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COMPARING TWO EXCHANGE RATE REGIMES UNDER PURCHASING POWER DISPARITY

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ABSTRACT

The theoretical and empirical literatures do not give a clear answer about the superiority of flexible exchange rate regime over fixed exchange rate regime when purchasing power parity (PPP) condition fails to hold. The flexible exchange rate regime is generally shown to be superior, assuming PPP. This study is a fresh examination of the popular assertion that Flexible Exchange Rate regime outperforms other Exchange Rate regimes. We analyze the effect of the violation of purchasing power parity combined with deviations in output target and real exchange rate from their long-run equilibrium values on government's decision domain, which we call government's loss function.

This study uses a government loss function, for the most part derived from Barrow and Gordon (1983), to compare two exchange rate regimes under different PPP conditions. The results of this study confirm that a flexible exchange rate system indeed performs better if PPP holds. However, this implication may not be true when PPP doesn't hold, even if the cost of exchange rate change is zero. A major finding of this study, in sharp contrast to Obstfeld (1996), is that, if PPP does not hold, the flexible exchange rate system cannot be guaranteed to perform better unless two additional conditions are met: (a) output target is fully adjusted to its long-run equilibrium value; and (b) the long-run real exchange rate is lower than its long-run equilibrium value. If these conditions are not met, the result is ambiguous.

Since the above two conditions may not always hold, the implication of this study is quite significant and offers the opportunity for future empirical research.

INTRODUCTION

Since the collapse of Breton Wood system, policy makers have been searching for a stable international monetary system that could promote international trade and encourage long term investment. As a working solution to this issue, managed exchange rate system allowing deviations within a very narrow band have been adopted. One of the outcomes of such an attempt was the initiation of European Monetary System, an arrangement wherein the member countries, including most nations of the European Economic Community (EEC) were allowed to

manage their currencies depending on economic fundamentals and shocks within a band around the current value called target zones (Krugman, 1991). The presumed benefit is that exchange rate stability is supposed to bring about price stability, which enhances trade and consequently economic prosperity. Implicit in this idea is the assumption that the purchasing power parity (henceforth referred to as PPP) always holds. If PPP holds, we have P = P*E, where, P is the domestic price, P* is the foreign (world) price, and E is the exchange rate. Stability in E, therefore, translates into stability in P.

Similarly, a fixed exchange rate is also viewed as the measure to equalize interest rates across borders as shown by the interest rate parity equation: $R = R^* + \frac{E^e - E}{E}$, where R and R* are domestic and foreign rates of interest respectively, E is the current exchange rate, and E^e is the expected exchange rate. As a fixed exchange rate eliminates the differential between the current and expected exchange rates, it equalizes the interest rates across the trading countries. Since economic fundamentals do not change as rapidly as people's expectations, such an exchange rate system can ensure price stability, smooth flow of international trade and capital.

Obstfeld (1996) argues that the economic agents' expectation is influenced by government's resources, rather than its current action or commitment. Government's possible future action depends on relative size of losses under different policy regimes and, although a fixed exchange rate system can bring about price stability, the flexible exchange rate system is a more attractive alternative as long as the cost of the exchange rate adjustments is not very high. This argument depends on two assumptions: (i) PPP holds, and (ii) a fixed exchange rate system can successfully limit people's expectation. The PPP condition can, however, fail due to several reasons, such as deviations from the Law of One Price (LOP), the presence of non-traded goods, and the terms of trade effects of home bias in consumption. PPP puzzles, a common term for two anomalies of real exchange rates, indicate long-run PPP failures as well (Mussa 1986; Rogoff, 1996; Taylor, Peel, and Sarno, 2001). Additionally, Hyrina and Serletis (2010) used Lo's modified R/S statistic and Hurst exponent to show that PPP did not hold under currency exchanges between four countries.

So what happens if these assumptions do not hold? Can a target zone system still sustain or does it need a continuous realignment, which is clearly a failure of the target zone system? It is pertinent to ask, "Is a flexible exchange rate system between two currencies always better even if purchasing power parity does not hold between the two countries?"

The relevant theoretical literature does not fully answer these questions whereas the empirical researches have provided mixed results. Flexible exchange rates were optimal, according to Obstfeld (1996) whether deviations from PPP are due to deviations from the LOP or due to the presence of non-traded goods. In contrast, Devereux and Engel (2003) illustrated that, if PPP fails because of deviations from the LOP arising from sticky prices in local currency, then fixed exchange rates are optimal even in the presence of country-specific shocks. These studies do not establish the superiority of one exchange rate regime over the other when PPP condition

does not hold and output target and real exchange rate deviate from their long-run equilibrium values. This paper, therefore, is devoted to analyzing the effect of the violation of PPP along with the deviation of output target and real exchange rate from their long-run equilibrium values on government's decision domain, which we term government's loss function.

THE MODEL

The model assumes a typical government loss function following Barrow and Gordon (1983) with some modifications. The loss function is of the following form:

$$L = (Y - KY^*)^2 + \beta (\Pi^2) + c (\varepsilon), \quad (1)$$

where, Y is the output level, Y* is the targeted output level, Π is the rate of inflation, c(ε) is the cost of changing the exchange rate, ε is the exchange rate, and K and β are assigned weights. The first squared term in the loss function is the quadratic approximation of the welfare loss of being away from targeted output level. Therefore, the output deviation enters the government loss function because it causes unnecessary economizing on real balance, which generates costs of price change and even increases endogenous relative price uncertainty (Benabou, 1988). The second term in the equation is the rate of inflation. An unanticipated inflation is costly and socially undesirable because it increases relative price variability (CuKiermanm, 1984). The third term is the cost of changing exchange rate. Excessive short-run fluctuations in exchange rates under a flexible exchange rate system may be costly in terms of higher frictional unemployment if they lead to over-frequent attempts at reallocating domestic resources among the various sectors of the economy.

The output function is represented by the augmented Phillips curve as follows:

$$Y_t = \overline{Y} + \alpha (\Pi_t - \Pi_t^e) + u_t, \quad (2)$$

where, Y_t is the output level, $\overline{Y}$ is the long-run output level, Π_t and Π_t^e are actual and expected inflation rates respectively, and u_t is the output shock. Other assumptions of this model are as the following:

Purchasing power parity condition: $e_t - p_t + p_t^* = q_t$ (3)

Movement of real exchange rate: $q_t - q_{t-1} = \lambda (\zeta - q_{t-1}) + v_t$ (4)

Aggregate demand function: $m_t - p_t = hy_t - \gamma i_t + \mu_t$ (5)

Uncovered interest parity condition: $i_t = i_t^* + (e_{t-1}^e - e_t)$ (6)

where, $v_t \sim N(0, \sigma_v^2)$

$u_t \sim N(0, \sigma_u^2)$

$\mu_t \sim N(0, \sigma_\mu^2)$

$\varepsilon_t = e_t - e_{t-1} \sim N(0, \sigma_\varepsilon^2)$

$K, \beta, \alpha, \lambda, h, \gamma > 0$

The variables p_t and p_t^* are domestic and foreign price levels respectively; q_t is the real exchange rate; m_t is the nominal money supply; i_t and i_t^* are domestic and foreign interest rates respectively; and u_t, v_t, and μ_t are output, real exchange rate and demand shocks respectively. Similarly, ζ is long-run equilibrium exchange rate. Based on the above assumptions, we derive respective loss functions under flexible and fixed exchange rate systems. The complete derivation is given in the appendix.

The Loss Functions

$$L^{Flex} = \frac{\beta}{\alpha^2 + \beta}(\bar{Y} - KY^* - \alpha\varepsilon_t^e + u_t + \alpha\lambda(\zeta - q_{t-1}))^2 \quad (7)$$

$$L^{Fix} = \{\bar{Y} - KY^* - \alpha\varepsilon_t^e + u_t - \alpha vt\}^2 + \beta\{\lambda(\zeta + q_{t-1}) + v_t\}^2 \quad (8)$$

Taking unconditional expectation yields,

$$E(L^{Flex}) = \frac{\beta}{\alpha^2 + \beta}(\bar{Y} - KY^* - \alpha\varepsilon_t^e)^2 + \frac{\beta\alpha^2}{\alpha^2 + \beta}\lambda^2(\zeta - q_{t-1})^2 + \frac{\beta}{\alpha^2 + \beta}\sigma_u^2 + \frac{2\beta\alpha}{\alpha^2 + \beta}\lambda(\zeta - q_{t-1})(\bar{Y} - KY^* - \alpha\varepsilon_t^e) \quad (9)$$

$$E(L^{Fix}) = (\bar{Y} - KY^* - \alpha\varepsilon_t^e)^2 + \sigma_u^2 + \alpha^2\sigma_v^2 + \beta\lambda^2(\zeta + q_{t-1})^2 + \beta\sigma_v^2 \quad (10)$$

The term $c(\varepsilon) = c(\varepsilon_t - \varepsilon_{t-1})$ is the cost due to the change in exchange rate. This cost enters only into the loss function under flexible exchange rate system because excessive short-run fluctuations may lead to higher frictional unemployment caused by over-frequent reallocation of domestic resources. In this set up, the monetary authority will be tempted to take resort to the flexible exchange rate system when the effect of u_t (output shock) and/or v_t (real exchange rate shock) is so high that $E(L^{Flex}) + \bar{c}(\varepsilon) > E(L^{Fix})$ or so low that $E(L^{Flex}) + \underline{c}(\varepsilon) < E(L^{Fix})$, where $\bar{c}(\varepsilon)$ is the highest value and $\underline{c}(\varepsilon)$ is the lowest value of $c(\varepsilon)$. Suppose, $c^*(\varepsilon)$ is such that,

$$E(L^{Flex}) + c^*(\varepsilon) = E(L^{Fix}) \tag{11}$$

Substituting equation (9) and (10) into (11) yields,

$$\frac{\beta}{\alpha^2+\beta}(\bar{Y} - KY^* - \alpha\varepsilon_t^e)^2 + \frac{\beta\alpha^2}{\alpha^2+\beta}\lambda^2(\zeta - q_{t-1})^2 + \frac{\beta}{\alpha^2+\beta}\sigma_u^2$$

$$+ \frac{2\beta\alpha}{\alpha^2+\beta}\lambda(\zeta - q_{t-1})(\bar{Y} - KY^* - \alpha\varepsilon_t^e) + c^*(\varepsilon)$$

$$= (\bar{Y} - KY^* - \alpha\varepsilon_t^e)^2 + \sigma_u^2 + \alpha^2\sigma_v^2 + \beta\lambda^2(\zeta + q_{t-1})^2 + \beta\sigma_v^2$$

$$\Rightarrow -\frac{\alpha^2}{\alpha^2+\beta}(\bar{Y} - KY^* - \alpha\varepsilon_t^e)^2 - \frac{\beta^2}{\alpha^2+\beta}\lambda^2(\zeta - q_{t-1})^2 - \frac{\alpha^2}{\alpha^2+\beta}\sigma_u^2$$

$$+ \frac{2\beta\alpha}{\alpha^2+\beta}\lambda(\zeta - q_{t-1})(\bar{Y} - KY^* - \alpha\varepsilon_t^e) + c^*(\varepsilon) = (\alpha^2 + \beta)\sigma_v^2$$

$$\Rightarrow \sigma_v^2 = -\frac{\alpha^2}{(\alpha^2+\beta)^2}(\bar{Y} - KY^* - \alpha\varepsilon_t^e)^2 - \frac{\beta^2}{(\alpha^2+\beta)^2}\lambda^2(\zeta - q_{t-1})^2$$

$$- \frac{\alpha^2}{(\alpha^2+\beta)^2}\sigma_u^2 + \frac{2\beta\alpha}{(\alpha^2+\beta)^2}\lambda(\zeta - q_{t-1})(\bar{Y} - KY^* - \alpha\varepsilon_t^e) + \frac{c^*(\varepsilon)}{\alpha^2+\beta} \tag{12}$$

Rearranging equation (12) yields,

$$c^*(\varepsilon) = \frac{\alpha^2}{\alpha^2+\beta}(\bar{Y} - KY^* - \alpha\varepsilon_t^e)^2 + \frac{\beta^2}{\alpha^2+\beta}\lambda^2(\zeta - q_{t-1})^2 + \frac{\alpha^2}{\alpha^2+\beta}\sigma_u^2$$

$$- \frac{2\beta\alpha}{\alpha^2+\beta}\lambda(\zeta - q_{t-1})(\bar{Y} - KY^* - \alpha\varepsilon_t^e) + (\alpha^2 + \beta)\sigma_v^2 \tag{13}$$

Since c*(ε) is the critical value which equalizes $E(L^{Flex})$ and $E(L^{Fix})$, c*(ε) > 0 implies $E(L^{Flex}) < E(L^{Fix})$, while c*(ε) < 0 implies $E(L^{Flex}) > E(L^{Fix})$. Dynamic consistency requires that the government change the exchange rate whenever c*(ε) > 0. That is, the fixed exchange rate system is sustainable as long as c*(ε) <= 0.

From equations (9) and (10), it is clear that the expected loss in both regimes is an increasing function of real exchange rate deviation (i.e. $(\zeta - q_{t-1})$). The real exchange rate deviation, however, may cause more or less loss in flexible exchange rate system compared to that in fixed exchange rate system. Under PPP, the loss function under both regimes remains unaffected by real exchange rate deviation. So, if the cost of exchange rate change is negligible, the loss under flexible exchange rate system will be less than that under fixed exchange rate system. However, this is no longer valid when PPP does not hold. To demonstrate, we subtract equation (9) from (10), which yields,

$$E(L^{Fix}) - E(L^{Flex}) = \frac{\alpha^2}{\alpha^2+\beta}(\bar{Y} - KY^* - \alpha\varepsilon_t^e)^2 + \frac{\beta^2}{\alpha^2+\beta}\lambda^2(\zeta - q_{t-1})^2 + \frac{\alpha^2}{\alpha^2+\beta}\sigma_u^2$$
$$- \frac{2\beta\alpha}{\alpha^2+\beta}\lambda(\zeta - q_{t-1})(\bar{Y} - KY^* - \alpha\varepsilon_t^e) + (\alpha^2 + \beta)\sigma_v^2, \qquad (14)$$

assuming the cost of exchange rate change to be negligible (i.e. c(ε) = 0). From the observation of equation (14), it is obvious that there is no guarantee that $E(L^{Fix}) - E(L^{Flex}) > 0$, even if we assume that the cost of exchange rate change is zero unless two additional conditions are met. If output target is fully adjusted to the long run equilibrium output level i.e. $\bar{Y} = KY^*$, and the real exchange rate is lower than its long-run equilibrium value i.e. $q_{t-1} < \zeta$, then, from equation (14), it is clear that $E(L^{Fix}) > E(L^{Flex})$. That is the expected loss under a fixed exchange rate system outweighs the expected loss under a flexible exchange rate system if these two conditions are met.

If PPP holds, then $q_{t-1} = 0$ and, therefore, $\zeta = 0$. Thus, the negative term on the right hand side of equation (14) drops out, and we have $E(L^{Fix}) > E(L^{Flex})$. The expected loss under a fixed exchange rate system, consequently, is always greater than that under a flexible exchange rate system when PPP holds. These results can be summarized in the form of the following propositions:

Proposition 1: Under purchasing power parity, a flexible exchange rate system always performs better.

Proposition 2: Under purchasing power disparity, a flexible exchange rate system performs better only if output target is adjusted to its long-run equilibrium value and the real exchange rate is lower than its long-run value. If these conditions do not hold under purchasing power disparity, then the superiority of a flexible exchange rate system cannot be claimed.

CONCLUSION

Price stability is optimal for the long-term prosperity of an economy, and has received high importance in recent studies on macro-economic policy. Obstfeld (1996) argued that, no matter what the government's current action is, the economic agents' decision or expectation is influenced by government's resources rather than its current action or commitment. A government's potential future action depends on relative size of losses under different policy regimes. Obstfeld further maintains that, although a fixed exchange rate system can bring about price stability, the government always has an incentive to go for the flexible exchange rate system, as long as the cost of changing the exchange rate is not high.

We have shown, however, that this assertion is valid only under purchasing power parity condition. Even if the cost of the exchange rate is zero, the implications drawn by Obstfeld may be accurate if PPP doesn't hold. Under purchasing power disparity, a flexible exchange rate system can be assured to do better, but only if the output target is fully adjusted to its long-run equilibrium value and its long-run real exchange rate is lower than its long-run equilibrium value.

