dicho ambiente, como la existencia de recursos humanos calificados; algunos otros como un ambiente laboral propicio y utilizar prácticas de flexibilidad laboral, no están presentes en la región (Araiza y Velarde, 2007).

Tabla 4. Cooperación Interempresarial

Cooperación interempresarial	Tipos de cooperación	No. de empresas	Media	Desviación Estándar
39 de 39 empresas (100%) Media = 3.8 Desv.Est.=0.9	Cooperación para producir	39	3.9	0.9
	Cooperación para innovar	31	3.8	1.0
	Cooperación para mercado	26	3.9	1.0
	Cooperación para administrar	25	3.7	0.9

En esta tabla se aprecian los cuatro tipos de cooperación que realizan las empresas así como el índice de cooperación interempresarial

CONCLUSIONES

El presente estudio es realizado únicamente entre las pequeñas y medianas empresas de la industria metalmecánica de la región centro del Estado de Coahuila en México, por tanto su alcance es regional y las conclusiones que se presentan se limitan a la población de las empresas del sector en estudio

Existe evidencia empírica de la existencia de necesidades que impulsan a las empresas a colaborar, así como que dichas empresas llevan a cabo diversas actividades de colaboración, mismas que pueden ser tipificadas como: cooperación para producir, cooperación para mercado, cooperación para administrar y cooperación para innovar. Esto confirma que dada la complejidad del sector en el que se desempeñan, por naturaleza tienen necesidad de cooperar, tomando en cuenta los recursos necesitados y poseídos por cada

una de ellas, por lo que generalmente cooperan para lograr incrementar la producción (necesidades de producción) y poder acceder a mercados (necesidades de mercado).

Finalmente una línea futura de investigación que se sugiere es elaborar un estudio que permita identificar, los niveles de desarrollo que las PyMES han alcanzado en relación a la CI.

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LA APLICACIÓN DEL PROCESO ADMINISTRATIVO EN LAS MICRO Y PEQUEÑAS EMPRESAS

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RESUMEN

Estudio referido a la identificación de las fortalezas y debilidades que las micro y pequeñas empresas tienen, determinadas a través de un diagnóstico que sobre el proceso administrativo realizan estudiantes de la Facultad de Ciencias Administrativas (Facultad) de la Universidad Autónoma de Baja California (UABC) de México. Por una parte, se identifican las principales fortalezas y debilidades de las micro y pequeñas empresas; ubicadas en Mexicali, Baja California; y que a través de este diagnóstico, tienen la información para generar estrategias que les permitan desarrollar una planeación de permanencia y desarrollo; por otra, se fortalece la formación de profesionales integrales y con responsabilidad social. Ambas situaciones tienen un efecto en el desarrollo económico y social de la entidad.

INTRODUCCIÓN

En México México se ha visto afectado por cambios constantes en su economía, que se han generado por fenómenos internos y externos; el más reciente es el presentado a nivel mundial en 2008-2009. Estos cambios sugieren dinámicas sustanciales en las políticas internas del país.

La Organización para la cooperación y el desarrollo económico (OCDE) en julio de 2009 publicó un estudio que sobre la actividad económica de México se realizó en el 2009 y en el que señala que "A pesar de contar con fundamentales más sólidos, México no ha escapado a la recesión económica mundial", pudiendo también "haber contribuido a esta rescisión el brote de influenza, así en este año se espera un crecimiento negativo, y para 2010 una recuperación gradual."

La misma OCDE en su manifiesto, destaca cuatro aspectos importantes, los que se refieren a la reforma fiscal, la cobertura de seguro de salud, la cobertura de la educación secundaria y a "reformas estructurales en áreas clave para fomentar el crecimiento a largo plazo". En este último punto, destaca el comentario de que "las reformas generadas han sido menor que en otras economías emergentes".

Para generar un desarrollo económico se requiere de la existencia de las empresas ya sea con inversión interna o con inversión extranjera. En México el 99.8% son micros, pequeñas y medianas empresas (Secretaría de Economía 2009. www.economia.gob.mx) (Mipymes), razón por la cual a partir del 2003 se creó la Subsecretaría para la Pequeña y Mediana Empresa (SPyME) cuyo objetivo es el de diseñar, fomentar y promover programas y herramientas que tengan como propósito la creación, consolidación y desarrollo de las micro, pequeñas y medianas empresas.

De acuerdo con la misma SPyME, las "*micro, pequeñas y medianas empresas, son un elemento fundamental para el desarrollo económico de los países, tanto por su contribución al empleo, como por su aportación al Producto interno bruto (PIB). En el caso de México, las Mipymes generan el 52 por ciento del PIB y contribuyen con el 72 por ciento de los empleos formales*".

El gobierno federal a través de la SPyME señala que para "*garantizar que la política presentada tenga los resultados esperados, es necesario reconocer que cada segmento empresarial tiene necesidades*

particulares y requieren de apoyos específicos y focalizados a su naturaleza para lograr su desarrollo y consolidación".

EN BAJA CALIFORNIA, MÉXICO

En el estado de Baja California, de conformidad con información de la Secretaría de desarrollo económico (Secretaría de Economia en Baja California. www.bajacalifornia.gob.mx/sedeco) (Sedeco), las Mipymes tienen similar comportamiento que a nivel nacional, aproximadamente el 97% del total de las empresas instaladas en el estado son Mipymes.

El gobierno estatal, dentro de su infraestructura cuenta con la Sedeco para promover diversos sistemas de apoyos para las Mipymes, reconociendo en éstas el potencial necesario para coadyuvar en el crecimiento económico del estado en general.

Otro de los aspectos a considerar en las acciones emprendidas por el estado de Baja California, es contar con universidades públicas y privadas que participan y se ven envueltos en el mismo afán de crecimiento económico, social, político, cultural y de seguridad, por lo que fomenta la formación de profesionistas con una integración de conocimientos, valores y de responsabilidad social.

En el contexto de las universidades, Baja California desde 1957 cuenta con la Universidad Autónoma de Baja California (UABC), la cual siempre preocupada por cumplir con su responsabilidad de contribuir al bienestar de la sociedad bajacaliforniana, evalúa de manera permanente todos sus programas y planes de estudio, entre los que se encuentran programas que se vinculan con las empresas en especial con las Mipymes.

Cumpliendo con este objetivo, la UABC ha implementado diversas estrategias de vinculación con la comunidad bajacaliforniana y que al mismo tiempo permita la formación integral de sus estudiantes. Una de las estrategias que se establecieron para el logro de estos fines, de acuerdo con la reglamentación vigente, fue el determinar que el servicio social profesional (segunda etapa) que de manera obligatoria ejercen los estudiantes, se pudiera vincular con el sector productivo y público (gobierno), utilizando los conocimientos que obtienen en las aulas, aplicándolos en beneficio de la sociedad en general y de las Mipymes en particular.

Es importante mencionar que la universidad establece como objetivo del servicio social de todas las profesiones que se ofertan en ella, el que "debe ser realizado como una retribución a la sociedad por los beneficios de ellos recibidos a través de la educación. El compromiso, no es de tipo mercantil entre un acreedor y un deudor, sino fundamentalmente de tipo moral, el cual forma y desarrolla en el estudiante una actitud de servicio a la comunidad como profesionista, complementando así su educación con ejercicios prácticos de campo, y aprovecha su fuerza creativa para que, su lucro personal sirva a la comunidad con eficiencia"(Reglamentos universitarios: 2009).

De esta forma, se pretende que el estudiante contribuya al mejoramiento de las condiciones de vida de los sectores sociales menos beneficiado además de cumplir con un requisito indispensable para la obtención del título profesional que lo habilitará para el ejercicio de su profesión.

Dentro de las áreas económico-administrativas la UABC, tiene en Mexicali, Baja California, a la Facultad de Ciencias Administrativas (Facultad), la cual es responsable de lograr una asertiva vinculación con la sociedad mexicalense. Para tal fin, tiene establecidos diversos mecanismos de vinculación, dentro de los que destaca los de servicio social profesional y, es a través de este instrumento que se logra una asertiva vinculación con el sector empresarial, particularmente con las Mipymes.

Planteamiento del Problema

La UABC cuenta con el servicio social asociado a programas de estudio que particularmente en la Facultad de Ciencias Administrativas se da con doble intención: a) la retribución a la sociedad de los beneficios que cada estudiante recibe a través de su formación; considerando además el aspecto formativo del estudiante al estar realizando actividades de índole social y, b) coadyuvar a resolver problemas de orden administrativo de la población más desprotegida del país.

Siendo las Mipymes el sector empresarial de mayor importancia en el desarrollo económico del país principalmente por ser generadoras de empleos y una importante contribución al PIB, tanto el gobierno federal como el estatal (Baja California), tienen programas de apoyo para ellas, considerando que al ser las de mayor problemática y no contar con los recursos suficientes requieren de estos apoyos para desarrollar planes de crecimiento.

El planteamiento de este caso, es analizar si los programas de servicio social profesional que son vinculados a los programas y planes de estudios particularmente con las materias de auditoria administrativa y operacional, realmente ayudan a las micro y pequeñas empresas en su permanencia, crecimiento y desarrollo a lograr a través del diagnóstico administrativo que se genera.

Objetivo

Considerando que a inicios del 2009, se dio a conocer los avances obtenidos en la participación de la formación integral de profesionistas de las áreas administrativas, logrado a través del servicio social asociado a programas de estudios, se considero importante mencionar en esta ocasión lo que las empresas obtienen a cambio de permitir que los estudiantes les presenten diagnósticos administrativos sobre las actividades que realizan.

El objetivo principal de este trabajo es señalar las aportaciones que se ha dado a las Mipymes en Mexicali, Baja California, a través del servicio social asociado a las materias de "Auditoria Administrativa" y "Auditorias Especiales" las cuales forman parte de los programas y planes de estudio de las carreras de Licenciado en Administración de Empresas y Licenciado en Contaduría de la UABC.

REVISIÓN LITERARIA

El Consejo interamericano para el desarrollo integral (CIDI) dependiente de la Organización de los Estados Americanos (OEA), estableció para 2006-2009 las políticas y recomendaciones a observar por sus integrantes siendo éstas presentadas a través del plan estratégico que "*articule las políticas, los programas y las medidas de acción en materia de cooperación para el desarrollo integral*".

El plan estratégico señalado, presenta dentro de sus objetivos "*contribuir a la promoción de iniciativas de apoyo al desarrollo y mejora de la productividad de las micro, pequeñas y medianas empresas y otras unidades de producción, especialmente como una estrategia de generación de empleo y de combate a la pobreza*".

Dentro de este contexto, México tiene como estrategia la atención a las Mipymes a través de la Secretaría de Economía, mediante la creación de una política de "*desarrollo empresarial basada en cinco segmentos empresariales: emprendedores, microempresas, pequeñas y medianas empresas, empresa gacela y empresas tractoras; los cuales reciben atención del gobierno federal a través de cinco productos: financiamiento, comercialización, capacitación y consultoría, gestión e innovación y desarrollo tecnológico*".

Por otra parte, es importante mencionar como y en que se basa la conceptualización de Mipymes. De acuerdo con la Ley para el desarrollo y competitividad de las micro, pequeñas y medianas empresas que fue publicada el 30 de diciembre del 2002, la clasificación se da en función de los empleados con que se cuenta, sin embargo en el año presente (2009) en el Diario oficial del 30 de junio, se emite un complemento para dicha clasificación en la que se incluye el monto de lo vendido.

Tabla 1: Clasificación de las micro, pequeñas y medianas empresas en México.

Tamaño	Sector	Número de trabajadores		Monto de ventas anuales (mdp)	
Micro	Todas	Hasta 10		Hasta $4	
Pequeña	Comercio	Desde hasta 30	11	Desde hasta $100	$4.01
	Industria y Servicios	Desde hasta 50	11	Desde hasta $100	$4.01
Mediana	Comercio	Desde hasta 100	31	Desde hasta $250	$100.01
	Servicios	Desde hasta 100	51		
	Industria	Desde hasta 250	51	Desde hasta $250	$100.01

Fuente: Diario Oficial de la Federación del 30 de junio del 2009.

La ley mencionada, tiene como objetivo promover el desarrollo económico nacional a través del fomento a la creación de micro, pequeñas y medianas empresas y el apoyo para su viabilidad, productividad, competitividad y sustentabilidad, así como incrementar su participación en los mercado en un marco de crecientes encadenamientos productivos que generen mayor valor agregado nacional.

En el desarrollo de la productividad, competitividad y sustentabilidad de las mipymes, se encuentra un elemento importante a considerar como es su "Plan de negocios", dentro del cual se debe establecer, además de su visión a largo plazo (plan estratégico), cuales son sus potencialidades primeras, es decir sus fortalezas, debilidades, oportunidades y amenazas. Generalmente los empresarios piensan que una micro o pequeña empresa no necesita de una plan de negocios; sin embargo, no importando el tamaño de la empresa, para que esta pueda desarrollarse y tener un futuro, requiere de conocimientos administrativos como los señalados (Longenecker: 2003)

La administración de empresas requiere de nuevas formas debido a la complejidad, cada día en aumento, de sus actividades y sus operaciones, así como el ininterrumpido crecimiento de empresas que generan competencia, entre otros, obligando a plantearse una visión del futuro que se desea para la misma. (Rodríguez: 2002).

Considerando que dentro del logro de la competitividad de las empresas, tiene una participación importante la capacitación de sus integrantes, el esfuerzo que generan los gobiernos federales y estatales, debe estar conectado con los esfuerzos que en materia de capacitación se da por parte de las instituciones de educación, particularmente las instituciones de educación superior.