APPENDIX

Derivation of the Loss Functions

Lagging equation (3) by one period and subtracting it from the original equation yields,

$$e_t - e_{t-1} - p_t + p_{t-1} + p_t^* - p_{t-1}^* = q_t - q_{t-1} \text{ or}$$
$$p_t - p_{t-1} = e_t - e_{t-1} + p_t^* - p_{t-1}^* - (q_t - q_{t-1})$$
$$\prod_t = \varepsilon_t + p_t^* - p_{t-1}^* - (q_t - q_{t-1}),$$

where, $\prod_t = p_t - p_{t-1}$ (i.e. the rate of inflation) and $\varepsilon_t = e_t - e_{t-1}$ (i.e. change in exchange rate). Assuming zero rate of inflation in foreign country (i.e. $p_t^* - p_{t-1}^* = 0$) reduces the above equation to the following:

$$\prod_t = \varepsilon_t - (q_t - q_{t-1}) \tag{a1}$$

Substituting equation (4) into above yields,

$$\prod_t = \varepsilon_t - \lambda(\zeta - q_{t-1}) - v_t \tag{a2}$$

Taking conditional expectation of equation (a2) based on t period yields,

$$\begin{aligned} E_t \prod_t &= E_t\varepsilon_t - E_t\lambda(\zeta - q_{t-1}) - E_t v_t \\ &= E_t\varepsilon_t - \lambda(\zeta - E_t\, q_{t-1})) - E_t v_t \text{ or} \\ \prod_t^e &= \varepsilon_t^e - \lambda(\zeta - q_{t-1}) \end{aligned} \tag{a3}$$

Because, at the beginning of period t, q_{t-1} is already realized and $E_t q_{t-1} = q_{t-1}$. Subtracting equation (a3) from (a2) yields,

$$\begin{aligned} \prod_t - \prod_t^e &= \varepsilon_t - \lambda(\zeta - q_{t-1}) - v_t - [\varepsilon_t^e - \lambda(\zeta - q_{t-1})] \\ &= \varepsilon_t - \varepsilon_t^e - v_t \end{aligned} \tag{a4}$$

Substituting equation (a4) into (2) yields,

$$Y_t = \overline{Y} + \alpha[\varepsilon_t - \varepsilon_t^e - v_t] + u_t \tag{a5}$$

Substituting equation (a2) and (a5) into (1) and ignoring c(e) for the time being yields,

$$L = \{\overline{Y} + \alpha(\varepsilon_t - \varepsilon_t^e - v_t) + u_t - KY^*\}^2 + \beta[\varepsilon_t - \lambda(\zeta - q_{t-1}) - v_t]^2 \tag{a6}$$

The first order condition for the minimization of equation (a6) requires the following:

$$\frac{\partial L}{\partial \varepsilon_t} = 2\{\overline{Y} + \alpha(\varepsilon_t - \varepsilon_t^e - v_t) + u_t - KY^*\}\alpha + 2\beta[\varepsilon_t - \lambda(\zeta - q_{t-1}) - v_t] = 0$$

This implies the followings respectively:

$$\Rightarrow \alpha \bar{Y} - \alpha KY^* + \alpha^2\varepsilon_t - \alpha^2\varepsilon_t^e - \alpha^2 v_t + \alpha u_t + \beta\varepsilon_t - \beta\lambda(\zeta - q_{t-1}) - \beta v_t = 0$$

$$\Rightarrow (\alpha^2 + \beta)\varepsilon_t = \alpha(KY^* - \bar{Y}) + \alpha^2\varepsilon_t^e + (\alpha^2 + \beta)v_t - \alpha u_t + \beta\lambda(\zeta - q_{t-1})$$

$$\Rightarrow \varepsilon_t = \frac{\alpha}{\alpha^2+\beta}(KY^* - \bar{Y}) + \frac{\alpha}{\alpha^2+\beta}\varepsilon_t^e + v_t - \frac{\alpha}{\alpha^2+\beta}u_t + \frac{\beta}{\alpha^2+\beta}(\zeta - q_{t-1}) \qquad (a7)$$

This implies that, in a flexible exchange rate regime, the change in exchange rate totally absorbs real exchange rate shock and partially absorbs output shock. Substituting equation (a7) into (a6) yields,

$$L^{Flex} = \{\bar{Y} + \frac{\alpha^2}{\alpha^2+\beta}(KY^* - \bar{Y}) + \frac{\alpha^3}{\alpha^2+\beta}\varepsilon_t^e + \alpha v_t - \frac{\alpha^2}{\alpha^2+\beta}u_t$$

$$+ \frac{\alpha\beta}{\alpha^2+\beta}\lambda(\zeta - q_{t-1}) - \alpha\varepsilon_t^e - \alpha v_t + u_t - KY^*\}^2 + \beta\{\frac{\alpha}{\alpha^2+\beta}(KY^* - \bar{Y})$$

$$+ \frac{\alpha^2}{\alpha^2+\beta}\varepsilon_t^e + v_t - \frac{\alpha}{\alpha^2+\beta}u_t + \frac{\beta}{\alpha^2+\beta}\lambda(\zeta - q_{t-1}) - \lambda(\zeta - q_{t-1}) - v_t\}^2$$

Canceling similar terms with opposite signs and collecting terms yields,

$$L^{Flex} = \{\frac{\beta}{\alpha^2+\beta}\bar{Y} - \frac{\beta}{\alpha^2+\beta}KY^* - \frac{\alpha\beta}{\alpha^2+\beta}\varepsilon_t^e + \frac{\beta}{\alpha^2+\beta}u_t + \frac{\alpha\beta}{\alpha^2+\beta}\lambda(\zeta - q_{t-1})\}^2$$

$$+ \beta\{\frac{\alpha}{\alpha^2+\beta}(KY^* - \bar{Y}) + \frac{\alpha^2}{\alpha^2+\beta}\varepsilon_t^e - \frac{\alpha}{\alpha^2+\beta}u_t - \frac{\alpha^2}{\alpha^2+\beta}\lambda(\zeta - q_{t-1})\}^2$$

$$= (\frac{\beta}{\alpha^2+\beta})^2(\bar{Y} - KY^* - \alpha\varepsilon_t^e + u_t + \alpha\lambda(\zeta - q_{t-1}))^2$$

$$+ \beta(\frac{\alpha}{\alpha^2+\beta})^2(KY^* - \bar{Y} + \alpha\varepsilon_t^e - u_t - \alpha\lambda(\zeta - q_{t-1}))^2$$

$$= (\frac{\beta}{\alpha^2+\beta})^2(\bar{Y} - KY^* - \alpha\varepsilon_t^e + u_t + \alpha\lambda(\zeta - q_{t-1}))^2$$

$$+ \beta\left(\frac{\alpha}{\alpha^2+\beta}\right)^2\left(\overline{Y} - KY^* - \alpha\varepsilon_t^e + u_t + \alpha\lambda(\zeta - q_{t-1})\right)^2$$

$$= \frac{\beta^2+\beta\alpha^2}{\left(\alpha^2+\beta\right)^2}\left(\overline{Y} - KY^* - \alpha\varepsilon_t^e + u_t + \alpha\lambda(\zeta - q_{t-1})\right)^2$$

$$= \frac{\beta}{\alpha^2+\beta}\left(\overline{Y} - KY^* - \alpha\varepsilon_t^e + u_t + \alpha\lambda(\zeta - q_{t-1})\right)^2 \qquad \text{(a8)}$$

If exchange rate is fixed it implies that $\varepsilon_t = 0$ and $c(\varepsilon) = 0$. Substituting these relationships into equation (a8) yields,

$$L^{Fix} = \{\overline{Y} - \alpha\varepsilon_t^e - \alpha v_t + u_t - KY^*\}^2 + \beta\{-\lambda(\zeta - q_{t-1}) - v_t\}^2$$
$$= \{\overline{Y} - KY^* - \alpha\varepsilon_t^e + u_t - \alpha vt\}^2 + \beta\{\lambda(\zeta + q_{t-1}) + v_t\}^2$$

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THE DAY-OF-THE-WEEK EFFECT ON THE SANTIAGO STOCK EXCHANGE OF CHILE

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ABSTRACT

This empirical investigation examines the daily return data on the market index, IPSA, of the Santiago Stock Exchange of Chile to ascertain the presence of the day-of-the-week effect. The study utilizes the recent 68-month period from January, 2003 through August, 2008. During this period, the Chilean stock market gained almost 190 percent. Studies of equity markets around the world, both, developed and developing markets, have suggested that the market returns tend to depend on the day of the week itself. Most often such an effect has been found because of the significantly negative returns on Mondays and a diametrically opposite evidence for Fridays. Some recent studies however have questioned the continuing presence of such an effect in the U.S as well as in a few other national markets. To determine the presence of this anomalous effect, this study relies on the GARCH methodology. The findings indicate a persistent presence of the day-of-the-week effect in the Chilean market throughout the study period. However, our results are sample period specific. While in the first sub-period, the said effect was caused by the traditional Monday-Friday pattern, in the second sub-period, the anomalous effect was attributable to the significantly positive Wednesday returns. Moreover, this study finds that the daily returns on the Santiago Stock Exchange are far more dependent on the previous day's returns than on the day of the week.

INTRODUCTION

Finance literature offers extensive evidence of the day-of-the-week effect in both, developed and developing markets. The Monday returns for the equity markets have been found to be the lowest of the week and often negative. Simultaneously, the Friday returns have been documented to be the highest of the week. Several recent studies have questioned the day-of-the-week effect results uncovered by relying on the OLS methodology (see for example, Connolly (1989), Chang, et al. (1993) and Dubois and Louvet (1996)). And yet, the use of the more robust econometric techniques has not always led to disputing the OLS method based findings regarding the presence of the anomalous effect. For example, while Alexakis and Xanthakis (1995) and Kamath, et al. (1998) have reported that the evidence on the anomalous effect in their studies was methodology independent, the Chen, et al. (2001) paper concluded that their findings were both, the estimation methodology specific as well as the sample period specific.

The objectives of this study are to determine if there is evidence of the day-of-the-week effect on the emerging equity markets of Chile and to ascertain if the findings on "the effect" are sample period specific. Bollerslev's GARCH methodology is utilized in this study of the Santiago Stock Exchange of Chile. To meet the stated objectives, we utilize the daily data of the Selective Stock Price Index, IPSA (Indice de Precios Selectivo de Acciones) over the most recent 68-month period from January, 2003 through August, 2008.

PREVIOUS RESEARCH

Numerous studies of seasonal anomalies in the equity markets can be found in finance literature. The empirical evidence on the presence of the day-of-the-week effect occupies a central role in these studies. The well known articles by French (1980), Gibbons and Hess (1981), Keim and Stambaugh (1984), among others have indicated that the market returns tend to be dependent on the day of the week. Lakonishok and Smidt (1988) found that such an anomalous effect was present in the Dow Jones dating back to 1897. In an overwhelming majority of the older studies, the OLS methodology was utilized to detect :the effect. Connoly (1989) was one of the first researchers who argued that the return distributional characteristics of stock markets did not advocate the use of the OLS method. Connolly's findings suggested that the intensity of the day-of-the-week effect had weakened considerably after 1975. The results of the post-1975 sub-periods of Keim and Stambaugh (1984), Rogalski (1984), Smirlock and Starks (1986) and Condoyanni, et al. (1987) in fact showed a much reduced intensity of the anomalous effect.

Following Connolly (1989), studies by Chang, et al. (1993) and Dubois and Louvet (1996) also presented evidence which questioned the presence of "the effect". Chang, et al. (1993) noted that the day-of-the-week effect had become insignificant in the post-1986 period in the U.S., Belgium, Denmark and Germany even though such an effect was very much present in Canada, Hong Kong and seven European markets. Dubois and Louvet (1996) documented that "the effect" had vanished in the post-1985 sub-period in the U.S., Canada, Japan, Germany and Australia. Wilson and Jones (1993) study however found "the effect" to be glaringly present in four U.S. market indices even after making corrections for the non-normality of the data.

The day-of-the-week effect has been examined for equity markets around the world. Kamath, et al. (1998) present findings on this effect in 20 national markets in a tabulated form. The said effect has been investigated for the markets of Canada, Finland, France, Germany, Greece, Italy, the Netherlands, Spain, Sweden, Switzerland, Turkey, the U.K., Australia, Hong Kong, China, Japan, South Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, Taiwan, Israel, Argentina, Brazil, Chile, Columbia, Mexico, Peru and Venezuela. With some exceptions, a persistent day-of-the-week effect has been reported in most markets. The papers by Ho (1990), Lee, et al. (1990) and Wong, et al. (1992) found the returns to be positive on all days of the week as was found by Lauterback and Unger (1992) in Israel. In many cases, the findings

for certain markets are not consistent either because of the methodological differences or because of the sample period differences or both. For example, in case of Spain, Santemases (1986) found absence of "the effect" while Chang, et al. (1993) found a robust presence of "the effect" during the 1986-1992 period. Hui (2005) found evidence of the said effect in Singapore but not in South Korea, Hong Kong and Taiwan. Tong (2000) concluded that a Monday effect existed in the U.S. and fifteen markets outside the U.S. A recent study by Mazumdar, et al. (2008) found that the day-of-the-week effect patterns exist even for ishares of 17 countries. They conclude that trading based on "the effect" "outperforms a buy-and-hold strategy for most ishares" (p 714).

In a 2001 study of the said effect in China, Chen, et al. conclude that, "The evidence of the day-of-the-week anomaly in China is clearly dependent on the estimation method and sample period" (p 139). In the present study we attempt to evaluate if the findings on the anomalous effect in Chile are in fact sample period specific. In the case of South Korea, Kamath and Chusanochoti (2002) found such an effect to be rather robust in the decade of the 1980s but to have completely disappeared in the decade of the 1990s regardless of the methodology used. Easton and Faff (1994) for Australia, Alexakis and Xanthakis (1995) for Greece and Kamath, et al. (1998) for Thailand documented that their conclusions regarding the presence of "the effect" were unaffected by the methodology used for detecting it.

DATA AND METHODOLOGY

This investigation utilizes the daily closing index prices of the IPSA, the equity market index of the Santiago Stock Exchange of Chile, from January, 2003 through August, 2008. This data gave rise to a total of 1411 daily rates of return. The IPSA is a value weighted index made up of the 40 most actively traded stocks. The composition of the IPSA is revised quarterly. This index has been computed since 1977. The Santiago Stock Exchange is open from Monday through Friday except for holidays.

The information on the closing prices of the IPSA and the daily returns are summarized in Table 1. The IPSA began the year 2003 at 1008 and on the last trading day of August, 2008, it closed just over 2,895. Accordingly, IPSA rose 189 percent over the 68-month period. The Chilean market gained in each of the five full calendar years covered by the study. The ending index in August, 2008 was about 605 points below the 2007 high closing of almost 3,500. The daily returns were calculated using equation (1) in which R_t is the daily return on the index, IPSA, and P_t and P_{t-1} are the index closing prices on day t and t-1, respectively.

$$R_t = ((P_t/P_{t-1})-1) \times 100 \qquad (1)$$

Descriptive statistics of the daily returns on the IPSA are summarized in Table 2. This table displays the relevant statistics for the overall 68-month period covered in this study as well as for the two 34-month sub-periods. An inspection of Table 2 reveals some interesting facts.

First, the mean daily returns are positive in all three periods. Second, even though the mean daily return in the second sub-period is about one half of the same in the earlier period, it is accompanied by a much larger standard deviation. Accordingly, the coefficient of variation of daily returns (risk per unit of return) can be computed to be 20.76 in the second period as compared to a value of 7.49 in the first period (not shown in the table). Third, the median return is actually larger in the second period than in the first. Fourth, the distributions of daily returns are found to be negatively skewed in all three periods. Moreover, the kurtosis values noted are considerably larger than 3.0 in the overall and the second period and thus exhibiting fatter tails than the normal distribution. To further emphasize this distinction, we present a comparison of the distributional characteristics of the IPSA with the theoretical normal distribution in Table 3. The Jarque-Bera test statistics shown in Table 2 reject the normality hypothesis at the 1 percent level for the IPSA returns in all three study intervals. These distributional findings of the Chilean stock market index are comparable to those of numerous international markets in studies by Chang, et al. (1993), Corhay and Rad (1994), Easten and Faff (1994), Kamath, et al. (1998), Chen, et al. (2001) and Hui (2005).

Table 1: Raw Data of the Santiago Stock Exchange Index (IPSA) of Chile, 1/2003-8/2008

Time Period	1/1/2003-12/31/2003	1/1/2004-12/31/2004	1/1/2005-12/31/2005	1/1/2006-12/31/2006	1/1/2007-12/31/2007	1/1/2008 8/31/2008
Highest Index	1,585.78	1,825.34	2,214.07	2,712.81	3,499.50	3,096.11
Close Date	10/21/03	12/22/04	08/02/05	12/27/06	07/03/07	05/29/08
Lowest Index	982.17	1,390.63	1,710.07	1,939.60	2,689.19	2,427.11
Close Date	01/27/03	05/10/04	01/12/05	01/02/06	01/02/07	01/21/08
Last Day Index Close	1,484.80	1796.48	1,964.47	2,693.36	3,051.83	2,895.25
Return for the year %	46.43	20.99	9.35	37.10	13.31	(5.13)

Table 2 also contains the Box-Pierce Q (23) statistics of the three rates of return series. These statistics are found to be significant in all three study intervals thereby indicating that significant linear dependencies exist in all three return series. However, when the Q (23) measures are adjusted for heteroskedasticity, the resulting measures, Adj Q (23), are found to be insignificant in both sub-periods. The $Q^2(23)$ figures, the values of the Box-Pierce statistics for the squared return series are found to be significant in all three test intervals which suggest the rejection of the null hypothesis of conditional homoskedasticity.

Table 2 : Summary Statistics of Daily Stock Index (IPSA) Returns in Chile, 1/2003 - 8/2008												
Period	N	Mean %	Median %	Max.	Min.	Std.dev. %	Coeff.of Skewness	Coeff. of excess Kurtosis	Jarque-Bera test	Q(23) statistic	Adj. Q(23) statistic	Q^2 (23) statistic
1/2003-8/2008	1411	0.08	0.106	5.804	-5.03	0.97	-0.33	6.33	678.7**	72.7**	42.1*	631.7**
1/2003-10/2005	711	0.106	0.094	2.819	-3.044	0.794	-0.14	3.49	9.3**	44.3**	34	135.5**
11/2005-8/2008	700	0.054	0.124	5.804	-5.03	1.121	-0.35	6.24	321.2**	47.0**	31.5	275.9**
** and * represent significance levels of 1 and 5 percent, respectively												

Table 3: A comparison of Santiago Stock Index Return Distributions with the Normal Distribution, 1/2003-8/2008						
Normal Distribution	1S.D.	2S.D.	3S.D.	4S.D.	5S.D.	>5S.D.
Interval	0.6826	0.9545	0.9973	0.9999	0.9999	0.0000
1/2003-8/2008	0.7392	0.9546	0.9887	0.9943	0.9972	0.0028
1/2003-10/2005	0.6850	0.9536	0.9930	1.0000	1.0000	0.0000
11/2005-8/2008	0.7543	0.9500	0.9871	0.9943	0.9986	0.0014

The non-normal distributional attributes of the IPSA discussed above do not recommend the use of the Ordinary Least Squares (OLS) method which was the method of choice in an overwhelming number of studies conducted to detect the day-of-the-week effect prier to the 1990s. Therefore, we rely on a methodology which can capture the time dependence of return variability. Bollerslev's Generalized Autoregressive Conditional Heteroskedasticity (GARCH) model (1986) is our choice of methodology in the present study. The GARCH (p, q) model is given by equation (2) in which ε_t is the regression error term conditional on the information set ϕ at t-1, and h_t is the conditional variance dependent on past squared errors (return shocks).

$$Y_t = \alpha + \beta X_t + \varepsilon_t,$$
$$\varepsilon_t/\phi_{t-1} \sim N(0, h_t),$$
$$h_t = \alpha_0 + \sum_{i=1}^{p} \alpha_i \varepsilon^2_{t-i} + \sum_{j=1}^{q} \beta_j h_{t-j} \qquad (2)$$

To ascertain the presence of the day-of-the-week effect in the Chilean stock market, we utilize the GARCH (1,1) model suggested by French, et al. (1987) and Corhay and Rad (1994), among others for the study of equity market returns. The precise model relied upon in this study

is depicted by equation (3). In this equation, R_t is the daily return, and d_1-d_4 are the dummy variables for Monday through Thursday, respectively, and d_0 is the dummy variable for Friday.

$$R_t = d_0 + d_1M_t + d_2T_t + d_3W_t + d_4Th_t + d_5F_t + \beta R_{t-1} + \varepsilon_t$$
$$\varepsilon_t/\phi_{t-1} \sim N(0, h_t), \text{ and}$$
$$h_t = \alpha_0 + \alpha_1\varepsilon^2_{t-1} + \alpha_2 h_{t-1} \qquad (3)$$

EMPIRICAL FINDINGS

The means and standard deviations of the returns of each day of the week on the IPSA for the overall period and two 34-month sub-periods are contained in Table 4a. The Wednesday mean returns are found to be significantly different from zero in all three study intervals. While the Monday mean returns are found to be significantly negative in the overall period and in the second sub-period, the Friday mean returns are found to be significantly positive in the overall period and in the first sub-period. Table 4a indicates that the Monday mean returns are consistently the lowest returns of the week and that the Wednesday mean returns are the highest returns of the week.

Table 4a: Means and Standard Deviations of Chilean Stock Index Returns Across the Days of the Week, 1/2003-8/2008

Period	1/2003-8/2008		1/2003-10/2005		11/2005-8/2008	
Day	Mean	Std. Dev.	Mean	Std. Dev	.Mean	Std. Dev.
Monday	-0.119*	0.921	-0.037	0.853	-0.203*	0.982
Tuesday	0.007	1.112	0.128	0.851	-0.119	1.324
Wednesday	0.220**	0.959	0.173**	0.759	0.267**	1.126
Thursday	0.147*	0.980	0.091	0.777	0.204*	1.147
Friday	0.134**	0.819	0.169**	0.711	0.099	0.914
**and* represent significance levels of 1 percent and 5 percent, respectively						

We further examine the mean daily returns in Table 4b in which the percentage of times the IPSA returns were positive on each day of the week are presented. In the overall study period, the Monday return was positive in less than 50 percent of the time while the Friday return was positive in more than 60 percent of the time. In the second sub-period, the Monday return was positive on less than 42 percent of the time while the Wednesday and the Friday returns were positive more than 61 percent of the time.

.**Table 4b: Percentage of days the Chilean stock index returns were positive, 1/2003-8/2008**			
Period	1/2003---8/2008	1/2003---10/2005	11/2005---8/2008
Monday	48.70	55.47	41.67
Tuesday	51.22	55.78	46.43
Wednesday	59.09	56.94	61.27
Thursday	56.25	53.47	59.03
Friday	60.14	58.99	61.27

Since the distributional characteristics of the Chilean Stock market index were found to be non-normal and exhibited both, linear and non-linear dependencies, we present the evidence on serial correlation in this index in Table 5. The tabulated results indicate that the IPSA returns are significantly correlated with the previous day's return. The Q (23) statistics pertaining to the OLS errors from the first order autoregressive model are found to be significant in two of the three study intervals. Yet, when these errors are adjusted for heteroskedasticity, the resulting Adj Q (23) statistics are insignificant in all three study intervals. The tabulated results also indicate that the Q^2 (23) statistics pertaining to the square of the error terms are very much significant in all three periods. These findings support our decision to utilize the GARCH methodology in this investigation which can account for the heteroskedasticity in the return data.

Table 5: Autoregressive model: statistics of daily residual series of the Santiago Stock Exchange of Chile returns, 1/2003-8/2008					
$R_{t} = \alpha_0 + \alpha_1 R_{t-1} + \varepsilon_t$					
Period	α_0	α_1	Q(23) Statistic	Adj. Q(23) statistic	Q^2 (23) Statistic
1/2003	0.068**	0.149**	41.0*	28.8	668.6**
-08/2008	(2.66)	(5.65)			
1/2003	0.085**	0.196**	17.3	15.6	101.6**
-10/2005	(2.89)	(5.31)			
11/2005	0.046	0.123**	35.1*	25.7	293.2**
-08/2008	(1.09)	(3.28)			
** and * represent significance levels of 1 and 5 percent, respectively					

The results of the GAPCH (1, 1) estimation are summarized in Table 6. Several observations can be made from these tabulations. First, the daily returns in the Chilean equity market are more dependent on the returns of the previous day than on the day of the week itself (β). In the first 34-month sub-period as well as in the overall period, there is evidence of the day-of-the-week effect on the IPSA attributable to the negative Monday returns and the positive Friday returns. Third, in the second 34-month sub-period, the day-of-the-week effect is still present but not because of Monday or Friday. In this sub-period, the Wednesday's returns are the

cause of "the effect." Thus, even though we have detected a persistent presence of the day-of-the-week effect on the Santiago Stock Exchange over the recent 68-month period, the underlying findings are sample period specific. In this respect, our findings echo the sentiments expressed by the Chen, et al. study (2001). Fourth, the likelihood ratios (LR) which measure the relative fit of the GARCH model as compared to that of the OLS model indicate the significantly superior fit of the GARCH (1,1) model utilized in this study. Fifth, in all three estimations of Table 6, the parameters α_1 and α_2 are found to be statistically significant at the one percent level. The additions of these two parameters are found to equal 0.973, 0.960 and 0.984 in the overall period, in the first sub-period and in the second sub-period, respectively. These sums which are near 1.0 suggest that the shocks to volatility tend to persist over time.

Table 6: Day-of-the–week effects on the Santiago Stock Exchange of Chile: Garch (1, 1) results[a,b], 1/2003-8/2008

Period	d_0	d_1	d_2	d_3	d_4	β	α_0	α_1	α_2	LL	LR
1/2003	0.129**	-0.179**	-0.03	0.081	-0.015	0.161**	0.031**	0.170**	0.803**	-1770.5	320.4**
-8/2008	(2.75)	(-2.72)	(-0.48)	(1.28)	(-0.22)	(5.78)	(3.18)	(7.02)	(28.4)		
1/2003	0.158*	-0.245**	0.005	-0.008	-0.066	0.184**	0.026*	0.118**	0.842**	-798.2	54.2**
-10/2005	(2.39)	(-2.80)	(0.05)	(-0.09)	(-0.73)	(4.77)	(1.98)	(3.69)	(20.69)		
11/2005	0.084	-0.076	-0.072	0.198*	0.054	0.133**	0.041*	0.227**	0.757**	-964.0	185.7**
-8/2008	(1.27)	(-0.74)	(-0.77)	(2.16)	(0.53)	(3.23)	(2.34)	(5.84)	(19.17)		

a. LL: Log likelihood value and LR: likelihood ratio.
b. **and* represent significance levels of 1 and 5 percent, respectively

SUMMARY

The objective of this study was two fold: first, to ascertain if the returns on the Santiago Stock Exchange of Chile exhibited the day-of-the-week effect and second, to determine if the uncovered evidence on the said effect was sample period specific. To meet these objectives, this investigation examined the daily data on the Selective Stock Price Index, IPSA over the two recent 34-month sub-periods from January, 2003 through August, 2008. Over this 68-month period, the Chilean Stock market gained about 190 percent.

The findings of the study revealed that the day-of-the-week effect was present during both sub-periods of the study. However, different days of the week were responsible for the detected effect. Specifically, in the first 34 months of the study, the said effect was found to exist because of the negative Monday returns and the positive Friday returns as has been reported for numerous equity markets around the world. In the second 34 months of the study, the presence of the day-of-the-week effect was neither attributable to Mondays nor Fridays; instead, it was caused by the significantly positive returns on Wednesdays. Thus, even though the said effect has persisted over the entire study period, our conclusions in this respect are sample period

specific. Moreover, both the GARCH (1,1) formulation as well as the first order autoregressive formulation indicated that yesterday's return in the Chilean stock market is a significant determinant of today's return. In other words, the lagged return effect was more significant than the day-of-the-week effect.

ENDNOTES

1. See for example, Jaffe and Westerfield (1985), Aggarwal and Rivoli (1989), Condoyanni, et at. (1987), Lee, et al. (1990), Solnik and Bousquet (1990), Ho (1990), Barone (1990), Lauterbach and Unger (1992), Wong, et al. (1992), Santemases (1986), Chang, et al. (1993), Alexakis and Xanthakis (1995), Eastcn and Faff (1994), Martikainen and Puttonen (1996), Kim (1998), Kamath, et al. (1998), Kamath and Chusanachoti (2002), Chen, et al. (2001), Demirer and Karan (2002), Hui (2005), Steely (2001), Dubois and Louvet (1996), Lee and Chang (1988), Tong (2000), Cabello and Ortiz (2004), among others.

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CAREER INTEREST IN INTERNATIONAL BUSINESS: A COMPARATIVE STUDY OF PERUVIAN, CHILEAN AND US STUDENTS

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ABSTRACT

The growth and expansion of international markets has provided many opportunities for students to pursue work careers all over the world. Many companies which have expanded globally are in need of finding talented, interested and capable workers to accept job assignments in their foreign offices. Identifying who the potential candidates for foreign job assignments is an important human resource task. The purpose of this paper is to explore the perceptions of business students in relation to their knowledge and interests in working in a foreign country. The results indicate that Europe and Latin America are areas of the world that appear to be of more interest to students than others. Intuitive observation indicates that because most people are more familiar with these areas of the world, more interest and motivation to work in these geographic areas would be higher. Statistical analyses are conducted. Implications for businesses are set forth in the discussions.

INTRODUCTION

The growth and expansion of international markets has created many new opportunities for students to pursue work careers all over the world. Many companies which have expanded globally are in need of finding talented, interested and capable workers to accept job assignments in their foreign offices. Identifying who the potential candidates for foreign job assignments is an important human resource task. For a long time, American and European companies have been recruiting student graduates responsive to working in international settings (Foster & Johnsen, 1996; Laabs, 1991; Scullion, 1992; Stroh & Caligiuri, 1998; Solomon, 1994; Weeks, 1992) for some time. Newly trained professionals are an important pool of management talent available to meet the needs of global and multinational firms. These students are the future of business because they not only provide the intellectual capital for the present work plans but they also offer human resources that will determine international business of the future (Laabs, 1991; Scullion, 1992; Solomon, 1994; Weeks, 1992).

The direction that new recruits to international work settings choose for adapting to their new work environments has been the topic of management research for over two decades (e.g.,

Van Mannen and Schein, 1979; Nicholson, 1984; Fisher, 1986; Chao,et al., 1994). This research is important in international business mainly because of the difficulty connected with newcomers adjustment to new work roles, organizational cultures, and national cultures (Black et al., 1991). The complexities are well documented in the international literature especially with the reports of high expatriate premature return rates (e.g., Tung, 1981; Shay and Tracey, 1997) and the great costs related to premature staff returns to home offices (e.g., Caudron, 1991; Kraimer et al., 2001).

To add to the insights of how potential candidates may think about an international assignment for their professional work, we reviewed prior literature regarding student receptivity to accepting an international work assignment. We begin by presenting an overview of international effectiveness literatures. We then present the theoretical rationale for our model. Next, we use opinions of 229 students who completed a survey regarding their knowledge of a particular part of the world and their willingness to accept an assignment in that part of the globe. Further, we analyzed this data by comparing relationships between those who have visited a country and those who have not, along with those who speak a foreign language and those who do not. Finally, we present our findings and discuss their implications.

LITERATURE REVIEW

Receptivity to international employment is an important concept. It has been studied by various scholars in cross-sectional environments (Aryee,Chay, & Chew, 1996;Bois & Rothstein, 2002; Brett& Stroh, 1995, Clegg & Gray, 2002). There is evidence that multiple streams of research regarding success in international assignments have been conducted. A number of recruiting strategies have been employed to secure professionals for a global work force (Fedlman, 2001; Weeks, 1992). Many firms assess skills of prospective expatriates in an effort to select individuals most likely to succeed in the assignment (Graf, 2004; Van Vianen, DeParter, Kistof-Brown & Johnson, 2004). Successful expatriate assignments have been linked to a number of variables, including one's predisposition for such an assignment (Tharenou, 2003), training and preparation prior to the assignment (Shay & Baack, 2004), intuition and creativity (Harvey & Novicevic, 2002) and cultural differences (Jassawalla, Truglia, & Garvey, 2004, Sims & Shrader, 2004).

Solomon (1994) and Laabs (1991) showed how U.S. global companies seek new business graduates from aboard for their graduates recruitment programs. The labor needs of global and multinational firms for graduates from abroad are consistent with young graduates self-initiating work opportunities (Hugo, Rudd, & Harris, 2001).

Why is the study of students relevant? First, understanding the receptivity to working abroad of young professionals can assist companies in their recruitment and search for new talent (Laabs, 1991;Scullion, 1992; Solomon, 1994; Weeks, 1992). Second, scholars advocate understanding students receptivity to international careers because they are the next generation of

managers (Adler, 1986, Hill & Tillery, 1992). Third, by studying students who are contemplating entering the work force or who are considering different employment once they finish their education, strategies can be developed as to how to better recruit and attract them to international occupations.

RESEARCH HYPOTHESES

The globalization of the world has opened up unlimited opportunities for students to work in many locations around the world yet there is not a major rush to obtain these lucrative jobs. As such, this study attempts to analyze and understand the factors that contribute to a college student's interest and desire to seek a professional position abroad. The research question posed in this paper is: What factors affect or motivate a students desire to seek professional employment abroad? To develop this question and more thoroughly understand the substance of the factors associated with a students interest in a foreign country career we developed five (5) major hypotheses.

Generally, students who are thinking about professional opportunities have various sources of information that allows them to sort out and develop a point of view for making their decision(s). Many times the age of a student will determine whether they can immediately pursue a adventure in a foreign country. For a students who is "unattached," traveling to another country is a lark. Younger students have not settled down yet and for some career goals are not solidly developed. As such, foreign travel provides an exciting growth experience for them and it is very appealing. Older students generally have a set goal and in many cases are looking for a steady, professional career that will provide a comfortable living for them and their families (Tharenou 2003). Because of this state of affairs we assert that :

H1 There is a significant difference between older and younger students in their desire to work abroad.

Historically, it has been a general belief that men are the primary career individual occupying professional positions in foreign companies. The global economy, however, has offered varied opportunities for many people to advance their careers from many dimensions. Women especially have been able to pursue careers that have been very advantageous and helpful in there development. Studies by Taylor et al, (1996) indicate that the number of women moving into foreign career jobs has increased.

H2 There exists a significant difference between men and women in their desire to work abroad.

Those students who have lived abroad appear to have more interest in pursuing careers abroad. Familiarity with the culture and the geography offers information and evidence that

students can tangibly sort out and make solid decisions based on this actual assimilation into the culture (Selmer & Lam, 2004). Thus we posit that:

H3: There is be a significant difference in the interest to work abroad between students who have lived abroad for 60 days and those who have not.

Safety has always been a major factor for people from all cultures traveling in unknown areas of the world. Over the last 5 years, the intensity of ethnocentrism among countries has grown broader and more intense. Such ideas and emotional feelings about the nationality of a person, especially students can have a major effect on their desire to not only travel but work abroad. Therefore we believe that:

H4: There is a major concern about safety among American students seeking professional careers aboard

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Clearly, language fluency has been demonstrated repeatedly that it contributes significantly to the ability and motivation of a person to work abroad. Students proficient in a foreign language will have an increased desire and an ability to demonstrate success in their work assignments and travel (Nicholson & Imaizumi, 1993, Victor, 1992). With this idea in mind we propose that:

H5: There is be a significant difference between students who possess language ability than those who do not.

DATA ANALYSIS AND RESULTS

Data for this paper was collected from students through a self-administered survey. Work values were measured via Manhardt's (1972) three-dimensional scale. In general, Manhardt's work has been supported in subsequent tests, although the dimensions-comfort and security, competence and growth, and stauts and independence have changed slightly in several studies (Brenner & Tomkiewicz, 1982; Meyer, Irving, & Allen, 1998). Students from three major universities in Pennsylvania, West Virginia and Florida were surveyed regarding there knowledge, interest and desire to work abroad. A total of 228 students are included in the data set for this study.

Table 1 above shows the mean students' response on their knowledge of and their job interest in different regions of the world and the same in a few selected countries. The table segregates the results by the countries where the data was collected. It makes it possible to compare the students' responses to region and country knowledge and desire in job assignments among the three groups of students.

Table 1: Desire for Job Assignments and Knowledge						
Job Region	Level of Knowledge			Desire for Job Assignment		
	Peru Mean	Chile Mean	USA Mean	Peru Mean	Chile Mean	USA Mean
Scandinavia	1.79	2.05	2.12	2.27	2.11	2.20
Eastern Europe	2.03	3.57	2.02	2.44	3.18	2.18
South America	3.74	2.11	2.33	3.43	2.57	2.11
Central America	2.35	2.45	2.17	2.28	3.26	1.97
North Africa	1.73	1.98	1.93	1.29	1.94	1.64
South-Central Africa	1.46	1.49	1.70	1.45	1.54	1.48
East Africa	1.43	1.51	1.74	1.40	1.51	1.45
West Africa	1.47	1.38	1.72	1.50	1.33	1.42
North America	3.62			3.86		
Job Country						
Australia	2.86	2.87	2.62	3.43	3.89	3.07
UK	3.22	2.98	2.87	3.49	3.51	2.79
Canada	3.12	2.93	3.19	3.56	3.87	2.76
Germany	2.97	3.07	2.69	2.97	3.57	2.40
France	3.24	3.26	2.69	3.50	3.83	2.25
Japan	2.71	2.28	2.40	2.60	2.44	2.19
Mexico	3.33	3.26	2.88	2.82	3.20	2.06
China	2.45	2.78	2.45	2.37	2.81	1.97
Russia	2.22	2.33	2.16	2.17	2.45	1.75
South Africa	2.03	2.00	1.96	2.14	1.98	1.75
India	1.87	2.05	2.02	1.79	2.15	1.64
Korea	1.81	2.58	2.02	1.78	2.99	1.62
USA	4.05			3.95		

REGION AND COUNTRY KNOWLEDGE

In general, as Table 1 shows, the students did not report a high level of knowledge for any region. The only exceptions to this are the Peruvian students reported knowledge of South America and the Chilean students' knowledge of Eastern Europe had mean responses exceeding 3.50. The US students' mean response on knowledge of African regions, though low (below 2.0), exceeded the mean responses for the Peruvian and Chilean students. The mean response to level of knowledge generally is higher for individual countries. The Peruvian students reported

high mean scores (above 3.0) for UK, Canada, France, and Mexico. The Chilean students reported higher mean responses (above 3.0) for Germany, France and Mexico. In general, the mean scores on country knowledge are higher than that for the regions. This is because the regions presented to the student, did not include the Western Europe or the North America. Countries in these two regions received the higher level of knowledge scores from the students. Peruvian students provided a very high mean response values for North America region and the highest mean response for the USA. This is not surprising due to the salience of the USA in the Americas. The questionnaire used in Chile inadvertently excludes the North America and the USA, so we do not have the Peruvian students' knowledge scores for these two items.

The students from Peru and Chile, compared to the US students indicated a higher level of knowledge for all but two countries included in the survey. The exceptions were India and Korea where the Peruvian students indicated a lower level (mean response below 2.0) of knowledge. Except for these two examples, and the US students' response to level of knowledge about South Africa, mean responses for all other countries were above 2.0 for all the three groups of students. The Peruvian students' mean responses for the UK, Canada, France and Mexico and the Chilean students' mean responses for Germany, France and Mexico were especially high (above 3.0). The US students indicated such high level of knowledge only for Canada. The Peruvian students, not surprisingly, indicated an above 4.0 level of knowledge for USA. As indicated above, we do not have date on USA for the Chilean students and including USA for the US questionnaire would not have made sense.