En el trabajo presentando 2008, ya se mencionaba que la UNESCO y el Banco Mundial, han manifestado que en la actualidad, la riqueza o pobreza de las naciones dependen de la calidad de la educación superior, dando a conocer en el informe elaborado por un grupo de especialistas participantes de la "Conferencia Mundial sobre la Educación Superior para el Siglo XXI" (1998), modificando la visión sobre el papel estratégico de la educación superior en los esfuerzos conducentes al desarrollo económico y social de los países, identificando los obstáculos que debe superar la educación superior.

Bajo las premisas constitucionales de recibir una educación de calidad y de ejercer el trabajo, profesión o actividad que mejor le acomode a cada ciudadano, el servicio social surge como una obligación que se tiene de que los que tienen acceso a la educación superior, correspondan con sus conocimientos al desarrollo nacional; las instituciones de educación superior, tienen por tanto la responsabilidad de establecer los mecanismos necesarios para que el servicio social, se instituya como un deber moral y ético, el cual debe ser cumplido por convicción y en beneficio de la sociedad en general y en particular de los más desprotegidos de ella.

Las universidades tienen obligación de hacer eco de esta premisa, formando profesionistas que sean capaces de corresponder a con sus conocimientos a su entorno social y económico, considerando al servicio social como un deber moral y ético en la formación de estudiantes de nivel profesional, el cual contribuirá a consolidar y fortalecer la función social educativa, que ayude a solucionar los problemas y que promueva el desarrollo social, económico y de seguridad del país.

El gobierno de México, dentro de su estructura cuenta con la Secretaría de Educación Pública (SEP), como responsable de administrar los recursos que permitan que todos los mexicanos tengan acceso a la educación. En lo referente a la educación superior la SEP establece la normatividad que debe ser cumplida entre la que se encuentra lo referente al cumplimiento del servicio social como respuesta a lo que la sociedad aporta para la formación de los profesionistas para que a su vez éstos retribuyan a la misma sociedad con el aporte de sus conocimientos en la parte que les corresponda.

En atención al desarrollo económico de las micro, pequeñas y medianas empresas, el gobierno mexicano cuenta con la Secretaría de Economía (SE) que en su misión define como la "institución que promueve e instrumenta políticas públicas y programas orientados a crear más y mejores empleos, más y mejores empresas y más y mejores emprendedores". La SE tiene implementados diversos programas y acciones entre los que se cuentan los que otorga para que las universidades apoyen el desarrollo de emprendedores, la creación de nuevas empresas y asesoría a las empresas en desarrollo.

Dentro de este marco de referencia, el presente trabajo presenta los resultados de la participación de la UABC en el desarrollo económico de las micro y pequeñas empresas al darles a conocer la situación que guardan con respecto a las nuevas expectativas de conocimientos que se deben tener para lograr una permanencia, desarrollo y competitividad adecuado, en donde no basta con conocer como funciona su producto, sino como hacer para que su empresa tenga un futuro.

METODOLOGÍA

El método que se emplea es el descriptivo, ya que se presentan y describen los resultados que derivaron de los diagnósticos que resultaron de las auditorias administrativas y operacionales y los seguimientos subsecuentes que se aplicaron a 65 micros y pequeñas empresas en el período del 2005 al 2009.

Los pasos que se siguieron fueron los siguientes:

Primero.- Análisis documental para referenciar el marco legal, y educativo, que existe en México en relación con la integración de las micro y pequeñas empresas, para lo cual se consideraron   como principales fuentes de información las siguientes:
Constitución Política de los Estados Unidos Mexicanos
Estructura y disposiciones del gobierno en México referentes a la educación superior y al desarrollo económico de la sociedad mexicana.
Plan de Desarrollo Institucional de la UABC.
Revisión bibliográfica sobre modelos administrativos de las Mipymes.
Revisión bibliográfica, sobre el servicio social.

Segundo.- Revisión de los planes y programas de estudio y programas de servicio social de los   últimos ocho años de la unidad académica de la institución educativa en la que nos insertamos.

Tercero.- Revisión de los resultados obtenidos en la aplicación de auditorias administrativas y operacionales y su seguimiento, a micro y pequeñas empresas en Mexicali, Baja California, México.

Cuarto.- Descripción de los resultados obtenidos de programas de servicio social asociados a las materias de auditoría que se vinculan a las micro y pequeñas empresas en Mexicali, Baja California, México.

RESULTADOS

En el año 2002 se incluyen materias obligatorias de AUDITORÌA dentro de los aún vigentes (2009) planes de estudios para las licenciaturas de contaduría, de administración de empresas, de negocios internacionales y de informática de la UABC.

Dentro de estos planes de estudio, se permite la vinculación con el sector productivo a través de programas de servicio social en el que el alumno prestará servicio social aplicando sus conocimientos bajo la tutela del profesor de la materia.

Este enfoque del servicio social, ha permitido que, además de contribuir a la formación de un profesionista integral en cuánto a los conocimientos adquiridos y la aplicación de éstos, se logre apoyar a micro y pequeños empresarios que no cuentan con los recursos suficientes para contratar a un profesionista que les ayude a diagnosticar su situación administrativa.

 Características generales de los programas de servicio social asociados a programas de estudio:

En el contexto del servicio social aplicado en apoyo a Mipymes, en el 2008 se presentaron las principales características de los programas de servicio social profesional asociados a la currícula, siendo aún vigentes en este momento, las siguientes:
El servicio social es obligatorio para todos los alumnos, se consideran diversas opciones de cumplimiento de esta obligación, el que se asocia a la currícula es uno de ellos.
Puede asociarse a materias obligatorias y optativas de octavo y noveno semestre.
Se vincula al sector público en todas sus áreas y al sector productivo solo si se trata de micros y pequeñas empresas que requieran servicios profesionales que les ayuden en sus fases de creación, permanencia y desarrollo.
Permite la integración de equipos multidisciplinarios.
Son materias que requieren un enfoque práctico.
Permite la integración de equipos de alumnos multidisciplinarios.
Permite que el alumno pueda aplicar los conocimientos adquiridos en un contexto real.

Resultados obtenidos del diagnóstico y seguimiento a la situación administrativa que guardan las Mipymes auditadas mediante la aplicación de programas de servicio social asociados a materias de las áreas de auditoria.

A través de las materias de octavo semestre de auditoria administrativa para Licenciados en administración de empresas y de auditorias especiales para Licenciados en contaduría, se han auditado a 65 micros y pequeñas empresas durante el período de 2005 a 2009, principalmente de los sectores comerciales y de servicios. A través de estas auditorias, se han emitido diagnósticos cuyos principales resultados son:

En un 99 % de los casos, las micro y pequeñas empresas no cuentan con un plan de negocios ni cuentan con un plan estratégico o táctico. Son empresas familiares en más del 90% de los casos, por lo que la estructura organizacional no es utilizada y las líneas de mando se involucran en gran medida con la relación familiar. Ninguna de las empresas visitadas cuenta con un documento que les permita evidenciar la forma en que están organizadas. Ninguna de las empresas visitadas cuenta con un documento que permita constatar la existencia de un sistema de control interno. Durante el desarrollo de la auditoria, tres de las visitadas estaban en proceso de desaparecer debido a que no se contaba con el recurso financiero suficiente para continuar. En aproximadamente el 90 % de los casos, los empleados no son capacitados de forma sistemática, sino que sobre la marcha se va dando la asesoría y dirección que se requiere para el desarrollo de su trabajo. Por otra parte, la información contable solo es utilizada para el pago de los impuestos, no generando ninguna base de datos que les permita tomar decisiones más asertivas. El seguimiento a las acciones correctivas y preventivas, se da entre dos a tres meses después de haber concluido la auditoria. Durante estos seguimientos se observa que menos del 10% de los casos ha cumplido con lo acordado, debido principalmente a lo que se menciona en el punto siguiente. En el 100 % de los casos, las empresas no cuentan con recursos suficientes; y en algunos casos el interés; para seguir las recomendaciones que se les da en relación con el diagnóstico que se les presenta. No obstante lo anterior, muestran interés en que se les ayude a través del servicio social para generar parte de su planeación estratégica.

CONCLUSIONES

Considerando el objetivo planteado, a continuación se relacionan las principales conclusiones: Desde el punto de vista de la formación integral de los alumnos a través de la vinculación del servicio social con las empresas: Los programas de servicio social, han permitido generar una conciencia social en los alumnos que les ayudará en su ejercicio profesional . Promueve la vinculación institución educativa-docente-alumno-empresa. Desde el punto de vista de las empresas en cuánto al apoyo recibido por los alumnos de la Facultad a través del servicio social: Considerando los resultados obtenidos se concluye en primera instancia que el proceso administrativo consistente en planear, organizar, dirigir y controlar, realmente no se da de forma organizada, sino más bien de manera empírica. El diagnóstico en las empresas, ha generado la inquietud de establecer mecanismos que les permitan aprovechar sus recursos mediante una administración eficiente y práctica. Los empresarios muestran interés en seguir recibiendo este tipo de apoyos por parte la universidad al no contar con finanzas suficientes para lograr orientación a través de los recursos propios.

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MARATÓN DE CONOMIENTOS, ESTRATEGIA ENCAMINADA A ENRIQUECER EL QUEHACER ACADÉMICO EN ÁREA FISCAL: ANFECA (ASOCIACIÓN NACIONAL DE FACULTADES Y ESCUELAS DE CONTADURÍA Y ADMINISTRACIÓN). ZONA 1. MÉXICO.

Adelaida Figueroa V, Universidad Autónoma del Estado de Baja California

RESUMEN

Unos y otros partidarios seguramente convendrían, sin embargo, en un punto común: el benchmarking es un instrumento que permite captar la realidad de una determinada organización, por compleja que esta sea, constituyéndose en la base para generar mejores decisiones, bien dentro de una empresa, en una entidad gubernamental, o en una institución educativa. En otras palabras: se trata de un instrumento situado en el ámbito de la eficiencia para hacer a la organización de la cual forma parte. Elia Marún Espinosa, Asociación Nacional de Universidades e Instituciones de Educación Superior (México)

INTRODUCCIÓN

El BenchMarking es un proceso de medición, el cual puede contribuir a lograr una ventaja competitiva considerable. Este proceso de comparar y medir continuamente a una organización con respecto a los líderes comerciales de cualquier parte del mundo tiene un simple objetivo, el poder obtener información que permita tomar las medidas necesarias para el mejoramiento en el desempeño.

Es por eso que al ser un proceso por activo permite cambiar las operaciones de manera natural. No se debe confundir BenchMarking y Análisis Competitivo, este último incluye comparar un producto del competidor contra el tuyo, comparar las características y el precio del producto. El BenchMarking va mas allá, comparando como se diseña, manufactura, distribuye y apoya a un producto, en decir que se enfatiza en los procesos fundamentales usados para producir, distribuir y apoyar al producto. *BenchMarking Funcional* No es necesario concentrarse en los competidores directos de productos. Existe una gran posibilidad de identificar competidores funcionales o líderes de la industria para utilizarlos en el BenchMarking. Esto quiere decir que quizás la comparación no necesariamente es contra tu competidor principal, sino acoplar el proceso a que las medidas que se obtengan sean las más adecuadas para el mejoramiento de la organización.

Es bajo este paradigma que IES mexicanas en distintas áreas crean alianzas a fin de mantenerse actualizadas y en constante cambio. Una de esas organizaciones es ANFECA (Asociación Nacional de Facultades y Escuelas de Contaduría y Administración). Dicho organismo esta contituidos por consejos regionales.

Los Consejos Regionales se integrarán con las Instituciones Asociadas, de acuerdo a la siguiente zonificación: Zona 1. Noroeste.- Baja California, Chihuahua, Sinaloa, Sonora, Baja California Sur. Zona 2. Norte.- Coahuila, Nuevo León, Tamaulipas. Zona 3. Centro.- Aguascalientes, Durango, Querétaro, San Luis Potosí, Zacatecas. Zona 4. Centro Occidente.- Colima, Guanajuato, Jalisco, Michoacán, Nayarit. Zona 5. Centro Sur.- Guerrero, Hidalgo, Edo. de México, Morelos, Puebla, Tlaxcala. Zona 6. Sur.- Chiapas, Oaxaca, Tabasco, Veracruz, Campeche, Yucatán, Quintana Roo. Zona 7. Cd. de México y su zona conurbada

Misma que en el afán de contribuir al mejoramiento de la calidad de la educación en las distintas áreas del conocimiento establece como estrategia el evento denominado MARATÓN DE CONOCIMIENTOS EN

EL ÁREA DE FISCAL.

De acuerdo a la definición MARATÓN es: Carrera pedestre olímpica de 42,195 km. o cualquier otra competición de resistencia o actividad dura y prolongada.

El "Maratón de conocimientos" es una competencia de información y habilidades acerca de un área específica, que tiene como propósito impulsar entre los alumnos el estudio exhaustivo de una disciplina curricular común a los miembros de ANFECA. Podrán participar todas las Escuelas y Facultades afiliadas a ANFECA, mismas que se enterarán mediante la convocatoria publicada oportunamente por la Dirección Regional de ANFECA en el caso de los Maratones Regionales y por la Vicepresidencia para los Maratones Nacionales.