DESIRE FOR FOREIGN JOB ASSIGNMENT

Students' in Peru indicated higher mean response to job interest in Scandinavia, Eastern Europe, South and Central America. The mean response is greater than 2.0 for these regions. The response of the students from Chile is similar in this respect. The US students' responses have a similar profile, but they indicated a lower job interest for Central America than the students from Peru and Chile. All the three student groups rated their job interest in North Africa, South-Central Africa and East and West Africa as low (less than 2.0 mean response).

The students from Peru indicated higher job interest for South America (mean response 3.43). Students from Chile indicated high level of job interest (above 3.0) for Eastern Europe and Central America. The response on job interest in the Scandinavia, the three groups have the mean response below 2.5. For the Eastern Europe, South America and Central America regions, the students from Peru and Chile indicated a higher degree of job interest than their US counterparts. In general, it can be concluded that the students from Chile and Peru reported higher job interest about certain regions than their US counterparts.

In terms of students' interest in job assignment in different selected countries, there were some clear differences among the responses from students from the three countries. The students from Peru and Chile, compared to the US students, consistently showed higher interest in job

assignments in all the listed countries. The US students had the highest job interest for Australia (mean response 3.07). Students from Peru and Chile also indicated high job interest in Australia and, as mentioned before, their mean responses were higher than that for the US students. Similar pattern can be seen in responses for UK, Canada, Germany, France, Japan and Mexico.

The Peruvian students indicated highest job interest for Canada, UK, France, and Australia with mean responses well above 3.0. The highest mean response of 3.95 was for USA. It can safely be said that the USA and the Western Europe will be destination of choice for the Peruvian students. These students also indicated strong preference for Germany, Japan, Mexico, China, Russia, and South Africa. Their mean response on job interest item was above 2.0 for these countries. India and Korea held only a weak attraction for the Peruvian students.

The Chilean students also reported very strong job interests (mean response greater than 3.0) in Australia, Mexico, UK and in other Western European countries, Surprisingly, these students showed strong interest in accepting job assignments in all listed countries except South Africa. The data indicates that the Chilean students are more open to job assignments abroad than the students are from Peru or the USA. The US students in comparison indicated the least interest in foreign job assignments.

As far as the knowledge of regions or country is concerned, the students reported a higher levels of knowledge about the countries than of the corresponding regions. The name of the country has the specificity whereas the regions lack it. Globalization and international trade brings people in contact with people and products from other countries. That helps develop familiarity with the countries. The regions lack that anchor points in the students' knowledge map. However, it must be noted, the in spite of the vastness and the potential of the African continent, the students do not seem to know much about it.

The students' desire for job assignments abroad is biased towards the North American and the Western European countries. These countries have powerful economies and global business enterprises. The students are familiar with these countries and their cultures and would appear to be comfortable working there. The globalization, while it affects all economies, has highlighted the life and culture of these countries. Because of such factors, the students have shown a higher level of willingness to accept employment there. It should also be noted, that the US students perceive the USA to offer good job opportunities and a high standard of living and, therefore, the US students do not show a very high interest to accept job assignments abroad.

CORRELATION ANALYSIS

Student's knowledge of a region or a country is likely to affect their desire for job assignment there. Table 2 below presents the correlation coefficients in students' response about knowledge and job interest of a region or a country for the three student groups. All the correlation coefficients are positive and statistically significant. It indicated that the knowledge of a region (RK) or a nation/country (NK) makes a student more interested in accepting job

assignment. Conversely, lack of regional or country knowledge will make a student less interested in working there. However, for students in both Peru and Chile the corresponding correlations are positive and statistically significant. For the Chilean students the correlation between National Interest (NI) and National knowledge (NK) is particularly high (0.615). The US respondents showed a high correlation among regional knowledge (RK) and regional interest (RI) with national knowledge (NK) and national interest (NI) , a pattern similar to that of the other two countries.

Table 2: Correlation Coefficient Between Knowledge and Desire for Job Assignment

Correlation Coefficients	Peru				Chile				USA			
	RK	RI	NI	NK	RK	RI	NI	NK	RK	RI	NI	NK
Regional Knowledge (RK)	1.00	.440*	0.548*	0.217*	1.00	0.457*	0.615*	0.388*	1.00	.432*	.416*	.730*
Regional Interest (RI)	0.440	1.00	0.241*	0.499*	0.457	1.00	0.348*	0.542*	.432*	1.00	.771*	.439*
Nation Interest (NI)	0.548	.241	1.00	0.433*	0.615	0.348	1.00	0.614*	.416*	.771*	1.00	.605*
Nation Knowledge (NK)	0.217	.499	0.433	1.00	0.388	0.542	0.614	1.00	.730*	.439*	.605*	1.00

*: Significant at alpha=0.05

The high and positive correlations indicate either that knowledge of a country creates a kind of "familiarity" that makes the student more interested in accepting a job assignment there, or that the students seek out information about the countries where they are interested in accepting a job assignment. However, the patterns among these correlations appear to indicate that the knowledge and interest have a complex relationship.

THE EFFECT OF AGE

To see if the age of the students has any effect upon their knowledge of a country or upon their desire for accepting a job assignment there, students up to 24 years of age were coded as (YOUNGER) and those above 25 years of age were coded as OLDER. The mean responses to the Country Knowledge and Desire to Work Abroad were then calculated for the two age groups. Table 3 below presents the difference between the mean response on their knowledge of a country and also their interest for job assignments in these countries. The ANOVA tests were carried out to see if there were any statistically significant differences.

As Table 3 shows, the differences in mean responses, with the exception of Chilean students' desire for working in India, are statistically not significant. The older students in Chile

showed more interest than their younger counterparts, in working in India. We can conclude that age is not a major factor in determining the knowledge about or the desire for accepting a job assignment in a country. The results seem to hold true for the US, Peru and Chile.

THE EFFECT OF GENDER

To test if the gender of the respondents has any effect on responses, the data was split between the Male and FEMALE respondents and the mean scores for the responses were calculated for the two groups. The difference in mean responses for male and female groups is given in Table 4 below. ANOVA analysis was conducted to test if the differences in mean response were statistically significant.

Table 3: Difference in Mean Response by Age

	Knowledge of Country			Desire for Assignment		
	Difference by Age			Difference by Age		
	Peru	Chile	USA	Peru	Chile	USA
Australia	-0.08	-0.10	-0.06	-0.24	-0.25	0.04
UK	0.00	-0.02	-0.19	-0.02	-0.05	0.23
Canada	0.36	-0.04	0.07	0.01	-0.10	-0.16
Germany	0.41	0.01	-0.18	-0.21	0.08	-0.05
France	0.16	-0.12	-0.34	-0.06	-0.15	0.03
Japan	0.04	-0.16	-0.16	-0.19	-0.09	0.06
Mexico	0.16	-0.30	-0.02	-0.26	-0.20	0.07
China	0.05	0.04	0.21	-0.04	0.10	0.02
Russia	0.14	-0.07	-0.02	-0.04	0.15	0.22
South Africa	0.00	-0.05	-0.02	-0.02	-0.11	-0.17
India	0.00	-0.06	-0.18	-0.35	-0.28 *	-0.24
Korea	0.04	-0.16	0.02	0.06	-0.47	0.14
USA	0.17			-0.12		

*: Significant at alpha=0.05

Regarding the knowledge of country, the male respondents reported more knowledge about Australia, Japan and Korea. The male respondents in Chile reported more knowledge than

the females about UK, but the female respondents reported more knowledge about Canada than the male respondents.

In the USA, gender difference in the desire for job abroad was significant only for Japan, where male respondents showed significantly higher desire than the female respondents. In Chile, significant difference was found only South Africa. For the Peruvian students, significant differences were found for Mexico and Korea. In all these cases male students indicated a higher level of desire to work in these countries than the female students. In case of Peru, there was no statistically significant difference in the male/female response on knowledge of country.

THE EFFECT OF LANGUAGE ABILITY

To test if the language ability as reflected multilingualism of the respondents has any effect on responses, the data was split between the monolingual and bi/multi-lingual respondents and the mean scores for the responses were calculated for the two groups. The difference in mean responses for two groups is given in Table 5 below. ANOVA analysis was conducted to test if the differences in mean response were statistically significant.

Most students in the USA are monolingual. The result of the analysis shows that those with skills in another language reported a higher degree of knowledge of other countries than those with proficiency only in English. For the US respondents all the mean differences in knowledge were positive. However, only the differences for Germany, France, Mexico, and Korea were statistically significant. Similarly, the multilingual US students also reported a higher level of desire for foreign job assignments.

In comparison to the US students, those from Peru and Chile reported very little difference by their language ability both in the level of knowledge and the desire to work abroad. Language ability does not seem to play an important role in Peru and Chile in this respect. On the knowledge of the country the exceptions are Russia for Chile where the knowledge of the language led to a higher mean response. Similarly, on the desire to work variable, the respondents with language skills showed higher mean response in Chile for Korea.

Learning a foreign language also involves a certain degree of familiarization with the culture, literature, history, and the traditions of the other country. It can be assumed that multilingualism may make an individual not only more knowledgeable about other world regions and countries where the other language is spoken, it may also give confidence to the individual that if a foreign job assignment warrants leaning a new language, the individual will be able to do so successfully. Business organizations may also consider an individual's foreign language skills in the selection process for foreign job assignments. The individual perceptions of other cultures and the desirability of language and cultural skills in successful expatriates, in turn, may make the individual more interested in and desirous of seeking a foreign assignment.

Table 4: Difference in Mean Response by Gender						
	Knowledge of Country			Desire for Assignment		
	Difference by Gender			Difference by Gender		
	Peru	Chile	USA	Peru	Chile	USA
Australia	0.30	0.02	0.32 *	0.19	-0.01	0.03
UK	0.30	0.34 *	0.30	0.32	0.24	0.28
Canada	-0.15	-0.25 *	0.25	-0.30	-0.06	0.12
Germany	0.03	-0.09	0.17	0.31	-0.04	-0.03
France	-0.15	-0.10	0.08	0.02	-0.14	-0.14
Japan	0.03	0.03	0.54 **	0.04	0.20	0.47 **
Mexico	-0.09	0.07	0.23	0.43 **	0.10	0.29
China	-0.20	0.01	0.17	0.15	0.14	0.11
Russia	0.14	0.06	0.32 *	-0.19	-0.10	0.23
South Africa	0.18	0.07	0.20	0.16	0.42 **	0.04
India	0.11	-0.10	0.12	-0.09	-0.10	-0.01
Korea	0.27	0.25	0.33 *	0.50 **	0.71	-0.02
USA	0.14			-0.05		

*: Significant at alpha=0.05
**: Significant at alpha=0.01

DISCUSSION

The global economy requires that the business organizations have access to managerial workforce that is capable and willing to work in foreign countries. The results clearly indicate that the desire to work abroad is highly correlated to an individual's knowledge about a country. The country knowledge appears to make the student feel familiar with the region and thus more willing to accept foreign assignment there. However, students' interest in jobs abroad is higher among those in Peru and Chile than those in the US. The Latin America is characterized by similarity in culture and language. Students in Peru and Chile could be more willing to work in the region, in countries like Brazil or Argentina. This study did not include South American countries in its list, and therefore, we do not have specific information about students interest in jobs in South America. However, the Peruvian and Chilean students consistently reported higher knowledge and job interests in foreign regions and countries.

The study assumed that the younger students will be more willing to accept jobs abroad, since they do not have to consider family relocation issues. However, this study did not find much support for any age based difference. This was true for students in all the three countries

included in this study. Gender appeared to be a slightly more significant factor in determining differences both in knowledge and job interest variable. However, the gender difference was significant only for a very few regions or country in each of the three student groups. Both men and women are equally interested or disinterested in foreign job assignments. The equality of education opportunity for women, their movement into the professional careers and convergence of roles could account this result.

Table 5: Difference in Mean Response by Language Ability

	Knowledge of Country			Desire for Assignment		
	Difference by Language			Difference by Language		
	Peru	Chile	USA	Peru	Chile	USA
Australia	-0.30	0.04	0.01	-0.11	0.24	0.80 **
UK	-0.01	0.36	0.51	0.27	0.25	0.65 *
Canada	0.04	-0.03	0.20	-0.11	-0.16	0.58 *
Germany	0.35	0.06	0.49 *	0.15	0.30	0.40
France	0.26	0.26	0.52 **	0.28	0.11	0.83 **
Japan	0.16	0.00	0.48 *	0.18	-0.03	0.72 **
Mexico	0.07	-0.04	0.58 **	0.24	-0.30	0.60 **
China	0.16	-0.06	0.33	0.41 *	0.02	0.83 **
Russia	0.01	0.36 *	0.13	0.24	0.01	0.23
South Africa	0.03	0.09	0.27	0.21	0.15	0.59 **
India	0.35	0.08	0.42 *	0.19	0.18	0.42
Korea	-0.11	0.08	0.47 **	0.15	1.50 *	0.56 **
USA	-0.49 *			-0.03		

*: Significant at alpha=0.05
**: Significant at alpha=0.01

Knowledge of a foreign language is an important factor among US students in determining their response. The US students with the knowledge of a foreign language indicated higher levels of knowledge about other regions and countries and their willingness to work abroad. This would be expected because the learning of another language also exposes students to the culture, history and the literature of other parts of the world. They would also be more interested in accepting job assignments there. However, this study did not find such "language" effect among Chilean and Peruvian students. The results indicate that the Chilean and the Peruvian students have higher knowledge of, and high interest in working abroad, there was no

difference among them in terms of their language ability. Both monolingual and bi/multilingual Peruvian and Chilean students have similar values for the knowledge and job interest variables.

LIMITATIONS OF THIS STUDY AND IMPLICATIONS

This study explores the students, knowledge of other geographical regions and countries and their interest in accepting jobs abroad. It presents the finding for three student groups from the US, Peru and Chile. The study used only a small list of countries to measure students' knowledge and job interest. It did not include any country from South America. Future studied should provide a larger menu option to the respondents. At the same time, an open ended question asking the students to list countries that they would like to work in, may provide a richer response.

The study focuses upon the willingness of the students to work abroad but id does not concern itself with their ability to succeed in international assignments. Willingness is an important consideration. But future study should also include variables on family factors, foreign residency and ability to adjust to other country business and social environment.

The study focuses upon a group of students at one educational institution in each country. Each group is likely to be quite homogeneous within itself. A study that includes students from several institutions in each country may provide more variations in responses.

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FROM COGNITION TO BEHAVIOR: A CROSS CULTURAL STUDY FOR GLOBAL BUSINESS EFFECTIVENESS

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ABSTRACT

The norm for business in this century is globalization with manifestations in forms such as global outsourcing, global supply chain management, global competition, and global hiring of human resources. Therefore, people in their businesses who interact with many cultures need to be cross-culturally effective. Building on Black, Mendenhall, and Oddou's Framework for International Adjustment (1991), the purpose of this study is to correlate two cross-cultural tests. These tests provide feedback, both cognitive and behavioral, to individuals and their companies about their pre-departure cross-cultural readiness. The Intercultural Competency Scale (ICS) developed by Elmer (1986) measures an individual's general cognitive and perceptual ability to interact effectively with people from cultures different than their own. The Cross-Cultural Social Intelligence Test (CCSI) developed by Ascalon, Schleicher, and Born (2008) measures the ability to correctly select appropriate behaviors in cross-cultural situations. Correlations between individual factors and scores on both tests are measured, reported, and discussed. A predictor model for cross cultural social intelligence based on cognitive trait factors is also developed. Implications of using the instruments for future research are discussed.

INTRODUCTION

With globalization expanding at an exponential rate, the need for cross-culturally effective managers and workers has increased significantly. Professionals with strong and favorable intercultural attitudes, skills, knowledge, and behavior add value to their organizations. Cross-cultural effectiveness builds organizational learning, making it possible to expand and integrate marketing, sales, supply chains and operations to other countries. Whether professionals are working overseas as expatriates or conducting short-business trips, parent and host organizations need methods to ensure the success of multinational business ventures.

Black, Mendenhall, & Oddou (1991) first supported the idea that international adjustment was the result of an interaction effect of multiple variables in sequence. They found that training and previous experience in the pre-departure stage are prescriptions for improving the accuracy

of an assigned expatriate's perception of themselves and the situation prior to departure. Some other studies found pre-departure selection and preparation to be important factors for adjustment while identifying variables that predict intercultural effectiveness for either selection or training purposes (Hutchings, 2002; Liu & Lee, 2008). It should be noted that many competency trait variables, such as flexibility, are cross-culture general traits so that they apply regardless of which culture the expatriate is entering (Adler, 1974; Bochner, 1973).

However, in the late 1980s, much of the trait research started to shift toward integrating cognitive and behavioral research primarily due to limited support for the links between traits and performance (Hammer, 1987). Other research showed that a combination of these trait and behavioral factors, in addition to culture specific preparation, may play an important role in expatriate success (Pires, Stanton, & Ostenfeld, 2006; Elmer, 1986). For example, in a recent study, Smith and Reynolds (2009) set out to "assess differences between cognitive and affective measures and their ability to predict *behavioral* intentions and the impact of service features on these measures" among a population of subjects from a variety of cultures. They found that for all cultural groups, overall quality, satisfaction, and positive *affect* predict *behavioral* intentions."