Dicho evento que año con año la ANFECA Zona 1, lleva a cabo; en el cual convergen lo equipos de estudiantes y un maestro asesor que representa a una institución afiliada a la ANFECA. El propósito de dicho evento es en primera instancia el medir el desempeño que tenemos como Institución en área de FISCAL, dado que como área académica esta delimitado las habilidades y capacidades que; los estudiantes de esta disciplina debe poseer. Y aunado a esto; cada convocatoria esta regida por una serie de conocimientos y habilidades guía publicadas en cada una de las mismas. La mecánica de trabajo es la siguiente:

1. Se elaborarán reactivos para las áreas de fiscal de acuerdo a los temarios anexos en cada convocatoria emitida por la zona 1 Tomando como base la convocatoria enviada por el comité nacional de ANFECA. Siendo los académicos que colaboran en las instituciones afiliadas, los que elaboran los mismos para integrar el banco de preguntas y problemas de los maratones regionales del conocimiento en el área de fiscal.
2. Los reactivos se envían a la coordinación regional de maratones ANFECA para su revisión y aprobación, por un comité de pares de las universidades afiliadas, incluidos el coordinador regional de maratones y el de coordinador de planes de estudios. Los criterios de selección estarán determinados por los académicos especialistas en el área de conocimiento.
3. Se organiza evento académico en una sede previamente designada por el comité regional. Donde se prepara desde registro de participantes, recepción de los mismos, proporciona infraestructura.
4. Se determina ganador basando en los resultados obtenidos de las distintas evaluaciones que se llevan a cabo considerando el tiempo de respuesta.

Para tal efecto se utiliza herramienta electrónica denominada QUIZSYS elaborada por una de la afiliadas de la ZONA 1.

A los académicos que colaboran en las instituciones afiliadas, a la elaboración de reactivos para integrar el banco de preguntas y problemas de los maratones nacionales del conocimiento en las áreas de fiscal y finanzas

Es importante señalar que la prueba de conocimientos del maratón, se aplica en función de las asignaturas que cursan a nivel superior, de esta manera se obtiene un nivel de medición, tomando en cuenta que compiten con alumnos de universidades públicas y privadas, primero a nivel regional y posteriormente los dos primeros lugares a nivel nacional.
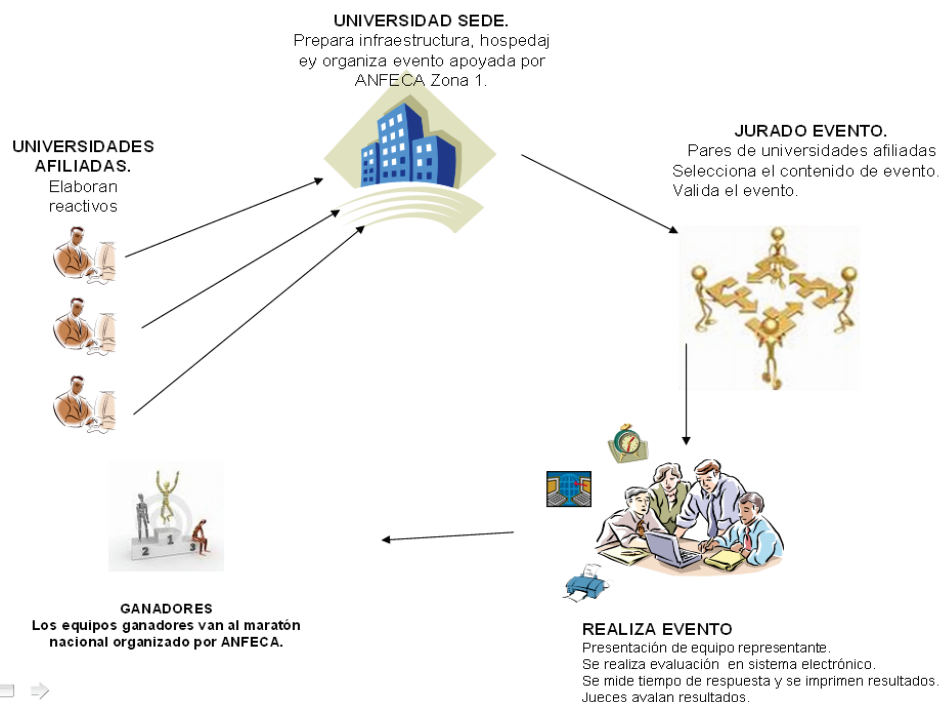
CONCLUSIONES

El establecimiento de este tipo de estrategias es encontrar e implementar áreas de acción que nos permitan convertir las amenazas en oportunidades. Haciendo comparativas de acuerdo al desempeño de los estudiantes nos permite medirnos contra otras instituciones similares.

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EL ESTUDIO DE LA EXTRACCIÓN PETROLERA COMO DETERMINANTE EN EL CRECIMIENTO Y DESARROLLO ECONÓMICO DE LOS HABITANTES DE CIUDAD DEL CARMEN CAMPECHE, MÉXICO

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ABSTRACT

En el estado de Campeche, la actividad petrolera vino a reactivar las industrias colaterales como la infraestructura, comercio, alimentos, hospedaje. Su presencia impulsó la actividad socioeconómica pero también generó alteraciones en las condiciones sociales de la comunidad, como la marginación, servicios públicos inseguridad, vivienda, etc. En los últimos 30 años ha habido un gran desarrollo lo que ha ocasionado el arribo de cadenas comerciales como Chedraui, Gigante, Soriana, franquicias como McDonalds, Burguer King, Kentucky.Cadenas hoteleras como Holiday Inn y Fiesta Inn etc. Asentados en el municipio Del Carmen lo que refleja el poder adquisitivo de los habitantes. teniendo como resultado cambios en las condiciones de vida de los ciudadanos. Petróleos Mexicanos constituye la fuente número uno de las aportaciones económicas que recibe el gobierno federal, al mismo tiempo es la primera empresa generadora de divisas, en el año 2005 exportó petróleo crudo por 28 mil 286 millones de dólares. Por lo que es la columna vertebral de la estabilidad financiera y económica de México. Por la magnitud de sus recursos y por sus exportaciones, PEMEX es un soporte fundamental de la economía mexicana. Aporta entre el 6 y 8% del producto interno bruto, dependiendo de los precios internacionales del crudo.

INTRODUCCIÓN

El municipio del Carmen se localiza al suroeste del estado de Campeche, limita al norte con el Golfo de México y el municipio de Champotón, al sur con el estado de Tabasco y la República de Guatemala, al este con los municipios de Escárcega y Candelaria y al oeste con el municipio de Palizada. Se ubica entre los paralelos 17° 52' y 19° 01' de latitud norte y los meridianos 90°29' y 92°28' de longitud oeste de Greenwich. Tiene una extensión territorial de 9,720.09 km2 que representa el 17.1% de la superficie del estado. (Enciclopedia de los municipios de México, (1999)Centro Nacional de Desarrollo municipal, Gobierno del estado de Campeche .

Un recurso importante lo representa el petróleo, cuya producción se ha incrementado notablemente en los últimos años, beneficiando tanto al municipio, como al estado y al país. El petróleo ocupa a 6200 personas de la entidad que representan el 2% de la población económicamente activa (PEA), hecho que impacta el medio ambiente y la economía del estado. (Ramírez Carrillo, Luis Alfonso, 2007) En la ruta del petróleo: impactos de una eventual explotación petrolera en Yucatán tomo III, fundación plan estratégico de Mérida,

El descubrimiento de los yacimientos hizo que el volumen de reservas probadas de hidrocarburos del país pasara de poco más de 6,000 millones de barriles en 1975 a casi 60,000 millones en 1984. Las reservas probadas al primero de enero de 2007 sumaron 15,514.2 millones de barriles de petróleo crudo, inferiores en 955 millones a las reportadas en el año previo. Las reservas probadas y probables ascienden a 30,771.6 (Berzunza Pinto, Ramón, (1991)Monografía del Estado de Campeche, Edic. Concordia,) millones de barriles, mientras que las reservas totales llegaron a 45,376.3 millones de barriles de petróleo crudo. En 2007, México ocupa el décimo quinto lugar de producción a nivel mundial. En la década de los setenta y principios de los ochenta, la región sureste sólo proveía poco más del 30% de la producción nacional de

petróleo y gas natural. La producción del sureste (Tabasco y Campeche) representó el 90% en materia de petróleo, el 80% en gas natural y poco más del 70% de la producción de petroquímica básica. (Sales Gutiérrez, Carlos, (1996)Campeche apuntes económicos y sociales, 3ª edición, Talleres de Fototipos S.A.,

METODOLOGÍA

La metodología de investigación que se usa consiste en el avance de los aspectos generales de la economía hacia los aspectos particulares, método deductivo, combinado con un proceso de análisis y síntesis, en cada fase de la investigación

RESULTADOS

El proceso de crecimiento en la producción petrolera fue muy rápido repercutiendo en el municipio del Carmen, donde llegaron numerosos trabajadores de varios estados, con la idea de encontrar trabajo bien remunerado. Como se muestra en el siguiente cuadro:
Unidades económicas como de personal ocupado del estado de Campeche 1989-2004:

	1989	1994	1999	2004	Crecimiento
Unidades económicas	9,595	17,337	20,269	36,293	378%
Personal ocupado	42,132	52,795	85,597	204,050	484%

FUENTE: INEGI. censos económicos 1989,1994,1999 y 2004.

Como observamos en la tabla anterior , la actividad petrolera vino a reactivar las industrias colaterales como la metal-mecánica y el comercio. Su presencia impulsó la actividad socioeconómica pero también generó alteraciones en las condiciones sociales de la comunidad carmelita.

Esto ha provocado un acelerado crecimiento de la inversión en la fase extractiva, se hizo de esta actividad una de las más dinámicas de la economía estatal. Debido a la gran cantidad de dinero que se empleaba en ella y al gran movimiento de los obreros, en el año de 1996 la producción de petróleo en la sonda de Campeche tenía un valor de cerca de 25 millones de dólares diarios. Ese mismo año PEMEX explotaba más de 300 pozos y contaba con 127 plataformas marinas
(Alonso González, 1972:59-60)

Petróleos Mexicanos constituye la fuente número uno de las aportaciones económicas que recibe el gobierno federal, no solo es la empresa paraestatal responsable de la extracción, refinación y venta del petróleo, si no que al mismo tiempo es la primera empresa generadora de divisas, en el año 2005 exportó petróleo crudo por 28 mil 286 millones de dólares. Por lo que es la columna vertebral de la estabilidad financiera y económica de México
(Alonso González, 1972:61-62).

El complejo petrolero Cantarell, cuenta con 15 millones de barriles de reserva probada, fue considerado el tercer lugar a nivel mundial en su tipo. También se inició el desarrollo de las estructuras Akal Nohoch, junto con el puerto de embarque de crudo de Cayo Arcas en el estado de Campeche, en la actualidad el 70% de la producción total nacional de crudo proviene de Cantarell.(Ordóñez1998:56-57)

En este mismo ámbito de trabajo. Llegaron Empresas transnacionales reconocidas como: Halliburton, Schlumberger, Tritón Energy, Baker Huges, y las nacionales asociadas con extranjeros dio lugar a PROTEXA, DIAVAZ, SONAT, EPN, COTEMAR Mantenimiento Marino de México, COMMISA entre otros poniéndose al servicio de la paraestatal. (Vadillo López, Claudio, Campeche: Sociedad economía política y cultura, México, UNAM, 2000)

PEMEX creció tanto que adquirió una vasta área de terreno para ubicar en ella la administración de las empresas contratistas y la creación de una zona residencial para albergar los trabajadores de PEMEX . Estos Son factores de una distribución urbana concebida en función de la explotación del petróleo (Enciclopedia de los municipios de México, Centro Nacional de Desarrollo municipal, Gobierno el estado de Campeche , 1999)

CONCLUSIONES

Si bien es sabido que economía y medio ambiente en la mayoría los casos no son compatibles con el crecimiento económico de una sociedad. El desarrollo económico de ciudad del Carmen ha sido importante en los últimos años, sin embargo no se refleja en la calidad de vida de la población nativa. Debido a asentamientos irregulares se hace mal uso de los recursos naturales como (humedales, cuerpos de agua, flora y fauna) estos se encuentran regulados por leyes de orden municipal, estatal y federal e internacional.

(García Cuellar, J. Ángel, Francisco Arreguín-Sánchez, Sergio Hernández Vázquez y Daniel B. Lluch Cota,"(2004) Impacto ecológico de la industria petrolera en la sonda de Campeche, México, tras tres décadas de actividad: una revisión", en Interciencia, col. 29, núm. 6, junio, 20

Carmen presenta un grado medio de desarrollo económico, porque se enfrenta al escaso dinamismo de las actividades primarias, incremento progresivo en la demanda de infraestructura, equipamiento urbano, el alto costo de nivel de vida, desigualdad interregional en el desarrollo y en la distribución del ingreso, es fuerte centro de atracción de corrientes migratorias y cuenta con una población flotante, incremento de fenómenos relacionados con las conductas antisociales; estos retos son los que deberá enfrentar la sociedad y gobierno así como buscar las estrategias debidas para combatirlas.

Carmen enfrenta la problemática que registran las ciudades petroleras, deterioro ambiental, situaciones de riesgo, pobreza urbana, inseguridad social, migración, violación de derechos humanos y multiplicación de asentamientos irregulares.

Los sectores informales mantienen en gran parte la economía familiar, fenómeno que se agudizó a partir de dos grandes movimientos migratorios; a finales de los años setenta y noventas, con la explotación de nuevos pozos petroleros y la instalación de la planta de nitrógeno en la península de Atasta, Carmen, Campeche. (Enciclopedia de los municipios de Campeche,(2000) Centro Nacional de Desarrollo Municipal, Gobierno del estado de Campeche)

Cuanto se logra colocar en PEMEX, un trabajador percibe una remuneración relativamente superior al promedio nacional, pero a cambio radica en localidades con altos costos en vivienda, alimentación y servicios. En cambio los que no consiguen empleo se dedican a delinquir ocasionando aumento en la delincuencia, se establecen en lugares irregulares provocando avance de manchas urbanas que destruyen los manglares de la isla en consecuencia se tiene un desequilibrio en la naturaleza, en sus casas no cuentan con servicios básicos como agua potable, luz drenaje. (Plan municipal de desarrollo del Ayuntamiento del Carmen 2003-2006)

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ANÁLISIS ESTRATÉGICO PARA EL DESARROLLO DE LA MICRO, PEQUEÑA Y MEDIANA EMPRESA EN EL ESTADO DE COAHUILA, MÉXICO

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RESUMEN

La pequeña y mediana empresa (Pyme) ha sido en los últimos años el centro de atención de numerosos trabajos, debidos fundamentalmente a su gran capacidad de generación de empleo, así como al papel primordial que juegan como generadoras de riqueza. Esto ha permitido un mayor conocimiento de sus características y de sus relaciones con el entorno económico. No obstante, las Pyme siguen necesitadas de fundamentos operativos que, de forma continua, pongan de manifiesto su problemática y sus estrategias al objeto de facilitar la toma de decisiones, tanto desde un punto de vista de política interna de la empresa para su gestión, como de política local o estatal, para determinar y fijar programas de actuación acertados y con suficiente tiempo de anticipación.

En la actualidad ser competitivos es vital para la supervivencia de las Pyme al constituir una referencia de la capacidad de anticipación y respuesta a los retos del entorno. Para mejorar la competitividad, la Pyme tiene la necesidad de adecuar tanto sus estrategias como su estructura organizativa y su forma de gestión al entorno dinámico de la economía actual. Sin embargo, muchas empresas persisten en una actitud conservadora a la espera de observar la operatividad de determinadas estrategias para introducir cambios en sus estructuras. Este trabajo forma parte de un proyecto de investigación más amplio sobre "análisis estratégico para el desarrollo de la mPyme", en el que intervienen diversas universidades mexicanas, de acuerdo con una base metodológica común. Ello permitirá, sin duda, en un futuro próximo la comparación y la agregación de la información.

En esta ponencia se explica la sección de la investigación que tiene como objetivos:

Analizar la situación de las mPyme en el Estado de Coahuila, considerando su estrategia y principales factores competitivos; indicadores de planeación y comportamiento estratégico; indicadores de tecnología e innovación y grado de utilización de las tecnologías de la información y comunicación.

Para llevar a cabo este trabajo se ha realizado un estudio empírico a partir de la información de 391 mPymes del Estado de Coahuila. La técnica de captación de la información fue una encuesta personal, utilizando como soporte un cuestionario autoadministrado dirigido al gerente de la empresa.

Es importante señalar, por un lado, que no es función de este trabajo de investigación juzgar la situación de la pequeña y mediana empresa en el Estado de Coahuila, sino ofrecer una visión integral de la empresa, que ponga de manifiesto, virtudes o desequilibrios, con el propósito de que sirva de referencia para que, en su caso, puedan adoptarse las medidas oportunas para potenciar las virtudes y ajustar los desequilibrios; y por otro lado, que en el desarrollo de las distintas fases de esta investigación se ha respetado escrupulosamente el secreto estadístico de la información utilizada, no mencionando a ninguna empresa en particular.

PERFIL VALORAR DE LOS ESTUDIANTES DE LA FACULTAD DE CIENCIAS ADMINISTRATIVAS

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RESUMEN

En un esfuerzo por elevar la calidad educativa a partir del del año 2002 la Facultad de Ciencias Administrativas, de la Universidad Autónoma de Baja California, adopta el modelo educativo por competencias en sus planes de estudio, de acuerdo a este modelo los egresados no solo deben de contar con los conocimientos teórico-prácticos, sino que además deben poseer competencias y los valores necesarios para ejercer su profesión.

Este importante papel de transformación que tiene la universidad, da la pauta para realizar acciones que permitan conocer el perfil valoral de nuestros estudiantes de los diferentes programas educativos que oferta la Facultad de Ciencias Administrativas. El presente trabajo tiene como objetivo aplicar un instrumento al total de la población estudiantil de los programas de Licenciados en contaduría, Licenciados en Administración de Empresas, Licenciados en Informática y Licenciados en Negocios Internacionales, que proporcione información para realizar acciones y crear estrategias que permitan reforzar los valores de nuestros estudiantes para crear profesionistas comprometidos, responsables y que logren transmitir lo aprendido a su entorno familiar y laboral en beneficio de la sociedad.

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LA APORTACIÓN DE LAS MUJERES A LA ECONOMÍA FAMILIAR EN MÉXICO, CASO: MICROEMPRESARIAS COMERCIALIZADORAS DE ALIMENTOS EN MEXICALI, BAJA CALIFORNIA

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ABSTRACT

La investigación que se presenta fue realizada en la colonia Independencia de la ciudad de Mexicali, Baja California, México. El objetivo del presente estudio fue identificar la representatividad de las mujeres en la comercialización de alimentos dentro de la economía informal, caracterizarlas y determinar su aportación al ingreso familiar. La investigación se realizó a través de un estudio descriptivo de corte transversal, aplicando una metodología mixta, se observaron a profundidad las actividades que se realizan en la comercialización de alimentos, y se llevo a cabo un análisis del objeto de estudio. En esta investigación se presentan los resultados de la aplicación de un instrumento a 157 comercializadores de alimentos. Lo anterior permitió conocer el número de mujeres dedicadas a esta actividad, así como sus características y entorno socioeconómico-familiar. Con base a la información obtenida a través del instrumento aplicado se presentan una serie de conclusiones que dan cuenta de la aportación que realizan las mujeres a la economía familiar en el campo materia de esta investigación. Los hallazgos de este estudio resultaron inesperados y reflejan la necesidad de dirigir la mirada hacia esta problemática.

INTRODUCCIÓN

Hablar de la participación femenina en el ámbito laboral nos remonta a tiempos muy antiguos. La mujer ha sido un importante agente económico para el desarrollo, no sólo de México sino del mundo, en todos los sistemas económicos y en las distintas etapas históricas En la actualidad, el entorno exige una mayor participación femenina en la toma de decisiones y su incursión a nuevos mercados laborales, convirtiéndolas incluso en generadoras de empleos. En ese sentido, la microempresa es un espacio que facilita a las mujeres compaginar el rol de madre, esposa y empresaria al mismo tiempo, permitiendo que el aporte económico de la mujer al presupuesto familiar ayude significativamente a superar la pobreza.

Consideramos apremiante determinar la importancia de la mujer en la economía familiar, debido a que ésta actúa al interior de la familia como un elemento imprescindible de formación, a la vez que cada día es más común ver su inserción en la vida económica de México. Nuestro interés por este tema radica en que consideramos a la mujer un importante factor de desarrollo económico al interior de sus hogares sin dejar de lado el impacto de su trabajo en la economía del país.

En vista de lo antes expuesto, el objetivo de la presente investigación fue identificar la representatividad de las mujeres en la comercialización de alimentos dentro de la economía informal, caracterizarlas y determinar su aportación al ingreso familiar.

REVISIÓN LITERARIA

El papel que ha venido desempeñando la mujer dentro de la economía en nuestro país durante los últimos años ha sido determinante. Cada día son más las mujeres que se integran a la población económicamente

activa y son incluso generadoras de empleo; así pues, la representación de la mujer en la administración de empresas es cada vez más cotidiana en sectores competidos.

Para ubicar el contexto en el que se desarrollan las mujeres microempresarias se considera oportuno en esta revisión bibliográfica identificar los distintos tipos de microempresas que existen en México. A decir de Carrasco (2005), se pueden clasificar las microempresas según la finalidad para la que fueron creadas o de acuerdo a su tamaño. Algunos de los principales criterios de clasificación de empresa son: la actividad o giro a que se dedica, esto en razón de si pertenecen a la industria mediante la producción de bienes materiales o en su caso la extracción o transformación de materias primas.

Para Ferrel, Hirt, Adriaenses, Flores y Ramos (2004) se considera empresaria a la persona que arriesga su dinero, tiempo y esfuerzo, para desarrollar un producto o forma de hacer algo innovador. Las empresarias se encuentran dentro de la categoría de mujeres que trabajan por cuenta propia, invirtiendo sus recursos y esfuerzos para lograr colocar su producto en la preferencia de los clientes; tratándose de microempresas estamos además, en varios de los casos, frente a mujeres generadoras de empleo.

A decir de Godínez (2008) el Consejo Nacional de Población (CONAPO) reporta que de 2000 a 2006, aumentó el número de mujeres que se incorporaron al ámbito laboral, otro dato interesante radica en que de los nuevos empleos creados durante la administración pasada, 54% fueron asalariados y 43% por cuenta propia, y que entre 2000 y 2004, 72 % de los empleos generados se ubican en la categoría de microempresas.   La citada autora señala también que la Asociación Mexicana de Ventas Directas reportó en 2003 un total de un millón 200 mil personas dedicadas a las ventas directas, de las cuales el 80% eran mujeres, en su mayoría amas de casa, quienes no son consideradas trabajadoras y sólo perciben el pago de comisiones sin ninguna prestación social.   Asimismo Godines (2008) comenta que…

> 23 por ciento de las mujeres que laboran obtiene ingresos mediante actividades por cuenta propia, según INEGI, 12 por ciento hace trabajo de apoyo a la familia sin recibir remuneración. Para el último trimestre de 2006, cinco millones 391 mil 581 mujeres se ubicaban en trabajos informales, en tanto que nueve millones 275 mil 358 tenían un trabajo formal y recibía un salario.

Por otra parte Godines (2008) señala que el "Instituto Nacional de Estadística, Geografía e Informática (INEGI) reporta que en el mismo periodo creció el número de mujeres que trabajaban por su cuenta: de 2 millones 882 mil 185 a 3 millones 562 mil 382."

Todos estos datos muestran claramente la importancia del liderazgo de las mujeres en las microempresas, como consecuencia de los cambios que en materia social, política, cultural y sobre todo económica se han presentado en México y en el mundo principalmente a partir de las dos últimas décadas del Siglo XX y hasta nuestros días.   Baja California, y su capital, Mexicali, no pueden estar al margen de dichos acontecimientos y cambios que reestructuran los esquemas sociales y económicos de la ciudad, colocando a las mujeres en un escenario más dinámico, competitivo y acorde a nuevas necesidades, que las ubican en muchos de los casos como cabeza de familia debido a la importancia que representa su aportación económica al ingreso familiar y a la economía del país.

METODOLOGÍA

El presente trabajo de investigación es un estudio en el que se aplicó una metodología tanto cuantitativa como cualitativa, por lo tanto es un estudio de tipo mixto. Esta investigación es de tipo descriptivo transversal, realizada en la colonia Independencia de la ciudad de Mexicali Baja California, México, durante los mese de octubre y noviembre de 2008. Los sujetos de estudio en esta investigación fueron las microempresarias comercializadoras de alimentos de esa zona. Se enfrentó la problemática de que no existe un padrón de microempresarias, debido a que muchas de ellas trabajan en la informalidad, por lo que el universo se determinó por medio de un censo, el cual permitió identificar la población de estudio. Se identificaron un total de 172 microempresarias de las que se encuestaron a 157 quienes aceptaron

participar en esta investigación. Las variables que se estudiaron en esta investigación fueron: sexo, representatividad, edad, estado civil, nivel de estudios y aporte a la economía familiar. Se elaboró un instrumento de investigación integrado por 24 ítems el cual fue aplicado por 3 encuestadores quienes fueron preparados para aplicar el instrumento con un enfoque participativo. La aplicación del instrumento se realizó en 2 horarios distintos: de 6:00 a 11:00 horas y de las 18:00 a las 24:00 horas. La información obtenida a través del instrumento de medición se clasificó en dos categorías de análisis: caracterización y actitud. Se utilizó el método de escalamiento tipo Likert para codificar los resultados del instrumento de medición y evaluar la actitud de las microempresarias, así mismo se utilizaron métodos estadísticos con ayuda del programa Statistical Package for the Social Sciences (SPSS) por sus siglas en inglés, para determinar las características de los sujetos de estudio. Los datos obtenidos sirvieron de base para la elaboración de las conclusiones de esta indagatoria.

RESULTADOS

A continuación se presentan los resultados de los datos obtenidos en esta investigación, los cuales se muestran según las variables estudiadas. Se pudo determinar que del total de personas encuestadas 44.6% fueron mujeres y 55.4 % fueron hombres, es decir, de las 157 personas encuestadas 70 fueron mujeres; cabe señalar que no todas las mujeres encuestadas resultaron ser propietarias del negocio, hallazgo inesperado en esta investigación, pues no entran en la clasificación de microempresarias (ver figura 1). Del total de personas encuestadas sólo 45.2 % dijeron ser dueñas de la microempresa.

Figura 1: Distribución de microempresarios por sexo
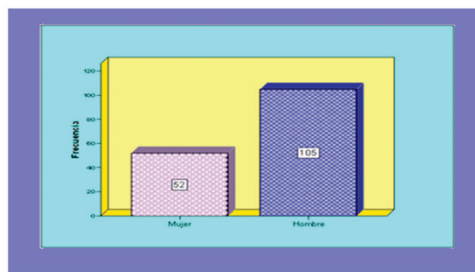
Esta figura muestra que la participación de las mujeres en las microempresas de la zona estudiada es menor a la participación de los hombres.