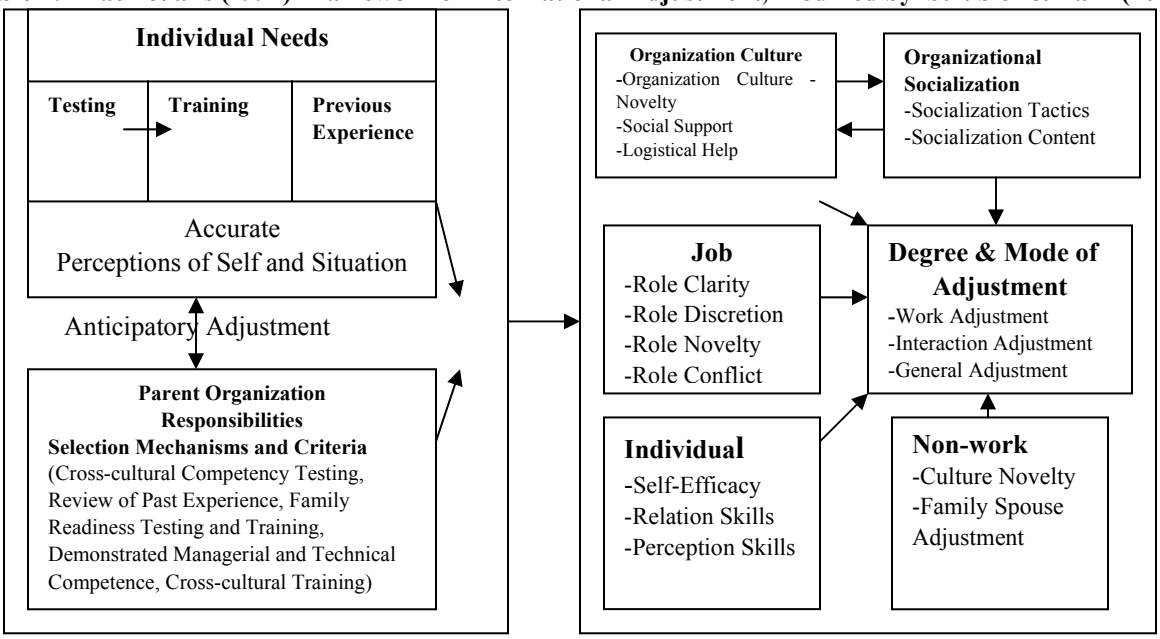
Building on and modifying the model of Black et al. (1991), Strubler & Park (2009) have argued that assigned expatriates should engage in (and their parent corporations ought to provide) cross-cultural effectiveness testing for selection purposes and to ensure the accuracy of pre-departure expectations as shown in Table 1. While testing should not be the only criteria for expatriate selection, testing does make both the individual and organization aware of strengths and weaknesses prior to selection and departure. Testing also makes it possible to design appropriate training for the expatriate.

Black et al. (1991) identified key factors affecting intercultural effectiveness and adjustment. They define 1) *intercultural effectiveness* as the ability of a person within the intercultural environment, and 2) *adjustment* as the overall multifaceted process through which expatriates develop an increasing degree of satisfaction in being able to cope with a cross-cultural environment. Therefore, it should be noted that intercultural effectiveness and adjustment are not equivalent concepts. Intercultural effectiveness may predispose an individual toward adjustment and without it the individual may not be able to adjust. However, adjustment is a complex process involving a large number of variables, many of which are outside the control of the individual, e.g., family and organization support. Therefore, intercultural effectiveness is necessary but insufficient for adjustment.

Still, according to Black et al. (1991), intercultural effectiveness and adjustment possess four common dimensions, namely, self-orientation, other-orientation, perceptual skills and cultural toughness. Self-oriented individuals engage in activities and have attributes that increase their self-esteem and confidence while finding replacements for their home interests and activities. They, in turn, handle stress well and demonstrate efficacy in both the work and social environments. Other-oriented individuals have the ability to develop relationships with host nationals and actively seek and find mentors. Individuals with strong perceptual skills tend to

engage in non-judgmental, non-evaluative mental processing about their situation. Successful expatriates are often required to adjust to cultural toughness, which refers to differences in standards of living that expatriates experience: the greater the difference, the more difficult the adjustment. Therefore, these individual factors seem to contribute to adjustment.

Table 1: Black et al's (1991) Framework of International Adjustment, Modified by Strubler & Park (2009)



Fisher and Hartel (2003) further assert that three personal factors play a significant role in intercultural effectiveness: 1) ability to communicate effectively, 2) to establish relationships, and 3) to cope with psychological stress. Still another recent study proposed that emotions, especially for individualists working in collectivistic cultures for long periods of time, play a major role in cross-cultural success. More specifically, emotional demands caused by cultural differences in expatriate encounters impact negatively on their experience (Tan, Hartel, Panipucci & Strybosch, 2005). Therefore, emotional maturity may be a major factor, at least when cultural differences are great, in determining competency and possibly whether an expatriate will complete a long-term assignment. Emotional maturity or intelligence is defined as "an array of capabilities, competencies, and skills that influence one's ability to cope with environmental demands" (Tan et al., 2005). Four key factors are cited: emotional appraisal and expression, emotional regulation in self and others, promotion of intellectual and emotional growth, and generation of emotions to assist in problem solving (Salovey & Mayer, 1990; Tan et al., 2005). For example, expatriates who can deal with negative emotions in a positive manner can experience continued job satisfaction in a cross-cultural environment. Further, expatriates with idiocentric personalities, i.e., individualists who view the environment as unstable and themselves as stable, will experience a higher degree of emotional labor. Also, individualists

(regardless of gender) prefer to be frank about their emotions and will fare better in feminine cultures where there is more freedom to express even their feelings of frustration (Hofstede, 1980; Mumby & Putnam, 1992; Ollilainen, 2000). Finally, high status expatriates serving in collectivistic cultures will experience less emotional labor than low status expatriates. A deeper look at the role of emotion in cross-cultural competency implies that multiple intervening variables, including cultural dimensions and individual personality factors, create a more complicated interaction effect.

The Intercultural Competency Scale, used in this study and developed by Elmer (1986), identified twelve intercultural competency traits from an extensive literature review. These include the following twelve dimensions: Approachability, Intercultural Receptivity, Positive Realistic Orientation, Forthrightness, Social Openness, Enterprise, Shows Respect, Perseverance, Flexibility, Cultural Perspectivism, Venturesome, and Social Confidence. From these dimensions, the Intercultural Competency Scale (ICS) was developed. It tests an individual for the presence of these cross-culture-general traits. None of traits are specific to a particular cultural situation. A cognitively- measured trait approach, the ICS was employed in this study as a measure of intercultural effectiveness.

A similar concept, also employed in this current study, is Cross Cultural Social Intelligence (CCSI). Combining the social intelligence and cross cultural communication literature, Ascalon, Schleicher, and Born (2008) developed a comprehensive situational judgment test. While encompassing emotional intelligence, social intelligence is defined as the "ability to understand the feelings, thoughts, and behavior of persons, including oneself, in interpersonal situations and to act appropriately upon that understanding" (Marlow, 1986). Extending that concept, socially intelligent people can adapt their behavior in a wide array of social situations (Cantor & Kihlstrom, 1987). Because social intelligence is specific to a particular culture, it may not be able to explain interpersonal effectiveness across cultures. Therefore, empathy and ethnocentrism are assumed as the basis for judgment of social intelligence in cross-cultural interactions. Three abilities are measured in the CCSI test: 1) recognition and understanding of (non)verbal cues of people from multiple cultures; 2) ability to accurately infer social references in multiple cultural encounters; and 3) by accepting and understanding multiple cultures, achieve relevant social objectives across cultural negotiations. CCSI is an example of a systematic, interdisciplinary measurement for integrating and examining cognitive and behavioral dimensions of cross-cultural effectiveness.

However, literature is scant on studies that have explored the relationship between cognition/perception and the ability to accurately read cultural situations or take action successfully in cross cultural interactions. Therefore, this research focuses on identifying correlations between two testing instruments: ICS and CCSI. Based on this exploratory study, we measure respondents' intercultural competency traits through the ICS (a cognitive and perceptual measure) and also determine the extent to which possession of these traits can predict the presence of cross-cultural social intelligence (CCSI, a behavioral assessment). This research

is intended to support future research on the relationship between intercultural effectiveness, cross-cultural background and success in adjusting to intercultural living situations.

METHODOLOGY

This research focuses on correlating two instruments that address intercultural effectiveness: the Intercultural Competency Scale (Elmer, 1986) and the Cross Cultural Social Intelligence test (Ascalon, Schleicher, & Born, 2008). The Intercultural Competency Scale was designed to evaluate the presence of cross-cultural abilities to interact with people from other cultures by testing individuals on twelve variables previously mentioned. The second study, developed by Ascalon, Schleicher, and Born (2008), measures Cross-Cultural Social Intelligence (CCSI Assessment) through a set of scenarios for which participants are asked to select the most appropriate interaction between two people in various cross-cultural situations.

Email requests were sent to approximately 100 working professionals to undertake both the ICS and CCSI surveys, both of which were made available on a website. To ensure data integrity for the correlation study, it was important to track and match completion of both surveys by individual respondents. After ignoring respondents who completed only one of the ICS or CCSI surveys, we found that 52 respondents undertook both of the surveys. Since seven out of these 52 respondents had missing data, the pool of respondents who filled out both the surveys completely was reduced to 45.

For the ICS test, each of the twelve factors, determined by a total of 45 items that are scored using a five-point Likert scale, is rated high, medium, and low. With 225 possible points, the mean score is 158 points, as calculated in the original research by Elmer (1986). These high, medium and low divisions are set from a range of scores. For example, a score of 200 is a high score and 120 is a low score. One's level is determined from the mean of the individual's test results. A total score is also assigned that explains one's overall capacity to build strong abiding relationships with host country people in another culture and to perform one's task in keeping with their organizational goals. A feedback page is provided to each participant that colors each of the twelve categories for easy recognition. It also provides the mean score obtained for each category. Then participants, by scrolling over that number, can have a more detailed explanation of what the score means and what a person can do to improve upon it (Elmer, 1986). Therefore, ICS measures personal characteristics that contribute to intercultural effectiveness. It is a cognitive scale which relies on self-reported preferences for engaging in general interpersonal situations, all of which have been determined to be indicators of intercultural effectiveness (Elmer, 1986).

By contrast, CCSI measures one's ability to correctly interpret and then select the best interaction scenario in situations with people from different cultures. For each question on the CCSI, four answers are given that must be rated by the participant on effectiveness. The respondent also indicates whether he/she would use the response. The responses offered are:

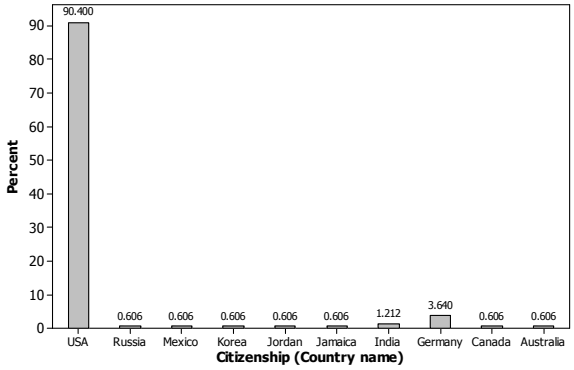
Empathetic-Ethnocentric=EE,Empathetic-Non-ethnocentric=EN,Non-empathetic-Ethnocentric = NE, and Non-empathetic-Non-ethnocentric=NN. For each of the questions asked, each answer is assigned a CCSI style, is given a rating of 0-5 on effectiveness, and is rated as a best or worst answer. Each of these ratings is developed from the evaluation of cultural experts. Unfortunately, many of the offered answers are considered inconclusive on the CCSI style and best/worst categories, making analysis difficult. Feedback for this survey is not immediately given back to participants, although the data on CCSI style, best/worst scoring, and effectiveness for each response can be provided to the participant after completion if requested.

As suggested by Ascalon et al. (2009), we scored the CCSI instrument based on each respondent's likelihood of performing the best and worst alternatives. The scores can range from 1 (not at all likely) to 5 (extremely likely) for each item and scale. First, respondents' likelihood ratings for each of the worst alternatives for each scenario were reverse scored. Then item scores were computed by averaging respondents' likelihood ratings on the best and worst alternatives. The total scale score was calculated by averaging across all the items. Higher the CCSI score on the total scale, greater would be the cross cultural social intelligence. Higher CCSI scores would be related to empathy, openness to experience, conscientiousness, and emotional stability.

RESULTS

As indicated in Figure 1 below, the majority of respondents (90.383) were U.S. Citizens. The remaining respondents were from Australia, Europe, Asia, Central America, and the Middle East. All of the respondents were fluent in English, possessed or were completing a bachelor's or master's degree, and were currently working or had worked in either full or part-time professional positions. Virtually none were traditional students without professional work experience.

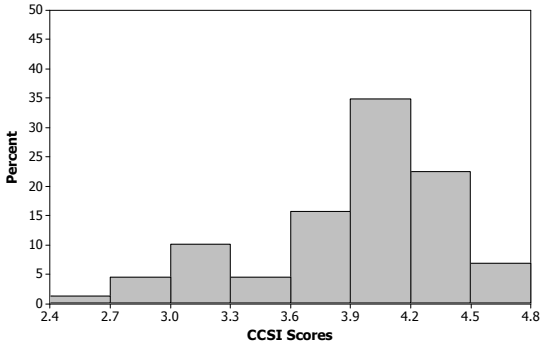
Figure 1 – Citizenship by Country Name



From all participants, factors of each test will be based on background information. The analysis of the data was performed using Minitab software. The current focus is to determine

whether those with a high level of overall intercultural competency are able to produce a high overall score in actual implementation of that knowledge and their traits.

Figure 2: Histogram of CCSI Scores



Figures 2 and 3 show the distribution of CCSI and ICS scores for the respondents. According to Figure 2, only 6% respondents scored low (< 3) whereas about 60% respondents scored high (> 4) on CCSI scale, thus implying possession of higher levels of cross cultural social intelligence by majority of the respondents in this sample.

Figure 3: Histogram of ICS Scores

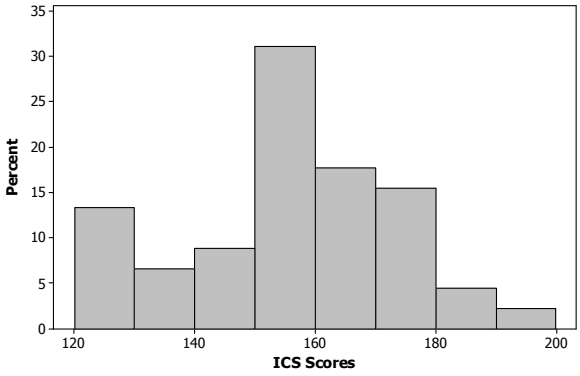


Figure 3 shows that ICS scores for the same respondents ranged from 120 to 200. The majority (60%) of respondents scored between 150 and 180 on ICS scale. Furthermore, only 6% respondents scored very high (above 180) while 20% respondents scored low between 120 and 140 on ICS scale. It is interesting to note that none of the respondents scored very low (< 120) on the ICS scale.

To determine if respondents who scored higher on CCSI scale also scored higher on ICS scale, we next performed the correlation analysis between CCSI and ICS scores of all respondents using Minitab statistical software. The Pearson correlation (r) was found to be statistically significant at 0.05 level with a value of 0.36. It implies a positive relationship of

moderate strength between ICS and CCSI scores. Since the ICS score is the cumulative score on 12 intercultural competency factors, we decided to examine the relationship of each specific factor with the CCSI score.

Table 2 shows Pearson correlation coefficients between all twelve intercultural competency factors and the CCSI scores. The results showed that four ICS factors – Approachable, Perseverance, Cultural Perspectivism, and Venturesome – were significantly correlated with CCSI scores. Cultural Perspectivism and Social Confidence were found to exhibit strongest (r=0.4) and weakest (0.1) correlation with CCSI, respectively. Enterprise was the only factor to be negatively correlated with CCSI but without any statistical significance. It is interesting to note the that intuitively obvious factors such as Social Openness, Shows Respect, and Flexibility showed no significant relationship with CCSI.

Table 2: Correlations between CCSI and ICS Factors

ICS Factors	Correlation (r)
1. Approachable	0.30*
2. Intercultural Receptivity	0.24
3. Positive Orientation	0.15
4. Forthrightness	0.17
5. Social Openness	0.24
6. Enterprise	-0.05
7. Shows Respect	0.27
8. Perseverance	0.34*
9. Flexibility	0.28
10. Cultural Perspectivism	0.40**
11. Venturesome	0.35*
12. Social Confidence	0.01

* Significant at "=0.05
** Significant at "=0.01

To test the stream of research which propounds the effect of cognitive intercultural traits on one's cross cultural social performance, we decided to identify which ICS factors, if any, can be useful and reliable predictors of CCSI scores. A regression model was developed next using CCSI as the response variable and all twelve ICS factors as the predictor variables with the objective to keep the model both parsimonious and statistically useful.

Table 3 shows the stepwise regression model approach used to identify the most useful predictor variables. The 4-ICS factors found to be the most useful in predicting the CCSI score

are Cultural Perspectivism, Approachable, Venturesome, and Enterprise. Table 4 shows the best regression model based on highest R^2 (35.16%) and smallest Mallows C_p value (0.8) which can be stated as: E(CCSI) = 2.302 + 0.116 (Cultural Perspectivism) + 0.05 (Approachable) + 0.069 (Venturesome) – 0.058 (Enterprise)

Table 3: Stepwise Regression: CCSI Scores versus 12-ICS Factors
Alpha-to-Enter: 0.15 Alpha-to-Remove: 0.15

Step	1	2	3	4
Constant	2.947	2.042	1.885	2.302
Cultural Perspectivism	0.109	0.113	0.106	0.116
T-Value	2.90	3.16	2.99	3.29
P-value	0.006	0.003	0.005	0.002
Approachable		0.058	0.043	0.050
T-Value		2.43	1.66	1.97
P-value		0.020	0.105	0.056
Venturesome			0.064	0.069
T-Value			1.53	1.69
P-value			0.133	0.099
Enterprise				-0.058
T-Value				-1.68
P-value				0.101
S	0.491	0.0466	0.458	0.449
R-sq	16.32	26.61	30.60	35.16
R-sq (adj.)	14.37	23.12	25.52	28.67
Mallows Cp	5.2	1.5	1.3	0.8

Table 4: Regression Analysis - CCSI Scores versus significant ICS Factors

The regression equation is:
CCSI = 2.30 + 0.116 Cultural Perspectivism + 0.0504 Approachable + 0.0690 Venturesome - 0.0581 Enterprise
(0.002)* (0.056)* (0.099)* (0.101)*
*Numbers in parentheses represent the P-value

Analysis of Variance

Source	DF	SS	MS	F	P
Regression	4	4.3629	1.0907	5.42	0.001
Residual Error	40	8.0467	0.2012		
Total	44	12.4096			

S = 0.448516 R-Sq = 35.2% R-Sq(adj) = 28.7%

According to Table 4, this regression model is globally useful with an F value = 5.42 and a corresponding p-value =0.001. The partial tests of usefulness for individual ICS factors are all significant at 0.102 level.

Figures 4 and 5 show the residual analysis and normality plot for the above regression model. It is clear that there are no major violations of the underlying assumptions of normality, independence, and equal variance. Hence, the above regression model can be used for predicting CCSI scores based on 4 cognitive intercultural predictor variables.