Se encontró que sólo 33.1% de los dueños de los negocios encuestados eran mujeres, hallazgo que resultó inesperado ya que se estimaba que el porcentaje fuera superior, dado que se había observado un número mayor de mujeres trabajando en el área de estudio. Del total de microempresas comercializadoras de alimentos en el área estudiada que pertenecen a mujeres, 28.85% de ellas son generadoras de empleos, frente al 71.15% que son atendidas por las propias mujeres, varias de ellas hasta con 3 auxiliares, la mayoría de las veces pertenecientes a su propia familia.

El grupo más representativo de microempresarias, es el que se encuentra en el rango de 36 a 50 años de edad con una representación de 54.1% del total de las encuestadas, seguido no muy de cerca por el grupo de mujeres de 20 a 35 años con 16.2 %. Las demás empresarias se encuentran en un 10.8% entre los 51 y 65 años, el mismo porcentaje es de las mujeres menores de 20 años y sólo 8.1% son mujeres mayores a 65 años.

En cuanto al estado civil de las microempresarias, se pudo determinar que 51.4% de las encuestadas dijeron ser casadas y sólo 10.8% dijeron estar separadas o ser viudas. Con relación a la escolaridad, se pudo identificar que 35.1% dijeron haber concluido la secundaria, 24.3% la preparatoria y 21.6% estudios técnicos. Cabe señalar que 2.7% de las microempresarias dijeron tener estudios a nivel licenciatura y 5.4% dijeron tener solo educación primaria.

Respecto del aporte de las microempresarias a la economía familiar se pudo determinar que 37.8% indicó aportar el 75 % al ingreso familiar, el 24.3% dijo aportar el 50%, el 21.6% dijo aportar el 100%. Cabe señalar que 13.5% de las microempresarias manifestaron el 25% de los ingresos a casa y sólo 2.7% de las microempresarias no aporta nada a la economía familiar.

Como se observa en la figura 2, el porcentaje de mujeres que aportan entre 75% y 100% del ingreso familiar es alto, poco más del 60% de las encuestadas, lo que refleja claramente la fuerza económica que representan las microempresarias en casa, frente a esta cifra, sorprende que sólo cerca del 3% no aportan al ingreso familiar, sin embargo, algunas comentaron ser hijas de familia y no requerir sostener una casa.

Figura 2: Aporte económico de la microempresaria al ingreso familiar
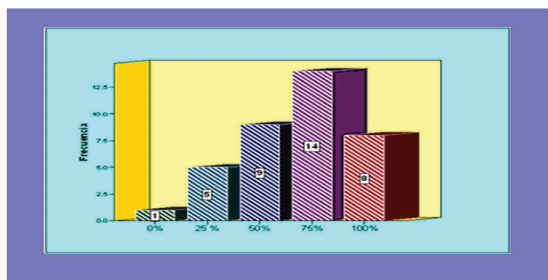
La aportación de las mujeres microempresarias de este estudio es muy importante ya que arriba del 60% aportan casi la totalidad de ingresos del hogar.

En el estudio para evaluar la actitud de las microempresarias respecto de la relación con su familia y como se percibe respecto de su aportación a la economía familiar, se encontró que la actitud de las microempresarias se encuentra lejos de ser favorable. Si se toma a las actitudes como síntomas y no como hechos o acciones (Hernández, Fernández y Baptista, 1998) se puede decir que entre las mujeres microempresarias se identifica clara inconformidad en la relación que mantienen con su familia; (Ver figura 3) sólo la mitad de ellas se sienten apoyadas en su negocio por parte de su familia. Una quinta parte de las microempresarias encuestadas se percibe como sostén económico del núcleo familiar, lo que puede ser un síntoma de baja autoestima personal.

Figura 3: Actitud de la microempresaria frente a su aportación económica al ingreso familiar
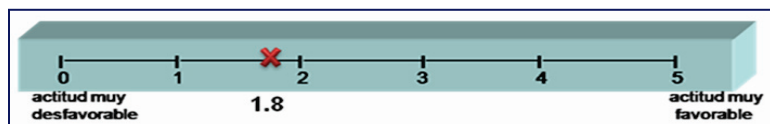
Esta figura muestra que las microempresarias no se perciben como jefes de familia, lo que apunta hacia una baja autoestima.

CONCLUSIONES

Tras el análisis de los datos obtenidos en esta indagatoria se plantean las siguientes conclusiones:
Primera.- La representatividad de las mujeres en la comercialización de alimentos dentro de la economía informal en el área estudiada fue baja, toda vez que sólo 33.1% de los dueños de los negocios eran mujeres, lo cual resultó un hallazgo inesperado en esta investigación.

Segunda.- Al caracterizar a las mujeres microempresarias comercializadoras de alimentos de la zona estudiada se pudo concluir que en su mayoría se dedican a esta actividad no por ser la única fuente de ingreso en su familia, ya que el 51.4% dijeron estar casadas y sólo 10.8% son mujeres separadas o viudas. También se concluye que el nivel educativo de las microempresarias es superior al mínimo, ya que 2.7%

cuenta con estudios a nivel licenciatura, 80% cuenta con estudios iguales o superiores a la educación secundaria y sólo 5.4% dijo haber cursado únicamente la educación primaria.

Tercera.- La aportación económica que realizan las microempresarias comercializadoras de alimentos a la economía familiar en el área estudiada es muy importante, toda vez que se pudo observar que el porcentaje de mujeres que aportan entre 75% y 100% del ingreso familiar resultó ser poco más del 60% de las encuestadas. Otro hallazgo importante en esta investigación fue el identificar que 11.5% de las mujeres encuestadas aunque no son microempresarias realizan un aporte significativo a la economía familiar desempeñándose como gerentes o administradoras de las microempresas.

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EFICIENTAR LA PRODUCTIVIDAD EN EL TRABAJO

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RESUMEN

En la sociedad contemporánea, las empresas exitosas son aquellas que desarrollan su recurso humano en base a las necesidades reales dentro de la organización. Cuando se hace referencia a la capacitación, no solamente se habla de dar conocimiento a una parte del personal para que pueda realizar eficientemente una actividad, nos referimos principalmente a cubrir las necesidades reales de cada persona y de cada departamentos en una organización que cuenta con distintas y diversas áreas de trabajo.

INTRODUCCION

Podemos asegurar que los cursos, conferencias y platicas que se imparten al personal, deben cubrir las necesidades reales de la empresa, en caso contrario, No esta cumpliendo el requisito de capacitación ni cubre la necesidad demandada de la empresa, dado que capacitación laboral y necesidad empresarial es una unidad inseparable en la concepción moderna de los recursos humanos. Nos queda claro de esta forma que la capacitación es necesaria para todo nuestro personal y no solamente para algunas personas como lo argumentan los responsables de capacitación en distintas empresas.

RESULTADOS

La capacitación es una actividad necesaria para mejorar la calidad de vida de nuestro personal dentro y fuera de la organización., También es una modernización progresiva de la empresa en la medida que actualiza y dota de nuevas habilidades y herramientas al trabajador para que el mundo del trabajo sea indivisible, donde empresa, capacitación y productividad tiene como sujeto al trabajador.

La productividad es la razón de ser de las organizaciones que tienen como meta, por un lado, la generación de un valor agregado para el cliente y, por el otro, la obtención de utilidades.

Es necesario clasificar la capacitación de acuerdo a la actividad que realiza nuestro personal, la cual podemos dividirla en dos grandes categorías: Capacitación Técnica y Capacitación Profesional. Los Programas de capacitación reflejan los planes generales de personal de la empresa y se derivan de las metas de la organización.

La primera por lo general se imparte a todos los operadores y personas de niveles primarios en la organización, los cuales realizan trabajos manuales y que requieren de ciertas destrezas y habilidades específicas para realizar su actividad. Los operadores en líneas de ensamblaje en una empresa maquiladora son un claro ejemplo de personal que requiere capacitación técnica.

La segunda, se imparte a las personas que coordinan y manejan personal en un departamento determinado, y son responsables de que todas las actividades se lleven acabo de manera eficiente y eficaz. Los Jefes de departamentos y Gerentes son ejemplos de personas que requieren estar en una capacitación profesional constante.

El principal reto que enfrentan los capacitadores en la mayoría de las empresas, es la de persuadir y convencer a los trabajadores de recibir la capacitación en un horario fuera de la jornada normal de trabajo.

Es decir, negociar la impartición de la capacitación en un horario que involucre el tiempo de la organización y otra parte en un horario fuera de la jornada regular del trabajador.

Uno de los principales desafíos de los coordinadores de capacitación, es la de seducir a los directivos de la organización, que los estímulos económicos deben estar estrictamente vinculados con el rendimiento que se tiene al recibir una capacitación adecuada. Es decir, es necesario contar con un adecuado plan de compensaciones diseñado y ponderado en las actividades realizadas en los departamentos de toda la organización, vinculado con los requisitos académicos de los trabajadores que realizan las operaciones.

Para muchas organizaciones, contar con una buen administración de las compensaciones es fundamental, convirtiéndolo en un mecanismo muy poderoso que puede utilizar la dirección para motivar y reforzar la cultura organizacional que queremos promover dentro de la empresa.

En la medida que los directivos de las organizaciones estén convencidos de los beneficios de la capacitación de manera permanente y general, los beneficios serán incrementados, alcanzando los objetivos de la organización y del trabajador.

Otro aspecto que se debe considerar, si queremos incrementar la productividad, es sin duda alguna la seguridad laboral. Este fenómeno se puede resolver ofreciendo certidumbre laboral al trabajador, a través del contrato individual de trabajo, abandonando las formas tradicionales de contratación por periodos cortos, lo cual no brinda seguridad ni permite la continuidad por tiempo necesario del trabajador con la empresa.

Sin embargo, la seguridad laboral por sí sola, no es suficiente para incrementar la productividad, otro aspecto que se debe analizar es la seguridad Industrial, la utilización de herramientas ergonómicas y el equipo adecuado para trabajar, son
Indispensables para lograr el objetivo planteado.

El mejorar el ambiente laboral del trabajador, involucra directamente a sus familiares más cercanos. Un claro ejemplo son los eventos sociales que realizan empresas exitosas, donde pueden convivir todos los trabajadores y disfrutar la compañía de sus familias.

Es necesario, afirmar que las empresas aplican la capacitación, pero en el momento de que el personal esta tomando los cursos de capacitación no siempre es receptivo a los contenidos del aprendizaje por que hay otros factores que afectan su rendimiento, y por cuestión obvia, la capacitación pasa a segundo término.

CONCLUSIONES

Se mencionó que es muy importante que los participantes a los cursos de capacitación no se sientan obligados al momento de asistir a estos eventos. De esta forma, evitaremos que sientan que es una obligación impuesta por el patrón y que será además, aburrida. Es por esto, que debemos capacitar al personal tomando como base las necesidades reales de la empresa.
Un aspecto muy importante, es que la persona que coordina la capacitación en la empresa, debe entender muy bien los beneficios y los resultados cualitativos y cuantitativos de la misma. Debe involucrar a todos los niveles de mando en este proceso especial, que de no mostrar un cambio de conducta nuestro personal, perderá credibilidad la capacitación.

La productividad es la razón de ser de todas las organizaciones, todas deben serlo, sin embargo no siempre queda muy claro el concepto de productividad y por lo mismo no es llevado a la práctica. Primero debemos enfatizar en que un conjunto de acciones llevadas a cabo para solucionar problemas

específicos dentro de la empresa son siempre relacionados con el concepto mencionado de productividad, eficientando el logro de nuestro objetivos.

Por último, se debe aclarar que la capacitación es solo una parte importante para el buen funcionamiento de las actividades de una empresa, solucionando los problemas específicos en nuestras áreas de trabajo. Sin embargo, la base necesaria, es que la empresa cuente con métodos, procedimientos, políticas y orientaciones generales muy bien definidos hacia la productividad, de esta forma podremos asegurar el mejoramiento y la eficiencia de la productividad en nuestra organización.

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EL RECICLADO DE VEHÍCULOS Y SURELACIÓN CON EL DESARROLLO SUSTENTABLE DE LA REGIÓN FRONTERIZA DE MEXICALI, BAJA CALIFORNIA, MÉXICO

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RESUMEN

La importancia de la situación geográfica de nuestro país, es una gran ventaja para lograr comercializar productos con los países más poderosos del mundo, aunado a nuestra mano de obra barata y el fácil acceso para instalarse en nuestro país, son algunas de las razones por las cuales se han desarrollado las industrias de desmantelamiento de autos con gran éxito. Las empresas desmanteladoras de autos necesitan empezar a aplicar programas apegados a los estándares internacionales para así hacer del reciclado y reutilización de partes un negocio que beneficie a la sociedad, y que no solo eso, sino también no genere contaminación al medio ambiente y genere problemas a las regiones donde se instalan, es importante generar una legislación más estricta en este sentido, capacitando y creando apoyos para la generación de nuevas tecnologías que protejan el medio ambiente y nos permitan tener una mejor calidad de vida. De igual manera si queremos exportar de una manera más competitiva necesitamos adaptarnos a los nuevos estándares mundiales y empezar a crear empresas más eficientes en el uso y manejo de políticas ecológicas y ambientales.

PALABRAS CLAVE. Reciclado, Vehículos, Desarrollo sustentable, Mexicali, Desmanteladoras.

THE VEHICLE RECYCLING AND RELATION TO SUSTAINABLE DEVELOPMENT OF THE BORDER REGION OF MEXICALI, BAJA CALIFORNIA MEXICO

ABSTRACT

The importance of the geographical situation of our country is a great advantage to achieve market products with the most powerful countries in the world, coupled with our cheap labor and easy access to settle in our country, are some of the reasons which have developed the auto dismantling industries with great success. Auto dismantling companies need to begin to implement programs attached to international standards in order to make recycling and reuse of parts of a business that benefits society and not only that, but no pollution to the environment and create problems for regions where they settle, it is important to generate a more stringent legislation in this regard, training and building support for the generation of new technologies that protect the environment and allow us to have a better quality of life.Similaly if we want to export in a more competitive we need to adapt to new global standards and begin to create more efficient firms in the use and management of ecological and environmental policies.

KEYWORDS: Recycling, Transportation, Sustainable, Development, Mexicali, Dismantlers.

BIOGRAFIA

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LAS PERSPECTIVAS DEL SECTOR AUTOMOTRIZ EN EL AREA DE AUTOS USADOS EN MEXICALI BAJA CALIFORNIA, COMO CONSECUENCIA DE LA ENTRADA EN VIGOR DEL TRATADO DE AMERICA DEL NORTE EN EL 2009

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RESUMEN

Como consecuencia del Tratado de Libre Comercio para América del Norte en el 2009, los países miembros liberarán y desgravarán de aranceles al sector automotriz en autos usados, por lo que esto nos traerá cambios significantes en el funcionamiento y operación de nuestras comercializadoras de autos usados. Lo que las obligará a transformarse en empresas más competitivas, debido a esto surge nuestra necesidad de información acerca de estos cambios, así como de las posibles soluciones a este gran problema que nos afectará de manera significativa en nuestra región. En otro sentido debemos conocer que la comercialización de autos usados ha venido a satisfacer en gran parte, la necesidad del ciudadano que no tiene los suficientes ingresos para adquirir un vehículo nacional, y que se conforma con obtener uno similar o igual a menor costo. Los acuerdos del TLCAN contemplan la liberación de aranceles para la importación de autos usados lo que implica: Que cualquier persona podrá importar automóviles de cualquier país de los miembros de TLCAN sin pagar aranceles por lo que como consecuencia las comercializadoras de autos usados ubicadas en la zona norte de nuestro país se verán afectadas.

PALABRAS CLAVE. TLCAN, Autos Usados, Comercializadoras, Aranceles, Libre comercio.

AUTOMOTIVE INDUSTRY OUTLOOK IN THE AREA OF CARS USED IN MEXICALI BAJA CALIFORNIA, AS A RESULT OF THE ENTRY INTO FORCE OF THE TREATY OF NORTH AMERICA IN 2009

ABSTRACT

As a result of NAFTA for North America in 2009, member countries freed from tariffs, tax on used cars automotive sector, so this will bring significant changes in the functioning and operation of our trading used cars. What will compel them to become more competitive firms, because of this arises our need for information about these changes, as well as possible solutions to this major problem that will affect us significantly in our region. In another sense we know that the used car market has come to largely meet the demand of citizens that does not have enough income to purchase a domestic vehicle, and conforms with similar or obtain one more cheaply. The NAFTA agreements provide for the release of import tariff on used cars which means. That any person to import cars from any country of the members of NAFTA without paying duty so because marketers of used cars located in the area north of our country will be affected.

KEYWORDS. NAFTA, Used Cars, Traders, Tariff, Free trade.

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PROYECTO ESTRATEGIAS PARA FOMENTAR EL EMPLEO EN ZONAS RURALES Y APRENDIZAJE SITUADO

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RESUMEN

Se describen avances del proyecto de vinculación "Estrategias para Fomentar el Empleo en Zonas rurales y aprendizaje situado" obtenido por los alumnos de Administración de Empresas de la EIN-GV; este documento se realizó con la intención de que ésta información sea de utilidad, tanto a maestros y directivos de la EIN-GV como a otras facultades e institutos de la UABC, así como a otras instituciones de educación superior; se concluye que los proyectos de vinculación son una excelente oportunidad para aplicar los conocimientos previos y a su vez generar nuevos conocimientos, aplicando los valores adquiridos tanto en casa como en aulas, sin olvidar la ética profesional; para corroborar lo antes mencionado se aplicarán encuestas en la segunda fase de este proyecto de vinculación.

PALABRAS CLAVES: Proyectos, vinculación, aprendizaje situado

INTRODUCCIÓN

El objetivo de este trabajo será describir los avances del proyecto de vinculación "Estrategias para Fomentar el Empleo en Zonas rurales", en relación al aprendizaje situado que obtendrán los alumnos de Administración de Empresas de la Escuela de Ingeniería y Negocios, Guadalupe Victoria. El método será la aplicación de encuestas con instrumentos prediseñados a alumnos, maestros y microempresarios involucrados en este proyecto (aplicable en la segunda fase) Por esta razón la intención de este documento es describir los avances del Proyecto de Vinculación "Estrategias para fomentar el empleo en zonas rurales", basado en un aprendizaje situado, obtenido por los alumnos de Administración de Empresas; con el fin de que esta información sea útil, tanto a maestros y directivos de la EIN-GV y a otras facultades e institutos de la UABC, así como a otras instituciones de educación superior.

Para efecto de este estudio mencionaremos a los distintos autores que nos hablan sobre aprendizaje situado en este mundo de aprendizaje donde la teoría debe aterrizarse en contextos reales, mismos que propician un aprendizaje significativo; se abordarán el tema de la UABC y el aprendizaje situado; los proyectos de vinculación; Gobierno del Estado y UABC promoviendo el empleo y el Proyecto estrategias para fomentar el empleo en zonas rurales.

APRENDIZAJE SITUADO

"El aprendizaje es inseparable e incomprensible al margen del contexto sociocultural en el que participa el aprendiz, adquiriendo destrezas al tiempo que desarrolla actividades." (Pérez, 2004, pág. 208)
Hablando de cognición situada "Debe de comprenderse como un proceso multidimensional de apropiación cultural, ya que se trata de una experiencia que involucra, el pensamiento, la afectividad y la acción" Baquero 2002, citado por Díaz Barriga, 2003, Pág. 108).

El modelo de aprendizaje cognición situada representa una de las inclinaciones contemporáneas más prometedoras de la teoría enfocada en la actividad socio-cultural. (Díaz, 2003)
Aprendizaje y contexto sociocultural son dos elementos inseparables (Rogoff, 1993, citado en Castorina y cols., 2008).
A través de un enfoque situado se busca un aprendizaje centrado en autenticas prácticas educativas, debiendo ser éstas congruentes, significativas y propositivas (Díaz, 2003).

UABC Aprendizaje Situado

La UABC, a través de políticas educativas y propósitos del modelo educativo, es un ejemplo de aprendizaje situado:
- La investigación y la vinculación como ejes de la actividad académica.
  (Políticas institucionales de la Universidad Autónoma de Baja California)
- Cerrar brechas entre la universidad y la sociedad
- Que el estudiante participe activa y responsablemente en su propio proceso formativo.
  (Modelo educativo de la Universidad Autónoma de Baja California)

Las modalidades de aprendizaje de la UABC que propician el aprendizaje situado, de acuerdo al artículo 155 del estatuto escolar son las siguientes:
- Ayudantías de investigación
- Ejercicio investigativo
- Apoyo a actividades de extensión y vinculación
- Proyectos de vinculación con valor en créditos
- Servicio social comunitario asociado a la currícula
- Servicio social profesional asociado a la currícula
- Prácticas profesionales

 (Estatuto escolar,UABC,2006)

Proyectos de Vinculación

Por su esencia y proyección social la educación superior modifica el contexto al cual está integrada, pero a su vez se ve modificada por el mismo. (SEP-ANUIES, 1981/1991). UN proyecto es una iniciativa con carácter temporal que surge para la obtención de un resultado singular. (Proyect Managemente Institute, 2000, citado por Klastorin, 2005)

En base al artículo 156 del Estatuto Escolar de la UABC, un proyecto de vinculación con valor en créditos, tiene varias alternativas para el logro de los créditos, así mismo puede integrar diversas modalidades de aprendizaje a la vez. (Estatuto escolar de la UABC, 2006) Según el artículo 158 del Estatuto Escolar de la UABC, el objetivo por el cual se otorgan créditos a los proyectos de vinculación estriba en los beneficios que aportan éstos a la flexibilidad curricular y al modelo de competencias para dar fortaleza a la adquisición del conocimiento más allá de las aulas y propiciar el acercamiento a su área profesional. (Estatuto escolar de la UABC, 2006).

En la Declaración mundial sobre la educación superior en el siglo XXI: visión y acción de la UNESCO respecto a forjar una nueva visión de la educación superior menciona lo siguiente en el artículo 6: "La educación superior debe reforzar sus funciones de servicio a la sociedad, y más concretamente sus actividades encaminadas a erradicar la pobreza, la intolerancia, la violencia, el analfabetismo, el hambre, el deterioro del medio ambiente y las enfermedades, principalmente mediante un planteamiento interdisciplinario y transdisciplinario para analizar los problemas y las cuestiones planteados." (Declaración mundial sobre la educación superior en el siglo XXI)

GOBIERNO DEL ESTADO Y UABC PROMOVIENDO EL EMPLEO

El Señor Gobernador del Estado de Baja California José Guadalupe Osuna Millán y la Universidad Autónoma de Baja California, representada por el Señor Rector Gabriel Estrella Valenzuela unen esfuerzos para fomentar el empleo en el Estado de Baja California.

La UABC promueve la asesoría y la asistencia a los micro-empresarios a través de PIADMYPE y el Proyecto de Vinculación Estrategias para Fomentar el Empleo en Zonas Rurales y Gobierno del Estado a través de la Secretaría de Desarrollo Económico, otorga créditos, apoyos a los micro-empresarios y apoyos a los alumnos para realizar la asistencia micro-empresarial, ambas instituciones se unen en pro de fomentar el empleo y auto-empleo en el Estado de Baja California.

Proyecto Estrategias Para Fomentar El Empleo En Zonas Rurales En La Escuela De Ingeniería Y Negocios, Guadalupe Victoria

Es importante mencionar que los proyectos de vinculación, han sido asertivamente promovidos por el Director de la escuela de Ingeniería y negocios el M.C. Luis Alfredo Padilla López.

El proyecto de vinculación "Estrategias para fomentar el empleo en zonas rurales" que se realiza en el Valle de Mexicali, específicamente en Guadalupe Victoria, coordinado por la M.R.H. Lucila Páez Tirado, nace apegándose a los objetivos del Programa Institucional de la UABC: Programa de investigación, asistencia y docencia a la micro y pequeña empresa (PIADMYPE).

PIADMYPE es coordinado a nivel estatal por la Facultad de Economía y Relaciones Internacionales de la la UABC en la ciudad de Tijuana, B. C. y extendiéndose a los municipios de Mexicali y su Valle, Tecate, Rosarito Ensenada y su Valle en el Estado de Baja California.

Objetivo

Que el alumno desarrolle los conocimientos, habilidades y valores de manera integral y simultánea asociados a la situación de las empresas a través de la asistencia a las Microempresas de la localidad con el fin de que los microempresarios incrementen las oportunidades de negocio y autoempleo.

Objetivos específicos

1.- Desarrollar en los estudiantes el espíritu de solidaridad y reciprocidad con la comunidad, donde la ética este presente para efecto del manejo de la información confidencial recibida por parte de los empresarios y el respeto en todo el proceso de asistencia a los Microempresarios.
2.- Propiciar el desarrollo de ideas creativas en beneficio de los microempresarios.
3.- Ofrecer de manera voluntaria a los microempresarios participar en la asistencia micro-empresarial que les permita incrementar su productividad y competitividad en su entorno.
4.- Propiciar la colaboración/cooperación entre Universidad-Empresa para el acceso a nuevas oportunidades de mejora.

Lineamientos y funciones

Del Alumno
1.- Mantener en secreto la información proporcionada por la empresa y no hacer mal uso de ella (confidencialidad).
2.- Promover que el alumno sea concreto y pragmático al momento de asistir a la Microempresa, recordar que el tiempo es oro para los Microempresarios.
3.- Respetar fechas para capacitación así como para el seminario Fomento al Empleo en Zonas Rurales.
4.- Hacer uso de la asesoría continua proporcionada por los maestros involucrados en el proyecto de vinculación al inicio de la clase.

5.- Hacer conciencia del compromiso que adquiere con la UABC y con la Microempresa.
6.- Es obligatoria la asistencia a cursos y seminarios.
7.- Es obligatoria la asistencia a clases y a través de la misma se tendrán hasta 20 minutos para la asesoría en relación con las dudas que surjan en la asistencia a las Microempresas, si no hubiese dudas se desarrollará la clase de manera habitual.
8.- Acercarse al Extensionista Universitario en Supervisión para solicitar capacitación y soporte técnico.
9.- Solicitar capacitación al Coordinador responsable de la Unidad Académica.
10.- Realizar el proceso de asistencia a los Microempresarios.
11.- Capturar información proporcionada por Microempresarios en el sistema SAM para
     obtener datos estadísticos e información financiera de los microempresarios.

Del Maestro
1.- Promover el compromiso que el alumno adquiere con la UABC y con la
    Microempresa.
2.- Mantener una continua comunicación con los alumnos participantes.
3.- Establecer el 100% de las políticas de evaluación y criterios a evaluar en clase.
4.- Promover la confianza en el alumno.
5.- Es obligatoria la asistencia a los seminarios.
6.- Dar asesoría a los alumnos involucrados en el Proyecto de Vinculación, dando un margen de hasta veinte minutos para tal efecto, si no hubiese dudas, se continuará con la clase de manera habitual.