Figure 4: Residual versus Fits Analysis (response is CCSI Scores)

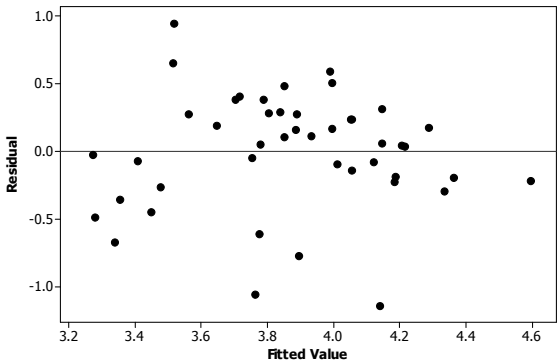
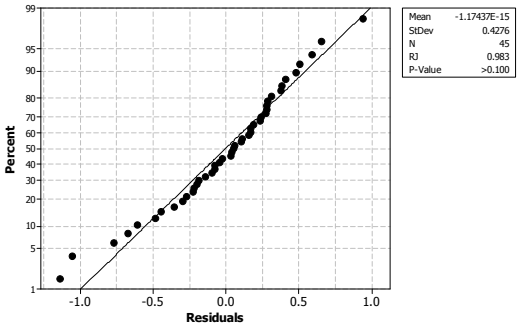


Figure 5: Normality plot for the residuals



DISCUSSION

Beginning with the overall scores for both tests, why is the distribution of ICS (150-180, mean = 158) and CCSI, (> 4), higher for the majority of respondents in this sample? One possibility is that the education and experience level of the subjects for this study was greater than scores would be for a control group randomly selected from the general population. All subjects in the study had professional industry experience and most were already completing graduate studies while working full-time. In short, education and professional-level work

experience may be correlated with intercultural competence and cross-cultural social intelligence. This explanation will be tested in the next study as the characteristics of the population are correlated with their CCSI and ICS scores. We should note here that the CCSI is a new instrument that has not been tested extensively. It may require more testing with larger samples to develop norms for low, medium and high scores. This may explain why the CCSI scores did not follow a normal distribution.

As indicated in Table 2, why are seemingly and intuitively obvious cognitive factors such as Intercultural Receptivity, Positive Orientation, Social Openness, Shows Respect, Flexibility, and Social Confidence not significantly correlated with CCSI? One possibility is that some cognitions do not necessarily translate into behavior. Secondly, effects may already be included in the four cognitive factors that have significant correlation with CCSI. Third, ICS may be measuring factors that simply were not taken into account by CCSI. Again, CCSI measures are based on behaviors related to ethnocentrism and empathy. ICS is measuring traits. For example, Intercultural Receptivity is defined as being "interested in people, especially people from other cultures" (Elmer, 1986). This concept appears, on the surface, to be the opposite of ethnocentrism. However, people who do not practice ethnocentrism (cognitively or behaviorally) still may not have an active interest in people from other cultures. In short, absence of malice toward others who are different than oneself does not necessarily constitute interest in others. Likewise, neither the absence of ethnocentrism nor the presence of empathy would necessarily correlate with social openness (the inclination to interact with people regardless of their differences), flexibility (open to culture learning), or social confidence (tends to be self-assured). People who are empathetic are understanding, aware of, sensitive to, and vicariously experience the feelings thoughts and experiences of others (Websters, 2003). Therefore, empathy may readily and reasonably correlate with Cultural Perspectivism, the capacity to imaginatively enter into another cultural viewpoint (Elmer, 1986). We may conclude then that certain factors as defined by both Elmer (1986) and Ascalon et al (2008) are correlated and useful for research purposes. Other factors such as Social Confidence are operationally-defined in such a way that there is no correlation. Therefore, they are not useful in predicting behavior from cognition. For future research, we can conclude from both the correlation and regression analysis of ICS and CCSI factors, that Approachable, Cultural Perspectivism, and Venturesome are useful ICS factors in predicting behaviors measured by the CCSI.

FUTURE RESEARCH

This empirical study is the first in a series to test Strubler & Park's (2009) revision of Black et al's (1991) Framework for International Adjustment. The purpose of the revision was two-fold: 1) to make the model more prescriptive so that organizations could improve their expatriate success rate and 2) to test hypotheses that would close multiple gaps in the literature. The model combines the concepts of intercultural effectiveness and adjustment. In this present

study, the goal was to test and correlate two instruments that measure intercultural effectiveness. Having reliable instruments that test both the cognitive and behavioral aspects of effectiveness are necessary to test hypotheses regarding both effectiveness and adjustment. The next empirical study will determine the extent to which cross-cultural experience, i.e., language and culture education, training, family background, travel, and work experience, is correlated with intercultural effectiveness. Later studies will focus on the correlations between extended cross-cultural experience and success in international adjustment.

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LAISSEZ FAIRE AND INTERNATIONAL TRADE: A CRITIQUE OF THE PROPOSED UNITED STATES – COLOMBIA FREE TRADE AGREEMENT

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ABSTRACT

Trade theory advocates that the removal of barriers in a bilateral trade framework increases business flows and improves economic efficiency. Consequent factor market developments lead to new employment as well as capital expansion opportunities, which, when realized, contribute significantly to regional economic growth. In practice, socioeconomic variances and the level of business maturity actually dictate whether the outcome is a net gain for either partner. Colombia is the third largest trading partner of the US and its largest export market for agricultural products in South America. A Free Trade Agreement (FTA) between the United States and Colombia was negotiated and signed in June 2007, and is now awaiting congressional approval in the US. The opposition to this FTA in the US is due to Colombia's track record of human rights violations, although that has improved significantly during recent years. Prima facie indications are that the FTA can benefit both countries, especially during the economic recession. It can also provide the US with a strategically located, democratic government as a trade partner in South-America. This paper explores the benefits and negative facets of the US–Colombia FTA, based on evidence from the last decade.

ECONOMIC RELEVANCE OF FREE TRADE AGREEMENTS (FTA)

FTAs provide partner nations with reciprocal duty-free access to each others' markets, effectively creating a common market, thereby facilitating trade flows and increasing economic efficiencies. The increase in scope and speed of market access results in faster turnover and creation of investible domestic surpluses. FTAs normally provide better and cheaper goods and services through increased competition, which leads to consumer surpluses for all partners. Economic welfare gains from a FTA may be viewed as the total of increases in consumer and producer surpluses net of the changes in revenue from customs tariffs. There are also other spillover benefits of FTAs including higher levels of innovation and investment that can contribute to economic recovery, growth and distribution (Hoekman and Schiff, 2002).

Over 200 regional FTAs now account for about one-third of global trade. While these generally promote economic growth in member nations, they can also create obstacles for multilateralism. There is speculation whether a large number of FTAs will threaten the health of the worldwide free trade system (Newfarmer, 2005).

THE UNITED STATES – COLOMBIA FTA

The *United States-Colombia Trade Promotion Agreement* (CTPA) is the proposed FTA, which is a bilateral commercial treaty for eliminating obstacles to trade and favoring private investment between the United States and Colombia. This agreement emerged from failed multilateral negotiations between the United States, Colombia, Peru, and Ecuador. The United States concluded negotiations with Peru in December 2005 while negotiations with Ecuador are continuing. The first bilateral trade negotiations between United States and Colombia were initiated in May 2004, and the US-Colombia FTA (will be henceforth called the CTPA) was signed in November 2006. The agreement was renegotiated to include more rigorous environmental and labor standards via a Protocol of Amendment that was signed in June 2007 which was presented by both countries to their respective congresses.

The proposed CTPA is a comprehensive FTA that will address issues relating to trade commerce, customs administration and trade facilitation, and remove technical barriers to trade, while safeguarding intellectual property rights, and labor and environmental standards. It will additionally include government procurement, investment, telecommunications and electronic commerce. Under this agreement, Colombia will eliminate most of its tariffs on US exports, and US companies will have greater access to Colombia's services sectors than other World Trade Organization (WTO) members. US companies will gain an advantage in Colombian markets by the elimination of tariffs on 80 percent of US consumer, industrial and agricultural goods. An additional 7 percent of US exports will be covered under the duty-free umbrella within five years of implementation, while the remaining tariffs will be eliminated ten years after implementation of the CTPA (Eslava, Haltinwanger and Kugler, 2004).

On the Columbian side, after the CTPA was signed it was submitted to the Colombian Congress in November 2006 and was approved in June 2007 and became a public law, Ley 143, in July 2007. The Amendment was subsequently approved by Columbian Senate and House and became public Law, Ley 1116, in November 2007. The Colombia's Constitutional Court completed its review in July 2008 and concluded that the Agreement conforms to Colombia's Constitution.

The CTPA is still languishing in the US Congress. It was not approved before the change of administration in January 2009, because it failed to garner bipartisan support. The current administration will reportedly favor the free trade initiative, provided Colombia can demonstrate adequate protection of human and labor rights. But there is no declared timetable yet, to implement the CTPA, given the looming controversy over the safety of Colombian labor leaders.

This is, however, not the best terms of trade for the US. Currently, 90% of Colombian products enjoy unilateral free access to US under the M*ost Favored Nation* tariff rates or the Andean Trade Preference and Drug Eradication Act (ATPDEA) signed in 2002. On the other hand, US exporters currently pay tariffs as high as 35 percent to enter the Colombian market. The CTPA will establish bilateral access and provide similar benefits to US exporters, thus creating economic opportunities for US manufacturers, workers, farmers and resource suppliers related to export businesses. It will generate better incomes for US Companies and could potentially increase US exports by 13.7 percent or $1.1 billion annually, contributing $2.5 billion to US GDP, according to the forecast from the US International Trade Commission (USTR, 2009).

According to the Latin America Trade Coalition's *Colombia Tariff Ticker*, the cost of the delay is real because US companies have paid $2.3 billion in unnecessary duties to the Colombian Treasury in the 3 years since the FTA was signed. The amount of $2.3 billion leads to higher prices in Colombia for US goods and services and reduced profits and jobs for US companies. Hence the CTPA can contribute positively towards the recovery from a long recession since it can offer US companies better access to Colombia's growing and dynamic market.

Colombia has the potential to be a strong trading partner, since there are already more than 10,000 US operating exporters, including 8,500 small and medium-sized companies.

US EXPERIENCE WITH ANOTHER FTA

The North American Free Trade Agreement (NAFTA) between the United States, Canada, and Mexico was initiated in 1994 creating the world's largest free trade area in geographic terms (Agama and McDaniel, 2002). Duties and quotas were phased out and have been eliminated for all trade in NAFTA since 2008. The US-NAFTA trade has crossed the $1 trillion mark in recent years, as shown in Table 1, and US exports to NAFTA has almost doubled from $217 billion in pre-NAFTA 1993.

Table1: US – NAFTA trade in billions of current US$

	Export	Import	Total
2007:	452	568	1020
2008:	412	555	967

US foreign direct investment (FDI) in NAFTA Countries (stock) was $348.7 billion, while NAFTA's FDI in the United States was $219.2 billion in 2007. While the expectations in the mid-1990s was that the NAFTA would improve the US trade balance and result in job gains in the United States, the US-NAFTA trade deficit has grown recently. The US goods account

trade deficit with NAFTA was $116 billion in 2007 and $143 billion in 2008, while this was only $9 billion in pre-NAFTA 1993. The US services account however shows a surplus with NAFTA of $26.5 billion in 2007. Critics claim that the growing current account deficit with NAFTA may have cost 1 million jobs US-wide (Fernández-Kelly and Massey, 2007). However this is only a part of the story, since the pattern of the job losses by geographic location and economic sector is unclear. It is probable that low skill / low wage jobs were substituted by high skill / high wage jobs, which is the norm for international trade related employment and also consistent with the increase in the service account surpluses.

COLOMBIA'S EXPERIENCE WITH OTHER REGIONAL TRADE ASSOCIATIONS

Colombia joined the general agreement on Tariffs and Trades (GATT) in 1981 and the country was an active member of this organization. Later, the Congress of Colombia approved the entry into the WTO, which replaced the GATT in 1994. Colombia became a party to all the agreements that are listed by the WTO. Other agreements currently implemented are (Fernandez, 2003):

* Andean Community
* The Group of Three (G-3)
* Colombia- Chile Agreement
* Andean countries and Mercosur agreement
* Colombia- Caricom Agreement
* Colombia – Panama Agreement
* Colombia and Central America countries

Colombia is a commercially significant market with functioning FTAs as well as some that are currently being negotiated.

The Andean Trade Preference Act (ATPA) /ATPDEA agreement started in December 1991 between the United States and four Andean countries (Bolivia, Colombia, Ecuador and Peru). The purpose of the agreement is to support the Andean countries in their fight against drug production and trafficking by expanding their economics alternatives. This agreement was renewed and amended by The Andean Trade Promotion and Drug Eradication Act (ATPDEA) enacted in August 6, 2002. The ATPDEA provides duty-free treatment for certain products previously excluded under the ATPA. Although this agreement is a one-way preference program, it has had a positive impact on two- way trade between Colombia and the United States. Both US imports and exports to and from Colombia grew by an average of 8 percent per year between 1991 and 2007. Consequently, it created thousands of jobs in both countries. In addition, Colombia has been the largest market for US exports at $8.6 billion, which represents 54 percent of US exports to ATPA members (Colombia, Bolivia, Ecuador and Peru).

FTAs being negotiated are:

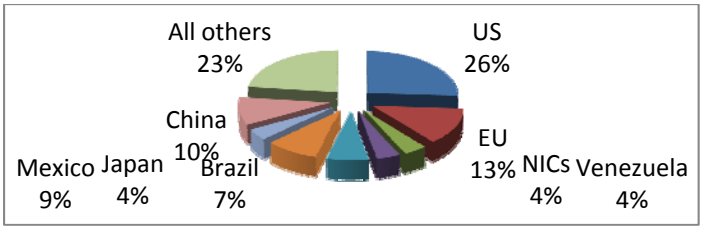
1. The Colombia–Canada FTA which is in final negotiations and it could be implemented next year. Colombia closed the negotiations of a free trade agreement with Canada in June 7, 2008. This agreement will benefit both countries; it will provide market access, investment, rules for trade goods and services. Bilateral trade between Colombia and Canada accounted $915 million.
2. The Colombia-European FTA (EFTA) Colombia initiated free trade agreement with EFTA members – Iceland, Norway, Switzerland and Liechtenstein – in June 2007.
3. Colombia-European Union Agreement The purpose of this agreement is to intensify and improve co-operation and enhance and facilitate bi-regional trade and investments.

US–COLOMBIA TRADE PROFILE

Colombia's total exports increased from $12 US billion in 2001 to $30 US billion in 2007, at a compounded annual growth rate of 16.5%, while total imports have increased from $13 US billion to $33 US billions, at a compounded annual growth rate of 16.8%, during the same period.

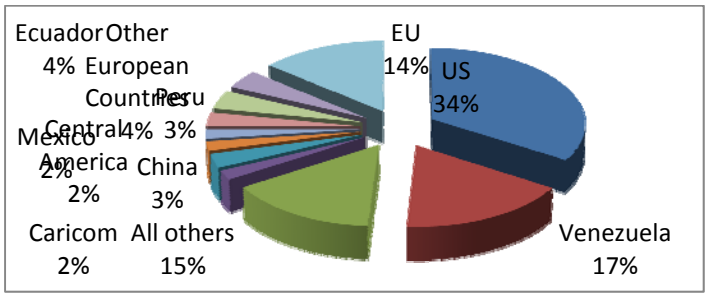
United States is the largest trading partner of Colombia in both exports and imports, as shown in Figures 1 and 2. The US was the source of over one-fourth of Colombia total imports in 2007. In 2007, the United States exported a record $1.2 billion of agricultural products to Colombia. The top products were beef, pork, poultry, dairy products, vegetables, fruits and tree nuts, wheat, barley, rice, soybean, sugar and sweeteners, processed products, tobacco and cotton.

Figure 1. Colombian Imports by Country in 2007



In the same year, the US accounted for over one-third of all Columbian exports. Colombia is the third largest trading partner of United States in the Western Hemisphere outside NAFTA. Colombia represents a large market with significant import potential. It has the third largest population (47 million in 2007) and the fifth largest GPD ($171 billion in 2007) in Latin America. It is also the largest export market for agricultural products in South America (Consulate of Columbia at Atlanta, 2008).

Figure 2. Colombian Exports by Country in 2007



The total value of trade in goods and services between US and Colombia was $18 billion in 2007. As shown in Table 2, Colombia is the third largest and the fastest growing export market for the US in South America.

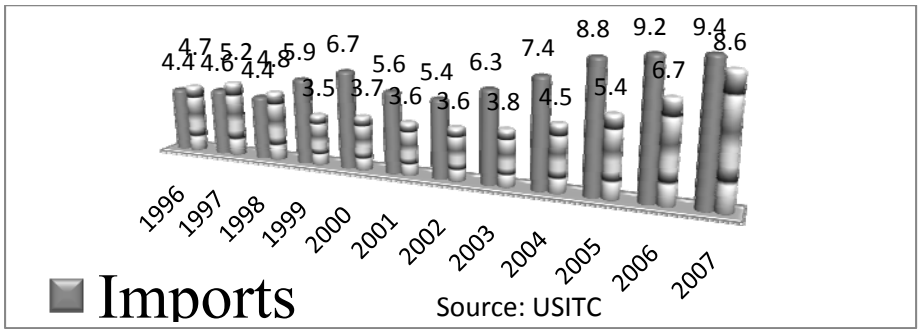
Table 2 US Exports to Trading Partners in Latin America

Country	2006 US$ billion	2007 US$ billion
Brazil	19.2	24.6
Venezuela	9.0	10.2
Colombia	6.7	8.6
Chile	6.8	8.3
Dominican Republic	5.3	6.1
Argentina	4.7	5.8

In 2007, US exports represent $8.6 billion, amounting to nearly 30 percent growth over the previous year. US exports to Colombia have almost doubled as Colombia's economy recovered from a recession in 2000-2001. Bilateral trade agreement between Colombia and the United States has expanded by 70% over the past decade as shown in Figure 3.

Exports are critical to the stability and growth of US economy. In 2007, US exports contributed to about 30 percent of economic growth. Trade with Colombia provides an expanded economic opportunity in a growing and dynamic business climate.

The CTPA will provide benefits for many farm products that will receive duty- free treatment in Colombia. These include beef, pork, poultry, cotton, wheat corn, rice, and soybean meal, fruits and vegetables, including apples, pears, peaches and cherries, as well as processed food products like frozen french fries, cookies and dairy products.



SOCIO-ECONOMIC BENEFITS OF TRADE FOR COLOMBIA

Economic progress in Colombia has helped to promote social development, reduce violence and curb the activities of drug cartels. Colombia is now more stable and prosperous but illegal elements and violence remain just below the surface. The CTPA has the potential to provide viable alternatives to violence and trafficking, through rapid economic growth, job creation and foreign investments. Colombia has been fighting corruption and illegal activities, and the approval of the CTPA can transform it into a reliable partner for the US in the region. This is borne out by some recent economic indicators, as stated below and depicted in Figures 4 and 5.

* Unemployment rate has fallen from 16.1 percent in 2001 to 12.4 percent in Jan 2008
* GDP has increased from 1.66 percent in 2001 to 7.62 percent in 2007
* Total imports have increased from $13 US billion to $33 US billions
* Total exports have increased from $12 US billion to $30 US billion

Figure 4. Colombia's Average National Unemployment Rate (Percent)

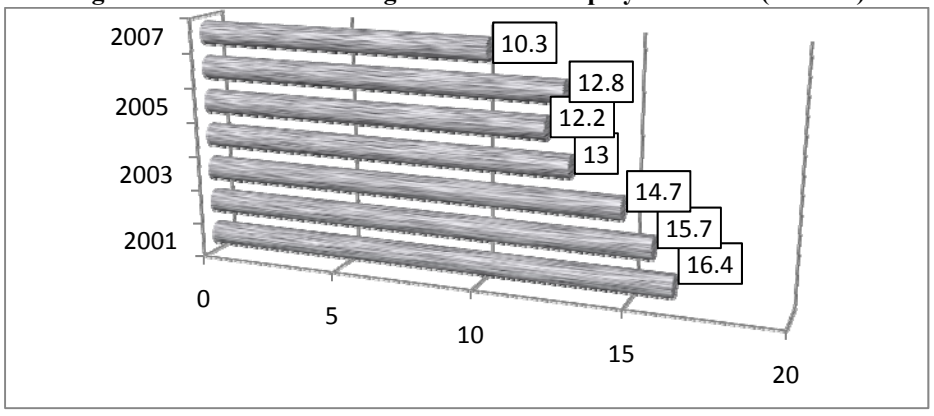
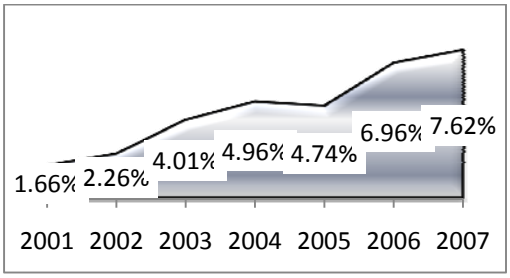


Figure 5. Colombia's Recent GDP Growth (Percent)



MUTUAL GAINS FROM THE CTPA

The CTPA will provide US businesses, farmers, ranchers, etc. more cost effective access to the Colombian market, since over 80 percent of US consumer and industrial goods will enter Colombia duty-free. After the implementation of the CTPA, Colombia will eliminate its price band system, making a variety of US goods and services more price competitive. It will also eliminate barriers to US services, provide a secure legal framework for investors, protect intellectual property and improve the environment. Some key elements of the agreement are:

- Uniform market access, for example no agricultural products are excluded.
- Phased tariff elimination within 15 years, starting with immediate zero-duty for about 80% of US exports.
- SPS measures have been resolved for agricultural trade (SPS signifies *Sanitary and PhytoSanitary* measures set out in the WTO guidelines, on how governments can apply food safety and animal and plant health measures within trade agreements).
- Exports subsidies have been precluded by mutual agreement for products shipped into each others' markets.

The United States and Colombia have been working in tandem to combat regional terrorism and the illicit trade of narcotics. As a result, Colombia is more peaceful and prosperous than it was six years ago, suggesting that economic growth may help to alleviate crime and other societal maladies. The implementation of the CTPA will provide a boost for these efforts by serving to validate US endorsement of Colombia's recent aggressive efforts against crime, besides contributing to its overall development.

The CTPA enjoys overwhelming (65.5% in a sample of 950) support of the Colombian people, according to a survey conducted by the consulate of Colombia in Atlanta. Colombians also feel that stronger ties with the United States will help the country become more secure, stable and prosperous, as demonstrated by over 500 responses in 3 months, to a request for public comment on the CTPA made by US Ambassador Ronald Kirk. There also appears to be strong support for the CTPA from US businesses, as evidenced by a spate of opinion pieces in the Business Week and the Wall Street Journal during 2009.

The CTPA is particularly lucrative for US agriculture, since Colombia is the largest agricultural market in South America. The American Farm Bureau and over 40 other agricultural industry and farm associations recognize the advantages and strongly support the CTPA since it will provide US products exported to Colombia with the same duty-free access already granted to Colombian products imported into the US. For example, producers of corn, which currently attracts a tariff of 68 percent, will have immediate duty free access to Colombia's market of 2.1 million metric tons, under the CTPA. Similarly, US horticultural exports like apples, pears and cherries that currently face a tariff rate of 15 percent, will attract zero tariff upon the enactment of the CTPA.

Agricultural imports from Colombia were valued at over $1.8 billion in 2008, with the top products being coffee and coffee products ($847 million), fresh cut flowers ($370 million) and fresh fruits – mainly bananas ($208 million). Colombia does not pose an import threat to the US farm sector and there are no current *Sanitary and Phytosanitary* barriers preventing the export of US products to Colombia.

PROSPECTIVE RESOLUTION OF OUTSTANDING ISSUES

The main reason for the US opposition to the CTPA is the violence against union workers by the paramilitary organizations, and the continuing presence of drug cartels. Although the overall level of crime in Colombia has been subsiding, US congressional members insist on concrete evidence of sustained results in reducing the violence and impunity, before ratifying the CTPA.

Colombia has a poor track record of prosecuting cartels that threaten, abduct and often assassinate union leaders. There is a history of labor leaders being assassinated consistently, but scant attempt by the state to apprehend and prosecute the criminals (Gracia and Zuleta, 2004). While some 4000 trade unionists were murdered since 1986, only five perpetrators have been convicted. Opponents also point out that there are continual violation of the rights of Colombian workers by corporations and paramilitary organizations.

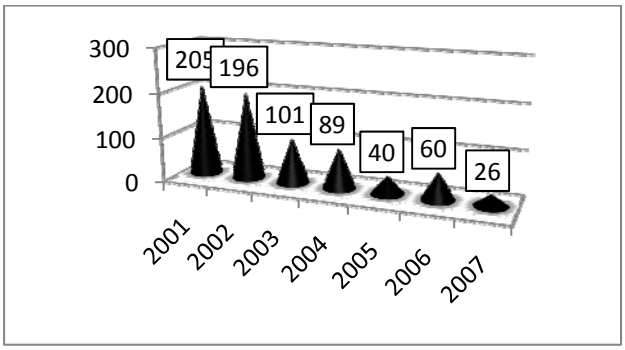
However, recent statistics show a sustained downward trend in crime, suggesting that the Colombian administration is committed to curb paramilitary violence, hostility towards union members and judicial impunity. The Colombian government established a Protection Program in 1997 to improve the safety of vulnerable segments of society. Between 2002 and 2007, the funding for this program increased by 141 percent, with union members as its core target segment. The protection program has had a great impact and contributed to the reduction of assassinations of trade union members in Colombia. While murders in the country overall decreased by 40 percent, assassinations of union members have dropped consistently by 80 percent between 2002 and 2007, as shown in Figure 6.

The Colombian government appears to be committed to employ significant resources to apprehend and prosecute the perpetrators of violent acts against union members. A culture of

social dialogue has been accepted and enhanced through the creation of new mechanisms and the renewal of others including the *Tripartite Agreement* that consists of three parties – workers, employers and government – that work cooperatively to protect labor rights.

The United Nation's International Labor Organization (ILO) removed Colombia from its labor watch list after 20 years. The Tripartite Agreement provides the mandate for the work of a new ILO office in Colombia that the Government authorized in 2006.

Figure 6. Declining Number of Assassinations of Union Members 2001-2007



(*Source: Embassy of Colombia.)*

The actions to fight impunity include a constitutional reform that transformed the Colombian judicial system in 2004, with the support of the US Department of Justice. A new accusatory system will replace the old inquisitor system. The office of the Prosecutor General created a special sub-unit within the Unit of Human Rights, to investigate and prosecute violence against union members. Over 1200 criminal cases have been registered with a focus on 187 priority cases as determined by the unions, within one year of the advent of this subunit in February 2007. Specialized judges have also been assigned exclusively to cases of violence against union members. The resources allocated to the judicial branch and the office of the Prosecutor General have increased every year since 2002. The budget increased by over 70 percent, growing from US$346 million in 2002 to US$598 million in 2008. During the same period, the budget of the Judiciary also increased by almost 50 percent. This has helped the new judicial system to drastically reduce processing time for cases, for example, the time for homicide cases has dropped by 75 percent and for drug trafficking by 90 percent (Griswold and Hidalgo, 2008).

In 2005, the Colombian Congress enacted the *Justice & Peace Law and Decree 128*, to demobilize violent guerrilla and paramilitary groups, through economic and social incentives, including de facto amnesties. The government has also extended permanent police presence to all municipalities of the country in 2007, which was absent in 168 municipalities even in 2002.

Colombia has a robust legal framework to protect the rights of workers, which includes the core labor standards defined by the ILO, namely:

- Freedom of Association and the Effective Right to Collective Bargaining
- Prohibition of Forced Labor
- Effective Abolition of Child Labor
- Non-Discrimination in Employment

Colombia has close to one million unionized workers in Colombia, and over 7,650 unions registered with Ministry of Social Protection. New resolutions have expedited the labor union registration process. Workers are allowed the right to form unions and the right to strike under the Constitution of Colombia. Colombia continues to reform its labor laws to achieve consistency with ILO standards. For example, in 2003, the Constitutional Court annulled various provisions limiting the rights of industrial unions to collective bargaining (Attanasio, Goldberg and Pavcnik, 2003).

PROGNOSIS

While member nations do derive economic benefits from regional FTAs, they can be trade restrictive in the global context, simply because more remote nations do not have the same ease of access to the large US or the EU markets. Another negative for a developing nation could be the amount of resources they spend in negotiating FTAs, for instance in attaining compliance with standards set by the richer nation. In the short run, these redirected resources may imply loss of alternate domestic investment opportunities (Burfisher, Robinson and Thierfelder, 2001). So, in view of better long term prospects of an FTA signed between a developed and a developing nation, the higher income nation needs to safeguard the developmental goals of the lower income nation. These may take the form of inclusions of agriculture, which generate gains in rural areas, or lessening the stringencies in investment and intellectual property laws to lower enforcement costs, or the simple provision of trade-related technical assistance. The CTPA appears to be well grounded in these principles.

Although the CTPA is still pending ratification by the US Congress, it can evidently generate economies of scale and scope for both countries. In the US, it can potentially create thousands of jobs, which is vital in a period of economic recession, and considering that US unemployment rates (over 10 percent) are at historical highs.

The CTPA will benefit Colombia by opening its market to more import competition, which will provide its consumers with better quality products at lower costs. It can also promote foreign direct investment and strengthen its socioeconomic relations with the largest economy in the world. A recent study by the University of Antioquia shows that not implementing the CTPA would decrease investment by 4.5 percent and GDP by 4.5 percent, while unemployment will increase by 1.8 percent and poverty levels will rise by 1.4 points.

The approval of the FTA would seal a deeper partnership between two nations that have been long-time friends and great defenders of market-based democracy. US will be a reliable

partner in turbulent times and support a region where liberal values are under attack. Colombia has made significant progress in the areas of labor rights and protection for union members, since 2002. The government has strengthened the judicial framework of the nation, and improved the legal rights for trade unions. In addition, the government has reduced violence against union members, increased funding of the protection program and intensified the prosecution of violence against union members. The new challenge for Colombia is to build on the progress that has been made. The CTPA can provide the economic engine to sustain this momentum.

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RESEARCH ON OFFSHORE OUTSOURCING: A SYSTEMATIC LITERATURE REVIEW

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ABSTRACT

The research on offshore-outsourcing is relatively new in international business field. This paper tries to find out the emerging research areas in offshore outsourcing with the use of systematic literature review (SLR) and find out that the case of offshore-outsourcing of small and medium size enterprises are practically inexistent in all three principal research fields such as International Business(IB), Strategic Management (SM) and Supply chain management (SCM). Research focusing on 'knowledge and innovation' seeking outsourcing from the outsourcing provider firms is also missing. Author also tries to focus on few emerging arena of research on offshore outsourcing.

INTRODUCTION

Offshore outsourcing' is a comparatively new research area in international business field. Globalization and accelerated competition as well as ever increasing consumer demand for value have pushed firms to look for new way of value creation through efficient use of limited resources. Offshore outsourcing is one of the way through which the firms try to address the new requirements of the marketplace. Indeed, there is evidence that outsourcing contributes positively to market value (Alexander and Young, 1996). However, there exist lots of divergences among the practitioners, politicians, public in general and researchers on the offshore outsourcing concepts, factors and performances. The lack of strong theoretical development has accelerated the debate on the pertinence of offshore outsourcing. However, offshore outsourcing research is gaining momentum in International Business, Strategic Management and Supply chain management field. Though most of the previous research was on macro-level as well as dealing with the social and job related issues. The new research trend has started to investigate in economic aspects of offshore outsourcing research with firm level empirical data. In this paper, different avenues of emerging research issues are addressed through the use of extensive systematic literature reviews of previous researches.

CONTEXT AND FUTURE INSIGHTS OF OFFSHORE OUTSOURCING RESEARCH

The theoretical developments as well as offshore outsourcing research have been developed multifaceted. The most important questions in offshore outsourcing remains,

according to the various literature reviewed, "the way to outsource successfully". What really interests to the practitioners in outsourcing from a research perspective is that why do some succeed and others fail in their outsourcing endeavors'?" The performance issues in offshore outsourcing and effects of the outsourcing on firm performance have, indeed, been identified also in the literature as one of the issues that still call for further investigation (Gilley and Rasheed, 2000; Mol et al., 2004; Quélin and Duhamel, 2003). A fundamental problem in addressing outsourcing performance is that the question of "how success in outsourcing should be evaluated" has not been examined thoroughly (Harland et al., 2005). As the performance can be evaluated against various different criteria, it would be important to find out which ones are the most relevant and what issues should be taken into consideration when selecting the performance criteria. According to the MGI study (Balasubramanian and Padhi, 2005),

> *"The highest levels of satisfaction and performance were reported by client companies that focus their offshoring performance metrics on a limited number of goals. Clients have relied on an assortment of detailed, mostly cost-focused metrics that failed to frame their strategic objectives and achieve sustained performance improvement. Successful client–supplier partnerships are moving away from such legacy reporting systems, which reinforce the micromanagement aspects of the staff augmentation model".*

The offshore outsourcing performance is not determined by a single factor alone or only on cost-focused measures, it is the correct management of the entire outsourcing process, from the start to the end of the outsourcing process management which leads to either a successful or a failed outsourcing endeavor. With increasingly varied offshore outsourcing activities, we need integrative tangible and intangible measurements in order to qualify either success or failure in offshore outsourcing initiatives. The following issues are utmost important, in this regard, to take into consideration in future offshore outsourcing research.

Towards Multi-dimensional Offshore Outsourcing Research

Economic globalization, which creates interdependency among countries, is characterized not only by trade of goods, services and know-how and very often the intermediate goods, but also by the development of New Global Division of Labour (NGDL) phenomena (Su, 2009). The NGDL refers to the fragmented production system of goods in several locations around the world in order to take advantage of certain benefits associated with the cost and quality of production factors such as labour, skills, energy, capital, innovation, potential markets etc. According to Berger (2006), "in the world of fragmented production, the issues are what they have always been: profits, power, security and new opportunities. What has changed is that it is now possible firms to achieve these goals by positioning themselves at any segment of "value chain" of the

product.” In the context of a "modular world", a product is now most often “made in world” than manufactured only by one single country. In other words, several countries contribute to the different parts of the value chain, based on their strengths or competitive capabilities and all enjoy the benefits accordingly. The current offshore outsourcing falls in this NGDL thematic where firms look for not only cost advantages but also for knowledge and innovation from the offshore outsourcing relationships (Mohiuddin, Su,Su, 2010).

The theoretical literature on the firm’s decision to produce in-house or outsource through market contracts is extensive and dates back to Coase (1937) and his theory of the firm. This theory is known as transaction cost economics (TCE) and implies that firms should produce goods in-house if the ‘transaction cost’ of market transaction is higher and if this cost is lower, firms should procure this goods from the market. Surprisingly, little material relating to the principal aspects of international outsourcing has been published in academic journals. Mol et al. (2005) found that from 1989 to 2000, only 7 articles contained the words "global" and "sourcing". Recently, however, the attention on the foreign aspects of the phenomenon has grown (Antràs and Helpman, 2004). The majority of this work has most commonly focused on either transaction cost theory, or, the principal-agent framework (Ono and Stango, 2005) as well as on the Resource based view (RBV). According to the resource-based view (RBV), core resources and core capabilities are the major factors which allow an enterprise to sustain its competitive advantage (Prahalad & Hamel, 1990). Those resources and capabilities must be valuable, rare, imperfectly imitable, and non substitutable (Barney 1991). This approach suggests that a firm should invest in those activities that constitute its core competences and outsource the rest (Prahalad and Hamel, 1990).

However, due to the dynamic changes in business environment, enterprises need to adjust or enhance their core resources and core capabilities to match current environmental evolution. According to the knowledge-based view (KBV), the dynamic core competence will be the major factor for enterprises’/alliances’ ability to sustain a competitive advantage in today’s value chain competition (Grant 1996). The networking or partnerships among the firms are considered very effective strategic decisions to encompass processing complexity, new market development, new product development and economies of all kinds (D’Amours, Montreuil, Lefrançois, Soumis, 1999).Via learning and knowledge/information sharing; the enterprise can enhance its dynamic core competence. Dynamic core competences are based on an enterprise’s integration into systemic meta-learning of universal and tacit knowledge through information transfer, redefinition of heuristics, and continuous improvement based on experimentation and the development of firm-specific skills based on dynamic routines (Lei et al. 1996). Dynamic core competences (DCC) can be leveraged to create growth alternatives for global diversification, new applications of existing technologies and/or the development of new lines of business (Lei et al. 1996).Dynamic core competences can be used to reduce uncertainty and to induce path dependencies that create causal ambiguity (making imitation from other firms difficult). In so doing, they can form the basis of competitive advantages (Lei et al. 1996).

Outsourcing could also have productivity enhancing effects at a more aggregate level if offshoring would lead to the creation of new firms, and the destruction of old ones (Antràs et al., 2004). This process is often associated with Schumpeter's theory of creative destruction, and numerous empirical studies have provided support for its positive impacts on productivity (Bartelsman et al., 2003). Other relevant theories have examined the potential for productivity enhancing effects due to knowledge spill-over as well as firms' abilities to focus on core competences by outsourcing relatively inefficient activities. To compete in increasingly competitive economic environments, decisions to offshore company activities are essentially driven by factors related to costs of production, distribution and productivity. From the perspective of the firm's offshoring, it is therefore seen as a part of its business strategy. For instance, if offshoring enables a firm to relocate its relatively inefficient production processes to external providers with cheaper and perhaps more efficient production capabilities, the firm can turn its focus to areas where it has a comparative as well as competitive advantage and expand output, or engage in new business activities.