Del Coordinador del proyecto
1.- Reclutar colaboradores y apoyar en capacitación.
2.- Coordinar, supervisar y capacitar a Extensionista Universitario Supervisor.
3.- Coordinar y supervisar el trabajo de campo.
4.- Atender la relación general del proyecto con el Centro de Investigación,
    Asistencia y Docencia de la Micro y Pequeñas Empresas.
5.- Coordinar logística de los cursos con la Facultad de Economía.
6.- Coordinar y asistir al seminario Fomento al Empleo en Zonas Rurales.

Del Extensionista Universitario en supervisión
1.- Capacitación y soporte técnico a Extensionistas Universitarios
    en Asistencia.
2.- Supervisión a extensionistas Universitarios
    en asistencia.
3.- Generar información solicitada por Coordinador.
4.- Reportar resultados y evidencias al coordinador.

Procedimiento

Clases y Capacitación: En la Escuela de Ingeniería y Negocios, se impartieron clases de acuerdo al calendario de cursos, clases y seminarios; los alumnos asistieron a los cursos de capacitación realizados por la Facultad de Economía y por la Coordinadora del Proyecto de Vinculación; los maestros involucrados en el proyecto de vinculación, asistieron a los cursos de capacitación; la alumna supervisora se asignó al proyecto a través del Programa de Servicio Social Profesional Programa de Investigación, Asistencia y Docencia a la Micro y Pequeña Empresa (PIADMYPE) a su vez el supervisor estuvo en continua capacitación con la coordinadora del proyecto.

Asistencia micro-empresarial

1.- Los alumnos iniciarán la asistencia Micro-empresarial en Ciudad Guadalupe Victoria por las Avenidas principales que corren de Este a Oeste y posteriormente por las calles que reflejen mayor movimiento comercial que corren de Norte a Sur.

2.- Los alumnos solicitarán permiso a los Microempresarios para brindar capacitación gratuita en los siguientes tipos de unidades económicas:

      1.- Ambulante

      2.- Puesto en la vía pública

      3.- Taller Independiente

      4.- Taller familiar

3.- Si el Microempresario acepta, se programarán las fechas de la asistencia previo llenado de los formatos correspondientes.

4.- Desde el inicio Extensionistas Universitarios en Asistencia informarán a los Microempresarios la oportunidad de solicitar un financiamiento a SEDECO para incrementar las utilidades del negocio, mismo que estará condicionado a que formalicen su situación ante las instituciones correspondientes.

4.- Si el Microempresario decide solicitar el financiamiento y registrarse de manera formal ante las instituciones correspondientes, se le explicará como acudir a los Centros de Atención Empresarial de SEDECO para evaluar el proyecto y considerar el monto a financiar.

5.- El alumno estará obligado a dar asistencia mínimo a dos empresas para efecto del Proyecto de Vinculación con valor en créditos.

6.- Unidades de aprendizaje asociadas a la asistencia micro empresarial
   (ver a anexo 1)

*Apoyos Económicos por parte de Gobierno del Estado de Baja California a alumnos:*Los alumnos que se incorporen a este proyecto de vinculación, así como los jóvenes que se asignen al Programa de Servicio Social comunitario o Profesional Estrategias para fomentar el empleo en Zonas Rurales recibirán una apoyo de $ 450.00 (cuatrocientos cincuenta pesos 00/100 M. Ncl.) por empresa que reciba la asistencia empresarial y otros $ 450.00 por empresa formalizada ante el SAT. (En la segunda fase se disminuye el apoyo a $180.00 más $30.00 de gasolina)

Los dos supervisores, recibirán un pago único por la cantidad de $ 5,000.00 al final del semestre. (en la segunda fase se disminuye el pago a $ 4000.00)

Alumnos asignados al proyecto: Los alumnos asignados al proyecto son diecisiete: trece alumnos del 6to. Semestre y cinco alumnos del octavo semestre de la carrera Licenciado en Administración de Empresas se incorporan al proyecto a través de un Programa de servicio social Profesional denominado Programa de investigación, asistencia y docencia a la micro y pequeña empresa.

Unidades de Aprendizaje involucradas y Maestros asesores: Las unidades de aprendizaje involucradas son las siguientes: Mercadotecnia II (Maestra Griselda Guillen Ojeda), Liderazgo (Maestra Guadalupe Loreto Mada), Desarrollo de Pequeñas y Medianas Empresas (Mtra. Mariana M. Valenzuela Montoya) Métodos cuantitativos (Mtro. Cesar A. Hernández Huitrón), Impuestos y Administración de sueldos y salarios (Mtra. Rosalva Ornelas Magdaleno), y Administración del capital de trabajo (Mtra. Lucila Páez Tirado).

Alumnos involucrados en este Proyecto de vinculación.

NOMBRE	MATRÍCULA	PROGRAMA EDUCATIVO
Álvarez García Israel	1/85616	Lic. en Admón. de Empresas
Alan Maldonado J. Ernesto	1/84689	Lic. en Admón. de Empresas
Amezcua Robles Reyna Johana	1/85645	Lic. en Admón. de Empresas
Avila Jiménez J. Javier	1/70890	Lic. en Admón. de Empresas
Camacho Favela Xochitl	1/84872	Lic. en Admón. de Empresas
Castañeda González Gemali	1/80904	Lic. en Admón. de Empresas
Corrales Cota Karla Jordana	1/i1141	Lic. en Admón. de Empresas
Guillen Velázquez Arturo	1/86789	Lic. en Admón. de Empresas
Guzmán Domínguez José Manuel	1/86827	Lic. en Admón. de Empresas
Jáuregui Guardiola Victoria	1/87011	Lic. en Admón. de Empresas
Ortega Aguilar Germán Gerardo	1/87777	Lic. en Admón. de Empresas
Pérez Navarro Damaris	1/87907	Lic. en Admón. de Empresas
Rodríguez Villarreal Cristina	1/88258	Lic. en Admón. de Empresas
Rojas Sánchez Sonia Rosina Veron	1/88266	Lic. en Admón. de Empresas
Ruiz Robles Berenice Anahi	1/88349	Lic. en Admón. de Empresas
Segura Saldivar Antonia	1/88496	Lic. en Admón. de Empresas
Solorio Ferrales Karla	1/89019	Lic. en Admón. de Empresas
Venegas García Andrés Roberto	1/84707	Lic. en Admón. de Empresas

RESULTADOS

En esta primera fase los Estudiantes en Administración de Empresas asesoraron a seis Microempresarios para que tomaran la decisión de formalizarse ante las autoridades correspondientes, y además sesenta y siete Microempresarios recibieron asistencia administrativa y financiera para mejorar sus negocios por parte de los Estudiantes antes mencionados. Como un anticipo, podemos mencionar que en la segunda fase los Microempresarios recibieron apoyos económicos por parte de Gobierno del Estado, incrementándose de manera sobresaliente la asistencia y las peticiones de asistencia y apoyo económico por parte de los Microempresarios; este proyecto es un claro ejemplo de aprendizaje situado, a través del cual los jóvenes estudiantes aplican sus conocimientos teórico prácticos en su entorno socio-cultural.

CONCLUSIONES

Debido a que este trabajo abarca únicamente una de las dos fases del mismo, aun sin haber concluido el Proyecto de vinculación Estrategias para fomentar el empleo en zonas rurales, tres maestras involucradas en este proyecto que imparten las materias de Desarrollo de pequeñas y medianas empresas, Capital de trabajo y Mercadotecnia II estuvieron de acuerdo en el hecho de que al involucrar a los jóvenes en una serie de experiencias encaminadas a prever o en su caso resolver los problemas existentes de los microempresarios, es una excelente oportunidad de aplicar los conocimientos previos y a su vez generar nuevos conocimientos, aplicando los valores adquiridos tanto en casa como en aulas, sin olvidar la ética profesional.
La universidad Autónoma de Baja California, promueve los proyectos de vinculación y a través del aprendizaje situado generado en los alumnos, busca enviar a la sociedad profesionales competentes, comprometidos con su entorno.
Se menciona que en la segunda fase de este proyecto se harán encuestas a microempresarios y a los jóvenes estudiantes para verificar lo mencionado por las maestras de la Escuela de ingeniería y Negocios, Guadalupe Victoria

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EFECTOS DEL DOWNSIZING EN LA SATISFACCIÓN LABORAL Y EL COMPROMISO DE LOS SUPERVISORES DE PRODUCCIÓN: CASO DE LA INDUSTRIA MAQUILADORA DE CIUDAD JUÁREZ, CHIHUAHUA, MÉXICO

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ABSTRACT

El interés por el estudio del downsizing y sus efectos, principalmente sobre los trabajadores ha tomado fuerza en los últimos años. La presente investigación tiene como objetivo principal identificar los efectos del downsizing en la satisfacción laboral y el compromiso de los supervisores de producción en la Industria Maquiladora de Ciudad Juárez, en donde se ha visto un notable incremento en el uso de esta práctica que en muchas ocasiones no resuelve los problemas que orillan a las empresas a tomar la decisión de implementarla. El análisis de 51 empresas revela algunos resultados contradictorios con respecto a los encontrados en la literatura en bases de datos y libros disponible.

INTRODUCCIÓN

El descenso en las tasas de crecimiento económico (2004; Greenhalgh, Lawrence & Sutton, 1988), el fenómeno de la globalización, el alto desarrollo tecnológico (Cacique & López, 2008; Kets de Vries & Balazs, 1997; Naumann, Bennett, Bies & Martin, 1998; Shah, 2000; Tsai, Yen, Huang & Huang, 2007) así como las presiones de la competencia (Kaleka, 2002; Naumann et al., 1998; Shah, 2000) son algunas de las fuerzas que obligan a las empresas a realizar recortes de personal, implementando una estrategia conocida como *downsizing*.

A pesar de que existe evidencia de los escasos beneficios de esta práctica (Cross & Travaglione, 2004), el *downsizing* es una estrategia que se utiliza con mucha frecuencia por las empresas para reducir su personal (Bhattacharyya & Chatterjee, 2005; Biasca, 1997; Budros, 1997; Cross & Travaglione, 2004; Jiménez & Sánchez, 2005; Naumann et al., 1998). La promesa de una aparente eficiencia hace creer que su práctica conduce a mejores y más efectivas prácticas en los negocios (Sparrow & Cooper, 1998).

JUSTIFICACIÓN

El fenómeno del *downsizing* afecta tanto la satisfacción laboral como el compromiso de los trabajadores (Allen, Freeman, Joyce, Reizenstein & Rentz, 2001; Choy, 2002; Cross & Travaglione, 2004; Devine et al., 2003; Levitt, Willson & Giligan, 2008; Marques, Galende & Cruz, 2006), variables que son consideradas como cruciales para el éxito de la organización (Cross & Travaglione, 2004; Kusum, 2004) por tal motivo, es importante monitorear constantemente tanto la satisfacción como el compromiso de los trabajadores.

El compromiso organizacional de hecho, es uno de los factores más importantes cuando se trata de involucrar a los trabajadores en cualquier iniciativa de cambio (Conner & Patterson, 1982) pues funciona como adhesivo, uniendo a los empleados con las metas de la organización Coetsee (1999).

En vista de que tanto el compromiso como la satisfacción laboral se ven afectados a partir de la implementación del *downsizing* y dada la importancia de estas actitudes para el buen funcionamiento de la organización, es importante realizar investigaciones sobre el impacto del *downsizing* con el compromiso y la satisfacción laboral, ya que puede contribuir a desarrollar y comprender la capacidad que se requiere para dirigir el proceso del *downsizing,* a través del entendimiento teórico y en consecuencia, la adaptación de la organización a este fenómeno (DeWItt, 1993).

OBJETIVOS
1. Revisar, analizar y sintetizar de manera integral la literatura disponible en torno al tema del *downsizing*, principalmente aquélla que contemple estudios en donde se establezcan relaciones entre el *downsizing* con la satisfacción laboral y el compromiso de tal forma que se pueda contar con un marco teórico que permita justificar las hipótesis planteados en este trabajo y fundamentar las conclusiones que se obtengan.
   a. Determinar si desde la percepción del gerente de recursos humanos, la implementación del *downsizing* afecta negativamente a la satisfacción laboral de los supervisores de producción de la Industria Maquiladora de Ciudad Juárez.
   b. Determinar si desde la percepción del gerente de recursos humanos, la implementación del *downsizing* afecta negativamente el compromiso de los supervisores de producción de la Industria Maquiladora de Ciudad. Juárez.
   c. Establecer la relación entre el tamaño del *downsizing* y la satisfacción laboral de los supervisores de producción sobrevivientes del proceso.
   d. Determinar si existe una relación entre la duración del *downsizing* y la satisfacción laboral de los supervisores de producción sobrevivientes del proceso.

REVISIÓN DE LITERATURA

En el marco teórico se recogieron los resultados de investigaciones que han abordado el tema del *downsizing* y las asociaciones con diversas variables, como es el caso de la satisfacción laboral, el compromiso laboral y la comunicación interna. Los resultados incluyen una compresiva búsqueda en diferentes bases de datos como *ABI, BUSINESS SOURCE PREMIER, JOURNAL CITATION REPORTS-SOCIAL SCIENCES, PROQUEST PSYCHOLOGY JOURNALS,* así como en libros de texto, algunos de ellos de reciente impresión La figura No. 1 que a continuación se presenta muestra a cada uno de los autores que han realizado aportaciones a este tema.

¿QUÉ ES EL *DOWNSIZING?*

Orígenes del *downsizing*:

El término *downsizing* fue adoptado por Estados Unidos a finales de la década de los ochenta, con la intención de identificar determinadas prácticas empresariales de gestión, destinadas a la reducción de personal (Magán & Céspedes, 2007).

Las condiciones que las empresas enfrentaban en ese momento en donde se destacaban una mayor competencia internacional, liberalización de la industria y rápidos cambios tecnológicos propiciaron la creación de organizaciones más pequeñas y estructuras organizacionales más simples (Magán & Céspedes, 2007), de ahí que las empresas empezaran a hacer uso de la estrategia del *downsizing* como respuesta a las condiciones que prevalecían en el entorno de la organización.

La conceptualización del *downsizing*:

El *downsizing* ha sido identificado como la estrategia para lograr la reducción del tamaño y costos de la

organización, así como el rediseño de los procesos de trabajo (Cross & Travaglione, 2004) de manera radical y a través de la eliminación de niveles jerárquicos (Lambert, 1999) p. 285 de una manera planificada y permanente (Cascio, 1993; Kets de Vries & Balazs, 1997; Sánchez & Suárez, 2005), con la intención de incrementar la eficiencia, competitividad (Cascio, 1993; Sánchez & Suárez, 2005), productividad (Cascio, 1993; Freeman & Cameron, 1993; Kets de Vries & Balazs, 1997) y efectividad de la empresa (Budros, 1997). En concreto, hacer que las organizaciones produzcan lo mismo o más pero con menos recursos (Biasca, 1997).

Figura No. 1: Esquematización del Marco Teórico
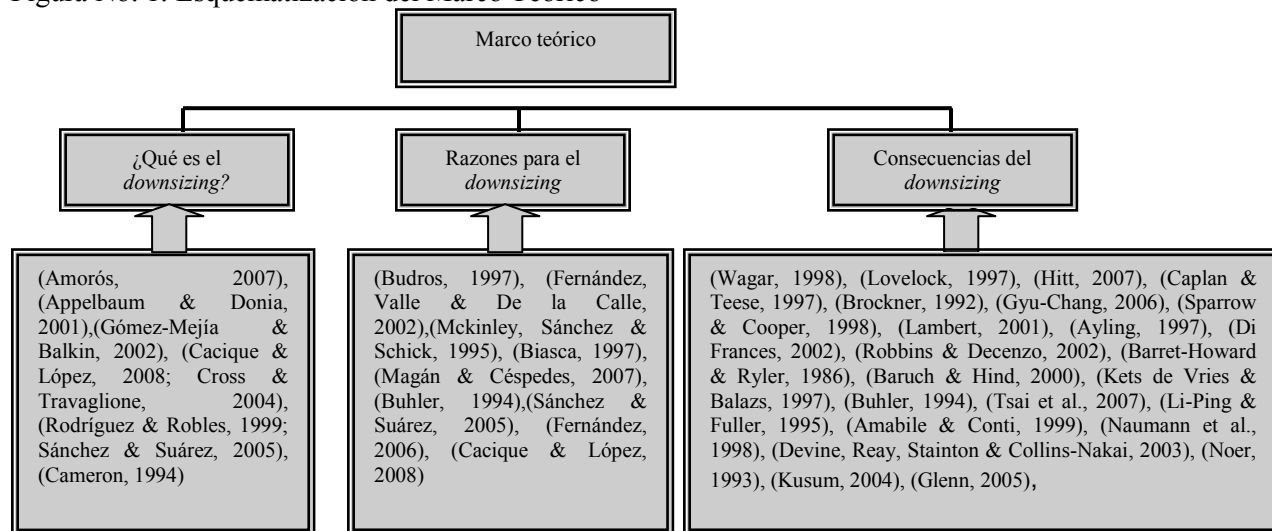
Consecuencias del *downsizing* en los trabajadores:

Los efectos perjudiciales de esta estrategia, principalmente en los empleados (Cummings & Worley, 2007; Sparrow & Cooper, 1998) p. 292 se han mencionado con la intención explicar los decepcionantes resultados que se observan evidenciados en diversas investigaciones (Cross & Travaglione, 2004), ofreciendo un panorama bastante sombrío para las empresas que deciden implementar la estrategia (Cummings & Worley, 2007) p. 295. A pesar de los intentos para considerar que esta estrategia beneficia a las organizaciones, la realidad es que la evidencia muestra algunos resultados contradictorios (Rodríguez & Robles, 1999). Por ejemplo, se ha mostrado que el *downsizing* en ocasiones no contribuye a la consecución de los objetivos para los que fue planteada, pues se ignoran los posibles efectos de la estrategia sobre los trabajadores que no son considerados al momento de decidir implementarla (Band & Tustin, 1995). De hecho a pesar de la frecuencia de su uso, a dos décadas de su lanzamiento existen muchos aspectos que no están suficientemente claros (Budros, 1997) (Appelbaum & Donia, 2001; Bhattacharyya & Chatterjee, 2005) en relación con las potenciales repercusiones negativas sobre la moral, compromiso (Mckinley et al., 1995) lealtad y motivación de los trabajadores, y en consecuencia, sobre la eficiencia organizativa (Fernández et al., 2002).

Empresas que han implementado el *downsizing*:

General Motors, Ford y Chrysler son firmas pioneras en el uso de esta estrategia (Budros, 1997), encabezando la lista de un gran número de empresas que a nivel mundial han decidido implementar el *downsizing*.

En la actualidad millones de empleados enfrentan el fenómeno del *downsizing*, práctica que empezó hace ya más de dos décadas. En Estados Unidos, más de diez millones de puestos fueron eliminados en la década de los noventa (Lewin & Johnston, 2008). Organizaciones como Oryx Energy, empresa

productora de petróleo en la zona de Dallas, Texas, Colgate-Palmolive, Heinz le han apostado a los recortes masivos (Biasca, 1997). Estos recortes también han sido anunciados o implementados en corporaciones como Chase Manhattan (12,000), Wells Fargo Bank (8,000), Bell South (11,300), Motorola (15,000), Citigroup (8,000) (Naumann et al., 1998).

Según las estadísticas del Departamento del Trabajo de Estados Unidos, tan solo en el año 2002 el recorte fue de 1,466 millones de empleados en ese país; en el caso de la empresa McDonald's, ésta planeó eliminar 600 empleos corporativos, cerrar alrededor de 175 restaurantes y terminar o reestructurar sus operaciones en siete países de Medio Oriente y América Latina (Mondy & Robert, 2005).

La Satisfacción Laboral.

La satisfacción laboral es una de las actitudes que más atención ha recibido dentro de las investigaciones en comportamiento organizacional (Amorós, 2007; Robbins, 2004) pp. 73 y 78. El término satisfacción laboral fue introducido inicialmente por Hoppock en el año de 1935; es conceptualizada como aquélla que integra la manera en la cual los trabajadores se sienten en su ambiente laboral tanto física como psicológicamente (Tsai et al., 2007).

HIPÓTESIS

H1. La implementación del downsizing afecta negativamente la satisfacción laboral de los supervisores de producción de la Industria Maquiladora de Ciudad Juárez.
H2. La implementación del downsizing afecta negativamente el compromiso de los supervisores de producción de la Industria Maquiladora de Ciudad Juárez.
H3. La duración del downsizing afecta negativamente la satisfacción laboral de los supervisores de producción sobrevivientes del proceso.
H4. El tamaño del downsizing afecta la satisfacción laboral de los supervidores de producción sobrevivientes al proceso.

METODOLOGÍA

Se trata de un estudio de corte transversal y con enfoque mixto (cualitativo y cuantitivo).

Muestra:

51 maquiladoras de los diferentes sectores, de una población de 294 maquiladoras ubicadas en Cd. Juárez, Chih.

Identificación de las variables:

- Independientes o exógenas: Enfoque, formas, tamaño, duración y razones para el *downsizing*.
- Dependientes o endógenas: Compromiso y satisfacción laboral.
- Variable moderadora o interviniente: Comunicación.
- Variables de control: Tamaño de la empresa y entorno.

Recolección de datos:

La recolección de datos se realizó a través del correo electrónico, iniciando el proceso de levantamiento de datos con una llamada previa a los gerentes de recursos humanos para solicitar su participación en el proyecto.

RESULTADOS

A continuación se presentan algunas tablas de frecuencias realizadas con la herramienta SPSS, así como análisis de correlación tomando como muestra 51 empresas maquiladoras de los diferentes sectores de actividad (eléctrico, automotriz, médico, electrónico, etc), que han enfrentado el proceso del *downsizing* en los últimos dos años. En la tabla No. 1 que se presenta a continuación se puede observar la percepción de los gerentes de recursos humanos con respecto a la satisfacción de los supervisores de producción que sobrevivieron a un proceso de *downsizing* en la industria maquiladora de Ciudad Juárez.

Tabla No. 1: El Nivel De Satisfacción De Los Supervisores De Producción Que No Fueron Despedidos, Después De La Implementación Del Proceso De Downsizing..

	Frecuencia	Porcentaje	Porcentaje acumulado
Disminuyó poco	3	5.9	5.9
No disminuyó ni aumentó	17	33.3	39.2
Aumentó poco	23	45.1	84.3
Aumentó mucho	8	15.7	100.0
Total	51	100.0	

Fuente: Elaboración propia.

Como se puede observar en la Tabla No. 1, se encuentran resultados contrarios a los esperados, considerando evidencias en la literatura, es decir, éstos revelan que el nivel de satisfacción de los supervisores de producción no solo no disminuyó, sino que el 45% (n=23) de los gerentes que respondieron al cuestionario manifestaron que esta actitud aumentó un poco; un 16% (n=8) respondió que aumentó mucho, el 33% (n=17) dijo que no hubo modificación y solo un 6% (n=3) reportó que disminuyó poco. Con este análisis podemos decir que la hipótesis No. 1 es rechazada.

En cuanto al nivel de compromiso, la Tabla No. 2 reporta resultados similares a los obtenidos en la satisfacción laboral a partir del instrumento aplicado. En él se puede observar que un alto porcentaje de los encuestados (40%) que representa un total de 20 casos, manifestaron que el nivel de compromiso de los supervisores de producción incrementó un poco; un 17% (n=9) dijeron que incrementó mucho; el 37% (n=19) reportaron que ni aumentó ni disminuyó y solo un 2% (n=1) dijo que disminuyó mucho, con lo que podemos decir que la hipótesis No. 2 tampoco se pudo contrastar.

Tabla No. 2: El Nivel De Compromiso O Identificación Con El Trabajo, Participación Activa E Integración Del Trabajo A La Propia Vida De Los Supervisores De Producción Sobrevivientes Al Recorte De Personal.

	Frecuencia	Porcentaje	Porcentaje
Disminuyó mucho	1	2.0	2.0
Disminuyó poco	2	3.9	5.9
No disminuyó ni aumentó	19	37.3	43.1
Aumentó poco	20	39.2	82.4
Aumentó mucho	9	17.6	100.0
Total	51	100.0	

Fuente: Elaboración propia.

Con la Tabla No. 3 que a continuación se puede determinar que no existe una correlación entre el nivel de satisfacción de los supervisores de producción y la duración del proceso (p>.05), con lo cual la H3 se rechaza.

Tabla No. 3. Análisis De Correlación Entre El Nivel De Satisfacción Laboral Y La Duración Del Proceso De Implementación Del Downsizing.

28. El nivel de satisfacción de los supervisores de producción que no fueron despedidos, después de la implementación del proceso de recortes de personal	Pearson Correlation	1	.126
	Sig. (2-tailed)	.	.377
	Sum of Squares and Cross-products	32.588	12.294
	Covariance	.652	.246
	N	51	51
10. Cuantos meses duró el proceso de recortes de personal.	Pearson Correlation	.126	1
	Sig. (2-tailed)	.377	.
	Sum of Squares and Cross-products	12.294	290.980
	Covariance	.246	5.820
	N	51	51

Fuente: Elaboración propia.

De la misma forma, en la Tabla No. 4 se puede observar que tampoco pudo encontrarse una correlación entre el tamaño del *downsizing* y la satisfacción laboral de los supervisores de producción de la Industria Maquiladora de Cd. Juárez (p>.05), con lo cual tampoco fue posible aceptar la hipótesis No. 4.

Tabla No. 4: Análisis De Correlación Entre La Satisfacción Laboral Y El Tamaño Del Downsizing.

28. El nivel de satisfacción de los superviores de producción que no fueron despedidos, después de la implementación del proceso de recortes de personal	Pearson Correlation	1	.124
	Sig. (2-tailed)	.	.386
	Sum of Squares and Cross-products	32.588	70.353
	Covariance	.652	1.407
	N	51	51
8. ¿Qué porcentaje del número total de empleados se planeó que sería despedido?	Pearson Correlation	.124	1
	Sig. (2-tailed)	.386	.
	Sum of Squares and Cross-products	70.353	9886.745
	Covariance	1.407	197.735
	N	51	51

Fuente: Elaboración propia.

CONCLUSIONES

Aunque la literatura revela que ante la implementación del *downsizing* la satisfacción laboral y el compromiso disminuyen, los resultados obtenidos con una muestra de 51 casos evidencian resultados contrarios al encontrar que desde la percepción del gerente de recursos humanos, tanto la satisfacción laboral como el compromiso de los supervisores no solo no disminuyeron sino que se pudo observar un aumento en ambas actitudes.

También se ha podido observar que no existe una relación entre la duración del proceso de *downsizing* con la satisfacción laboral de los supervisores de producción, así como tampoco se da tal relación con respecto al tamaño del *downsizing*.

Como se ha podido observar, ninguna de las hipótesis planteadas ha sido aceptada. Lo anterior puede estar relacionado con el alto índice de desempleo el cual puede provocar que los trabajadores manifiesten un alto nivel de satisfacción y compromiso debido a que sienten temor de ser despedidos. Estos resultados se justifican debido a que esta investigación se analizó desde la percepción del gerente de recursos humanos.

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