Firms determine its outsourcing strategy on the basis of shortcomings in resources or capabilities. Grant (1991) points out that the organization's competence depends on its capability to combine resources and organizational processes to meet the desired objectives. Grant (1991) also states that the conventional approach to the creation of resources has focused on the company's lack of resources and capabilities. In other words, in order to exploit certain resources, firms need to acquire external complementary resources which it does not possess. Thus, the firm is not limited to exploiting its own stock of resources and capabilities (Das and Teng, 2000), but can cover its shortcomings by purchase or strategic alliance, one form of which is outsourcing. Therefore, suppliers can also be considered resources that consolidate the organization's internal competencies.

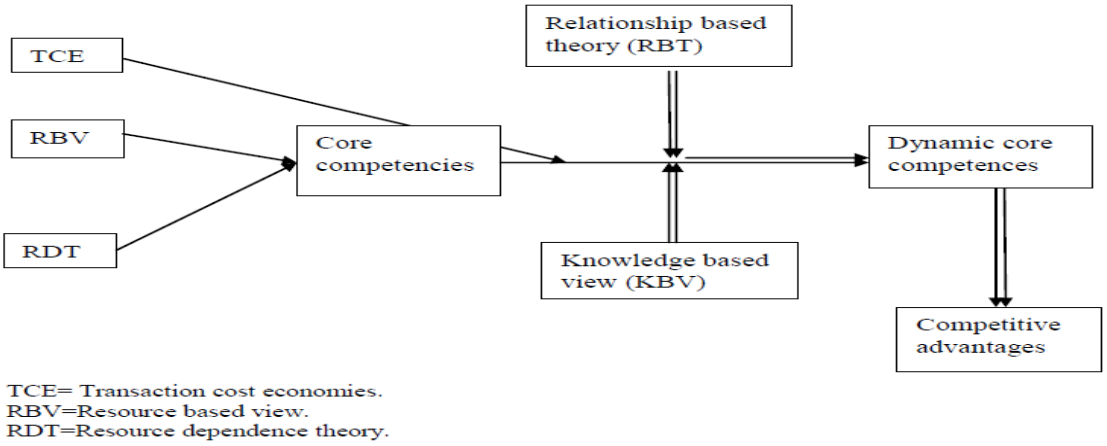
This perspective does not examine, however, the interrelationships and advantages when two or more organizations in the supply network unite to develop relational rents that could contribute to the development and maintenance of competitive advantage (Dyer and Singh, 1998). In view of this theoretical limitation, other determining variables in the outsourcing strategy must be considered. When firms outsource, they must consider the possibility of associative advantages for their internal and relational capabilities. The associative advantage would be the competitive advantage (Porter, 2005) achieved through a relationship between firms. The teaming upon companies to form business networks seems to be a promising competitive strategy since it permits the partner companies to concentrate on those activities of the value chain they perform best and thus every company forming the network maximizes its own added values (Poulin, Montreuil, Gauvin, 1994). This synergetic approach is considered as collaborative relationship based view (CRBV). This perspective of analysis suggests that critical resources can be expanded or built up beyond the confines of the firm and be integrated into inter-firm routines and processes. The use of outsourcing must be considered as a strategy in which essential process activities could be outsourced in a framework of long-term cooperation

where the suppliers are considered to be partners (Pfohl and Buse, 2000). The greater the competitive advantage that is associated with an activity, the higher that activity's strategic relational value will be. Strategic relational value is generated by the development of capabilities across organizational boundaries and can be achieved by the creation of complementary resources, defined as "distinctive resources of alliance partners" that jointly generate rents higher than the sum of those generated independently by the resources of each organization (Dyer and Singh, 1998). The development of relational capabilities with customers and suppliers through process integration (Hammer, 2001), relational competitiveness and simplification of activities (Hammer and Champy, 1994; Davenport, 1996) can all be influential when process activities are outsourced. Thus, the relationship based theory expands the capacity of firms even if it does not have all the resources and competences. It also encourages firms to build cooperation in core competence fields. Relationship based theory differs from resource based view (RBV) whereby core competences should be kept inside the firm and thus should deprive other firms from enjoying the benefit from cooperative inter-organizational relationships.

Recent research in offshore outsourcing has been diverting its focus from the Transaction cost economics (TCE), Resource based view (RBV) and Resource dependence view (RDV) towards Knowledge based view (KBV) and collaborative relationship based view (CRBV). Collaborative Relationship based view (CRBV) develops and explains how firms gain and sustain a competitive advantage within inter-organizational relationships (McIvor, 2005). More and more authors are combining the KBV, CRBV and dynamic network theories in order to explain the virtue of collaboration among the firms and one of this forms is outsourcing. This evolution of theoretical development is required in an era of changing paradigm of offshore outsourcing argument which seems to be transforming from pure 'cost savings from labor arbitrage' to that of 'value creation through leveraging of resources' - a more sustainable proposition where clients and vendors are likely to get into a strategic and long term relationship. This stream of research can also be related to the notion of 'transformational outsourcing' which does not directly and primarily aim at cost savings or acquiring resources that are unavailable internally. The transformational outsourcing is adopted to achieve the structures and form of a virtual firm. The search for these flexible and dynamic structures have given rise to organizational forms such as the virtual organizations, network organizations, modular organizations, barrier less organizations etc. (Hatonen and Eriksson, 2009, Montreuil ,Vallerand and Poulin,1996). The competitive advantage of a company is largely determined by the competitive advantage of the network the company belongs to, (Lakhal, Martel, Oral and Montreuil, 1999). In consequence of this changing paradigm of offshore outsourcing, theoretical foundation of research in this field is also changing from purely Transaction cost economics (TCE) and Resource based view (RBV) towards knowledge based view (KBV) and social exchange theories such as collaborative relationship based view (CRBV).

The emerging theoretical framework of offshore outsourcing can be put in the following graph:

Figure 1: Emerging theoretical framework of offshore outsourcing research



Emerging theoretical framework of offshore outsourcing research

Emerging Research Questions and Topics on Offshore Outsourcing

The extensive literature review led us to assume that the basic questions in offshore outsourcing such as What, Where and how will remain key topics for outsourcing research in the future:

Firstly, firms are increasingly trading off their options on what to outsource and to what extent. The increasing variety of suppliers has created an outsourcing market in which almost any business process or activity can be sourced.

Secondly, globalization, development in NTIC and other communication and logistics development and rapid economic development of many emerging countries has added versatility to the outsourcing location decisions. For example, Eastern Europe is replacing in certain sectors the offshore outsourcing activities which were supposed to migrate to India or China.

Thirdly, with respect to the "how" question, firms are continuously developing new outsourcing models to maximize the value while minimizing the risks of using external sources. The outsourcing management decision has, thus, gone beyond make-or-buy.

Fourthly, more and more offshore outsourcing projects are coming under rigorous scrutiny and value creation out of these manoeuvres.

The management of outsourcing relations has become a key managerial interest. The costs of managing the relationship portfolio also increases as the distinct number of vendors increase, because the managerial task of managing and aligning the portfolio becomes more

complicated. The relationship management issue of the suppliers is increasingly becoming the only sustainable competitive edge (Doig et al., 2001). From the theoretical perspective this issue can be addressed with the use of portfolio management theory into future outsourcing research. Prominent researchers such as Markowitz (1952) introduced portfolio management in the early 1950s for the purposes of financial management. It has not yet been widely picked up by outsourcing researchers.

Emerging Contexts of Offshore Outsourcing Research

The context of the offshore outsourcing has been changed lately. The ever increasing global supplier base have made it possible for firms of all sizes larges as well as the SMEs to capitalize on the benefits of outsourcing. There is very few existing research on small and medium-sized firm's (SMEs) offshore outsourcing activities. In contrast to large firms, SMEs face different kinds of challenges in outsourcing management. This is emerging as an important research field in offshore outsourcing research.

Offshore outsourcing in foreign countries increases risks not only from financial point of view but also the political one. Therefore, the analysis of possible risks is an essential part of studying offshore outsourcing (Jahns et al., 2006; Pai and Basu, 2007). In addition to the financial risks, the risk of intellectual property (IP) loss must be taken into consideration since many countries have not developed a strong IP regime. The role of the local governments (in both the home and the target country) as well as the role of international organizations and treaties can be very important field to investigate for offshore outsourcing (Mankiw and Swagel, 2006).

The decision of the location for the offshore outsourcing destination, time differences between the outsourcing firms and contracting firms as well as the time for outsourcing in a particular market are vital questions to investigate. Par example, 'Destination China' could be great for the moment but it can lose its advantages in certain sectors and the outsourcing firms which intend to offshore should decide precisely where and when to relocate their activities in a given industry. This leads to one further research question regarding outsourcing that probably will rise in the future – "when".

Small and Medium Size Enterprises (SMEs) and Offshore Outsourcing

The research in offshore outsourcing holds that large multinational companies (MNCs) outsource part of their business processes internationally as a means of reducing costs and achieving greater efficiency, flexibility and access to tangible as well as intangible resources (Doh, 2005, Farrell,2005,Ramamurti (2004). Most of the researchers, policy makers and practitioners focus their attentions on the MNCs offshore outsourcing (Levy, 2005, Lewin, Peacock, Peeters, Russell, & Sutton, 2005). On the other hand, the offshore outsourcing of the

SMEs has received far less attention from the academic, policy makers and managers. Few researchers such as Scully and Fawcett (1994) studied the offshore outsourcing of the SMEs and concluded that the motivations, challenges, and performance outcomes associated with the offshore outsourcing of the SMEs may differ from those of the MNCs in several respects. Researchers typically consider the SMEs to serve local market with locally available resources. However, Scholars from the entrepreneurship and international business research streams acknowledge that small and medium (SMEs) firms also play important roles in international business (Fujita, 1995 a,b, Oviatt & McDougall, 1994, Reynolfs, 1997). This stream of research is focused on the internationalization of the SMEs to reap the entrepreneurial opportunities in international product markets. The other value chain activities such as offshore outsourcing of these firms are lacking in academic research. The existing research from the different research streams such as Economics (Gorg & Hanley, 2005, Grossman & Helpman, 2005, Grossman, Helpman & Szeidl, 2005), International Business(IB) (Parkhe, 2007), strategic management (Butler ,2001,Hoskisson et al.,1999, Morstead and Blount,2003, Porter, 1980) and Supply chain management (Jahns, Hartmann, Bals, 2006) are mostly theoretical (Bunyaratavej, Hahn,& Doh, 2007, Kedia & Lahiri,2007). There are very few empirical researches with limited findings and sometimes different findings from conventional wisdom and theory. For example, early researchers have found that offshore outsourcing will take place in low cost countries (LCC) (Grote & Taube, 2007). But the study of Bunyaratavej, Hahn & Doh (2007) found that "a country is more likely to be a destination of higher value offshore outsourcing as the average wage of the country increases. Research exploring why SME managers decide to outsource various business processes to foreign firms is practically non-existent (Gregorio, Musteen and Thomas, 2008). In practice, Small and medium size enterprise (SMEs) dominates the business world in Canada and Quebec with 96% of all type of (for profit) enterprises, 35% of export value and employ half of the work force in the province (statistics Canada, 2007). The importance of the SMEs in Canadian and Quebecker economy and society is enormous. That's why it is very important to explore the venue of offshore outsourcing of Canadian and Quebeckers SMEs and specially the impact of this strategy on competitiveness in international markets. Outsourcing of non-core activities could allow them to focus on the activities they are best at, which in turn improves competitiveness. SMEs become more efficient as a result of the information flow that helps them improve technology and learn from the experience of other partnering (suppliers) firms and develop network in order to reap the synergetic or complementary benefits of partnerships. The efficiency and flexibility enhancing benefits of offshore outsourcing can allow the SMEs operating under resource constraints to tap into valuable resources from the suppliers firms in the emerging country. This can help them to gain competitive advantages. SMEs are very often size and resource constraints that inhibit their ability to internalize international activities (Dunning 1980). Offshore outsourcing can allow them to overcome size disadvantages and resource constraints and tapping resources owned by others (McGrath & MacMillan, 2000). In fact, through offshore outsourcing, SMEs can obtain the benefits of foreign-location-specific

advantages such as access to world class capabilities and innovation without needing to build internal multinational operations. This allows the SMEs to gain both cost savings and access to innovative capabilities. SMEs can be even more motivated to enter into offshore outsourcing activities comparing with the MNCs. Diminishing transportation and communication costs enable SMEs to explore outsourcing opportunities internationally. In the past, such international opportunities may have been beyond their reach and only within the reach of larger MNCs. Integrating the literature on offshore outsourcing (Gorg, Aoife, & Strobl, 2004) with that of 'role of networks and learning' in the internationalization process (Chetty & Agndal, 2007, Johanson & Vahne, 2003, 2006) is needed in order to study the phenomena of the offshore outsourcing of the SME. It appears from this literature that offshore outsourcing is an important mechanism for improving international competitiveness (Gregorio, Musteen & Thomas, 2008).

New Streams of Offshore Outsourcing Research

The offshore outsourcing phenomenon needs to be examined from multidimensional such as economic, strategic and social point of view. More research should focus on the impact of offshore outsourcing on the firm's ability to compete and succeed in the globalized economy. The offshore outsourcing is a highly debated issue and very often accused of all sort of socio-economic deterioration in the developed countries without any firm level data. That's why it's very important to study the performance of those firms which have entered into offshore outsourcing activities. The investigation on macro-level is also needed and specifically can address the questions of job losses and job creation in total and find the real differences. Since the 1980s offshore outsourcing as a corporate strategy has evolved from the transactional approach to a more broader form in which the outsourced process is co-developed with the outsourcing provider, and in which cost is no more the principal objective to attain. Since 90s, Academic interest is increasing in offshore outsourcing research field (Jiang & Qureshi, 2006).

The basic questions in offshore outsourcing research such as what to outsource, how and where to outsource have been the primary questions guiding the outsourcing research in the past and continuously remain pertinent, however, new questions are arising. Among them Institutional effects, outsourcing timing, incremental outsourcing is prominent (Hatonen & Eriksson, 2009). Although, many existing management theories were used individually to explain different facets of the offshore outsourcing, more and more authors are combining several theories to explain more integratively the offshore outsourcing phenomenon. On the top of cost savings, research is promising with issues such as access to resources and skills or to gaining operational flexibility. The current research promotes a more cooperative approach to outsourcing management. In offshore outsourcing research, the relational view and transaction cost approach do not contradict each other, but they co-exist.

SYSTEMATIC LITERATURE REVIEW (SLR)

There are two major reasons exist for reviewing the literature (Sharp & Howard, 1996). The preliminary literature review helps to generate and refine research ideas. The critical literature review or systematic literature review will enable us to get the update current state of knowledge, its limitations and to fit the current research project in the wider context (Gill & Johnson, 1997). A systematic review is a summary of research that uses explicit methods to perform a thorough literature search and critical appraisal of individual studies to identify the valid and applicable evidence. Our critical review respected the following criteria:

- Included the key academic theories within the research area of offshore outsourcing ;
- Demonstrated the up-to-date knowledge of offshore outsourcing field;
- Shows how the current research relates to previous published research;
- Asses the strength and weaknesses of previous work, including omissions or bias
- Justify the arguments of current research by referencing previous research.

A systematic review is a methodological process which identifies, evaluates and analyzes research evidence to synthesize and map it (Kitchenham, 2004; Staples and Niazi, 2007). The systematic review is based on a process which is a defined and methodical way of identifying, assessing, and analyzing published primary studies in order to investigate a specific research question (Staples and Niazi, 2007). It is based on a rigorous, transparent and reproducible process allowing developing the most complete view of the literature for researchers and policy-makers (Tranfield et al., 2003; Kitchenham, 2004). Undertaking a systematic review is increasingly regarded as a fundamental scientific activity, and the frequency of this kind of review is increasing in management (Tranfield et al., 2003).

The basic steps of a systematic review include: 1) identifying the need for a review, 2) developing a research protocol (formulating an explicit research question, fixing inclusion and exclusion criteria), 3) identifying relevant studies, 4) selecting the studies according to the inclusion and exclusion criteria, 5) assessing the quality of retained studies, 6) summarizing and synthesizing study results (Tranfield et al., 2003); (Kitchenham, 2004; Staples and Niazi, 2007).

Systematic literature review is widely used in many research fields. The current research project is not an exception. According to Becheikh et al., (2006)" Principal objective of a systematic literature review is to survey the fundamental contributions in a given research field. Conducting an exploratory literature review before the systematic literature review can be beneficial in order to better capture the terminology and the taxonomy of the field of research such as offshore outsourcing. Systematic literature review should be based on a specific objective which will guide the selection process, extraction, filtering and text analysis (Becheikh et al., 2006). Thus the systematic literature review became an important research instrument in

Management science research in order to augment research validity by a rigorous process and to reduce subjective characteristics.

Inclusion and Exclusion Criteria

This systematic review sets out to answer the two following research questions: 1) what are the research gaps in offshore outsourcing and, 2) what are the emerging research issues on offshore-outsourcing?

Selection of the Articles

In the papers retrieving phase, we used some popular databases such as EBHOcast, ABI/informa, FACTIVA, ISI, sciencedirect, FRANCIS etc. with the key words like offshore outsourcing research, offshoring and performance research, evolution of research in offshoring, and future of offshoring outsourcing research etc. Articles were selected if they addressed one of the two principal questions mentioned earlier. The current systematic review took in consideration published peer-reviewed papers, as well as research reports. Books, dissertations and book reviews were excluded, due to time and resource limitations. Relevant ideas and significant scientific contributions included in books and dissertations are often published afterwards in peer-reviewed articles.

At the end of this phase, 2359 documents were identified and reviewed, according to the inclusion and exclusion criteria. A first sorting based on the documents' titles and abstracts led to exclude 2169 documents that did not meet the inclusion/exclusion criteria. The thorough reading of the full text of the remaining 190 documents concluded with the exclusion of 133 citations. Hence, 57 documents crossed the double sorting and were definitely included in the first phase of the systematic review. 81 percent of them came from three electronic databases which are, in order, ISI web of science, Academic search premier, and proquest/ABI. Among these 57 articles, 13 articles were cited more than 50 times and through the manual search of references of these articles, 8 new articles were chosen. Thus total 65 articles and research reports were analyzed for this current paper.

RESEARCH GAPS AND OPPORTUNITIES

Research on 'Offshore outsourcing' is still disparately scattered among the different research field such as International Business (IB), Strategic Management (SM) and Supply chain management (SCM). The practice of borrowing theories from multiple fields of social sciences is very much present in the research community and it remains widely disparate the different sub-fields of research in offshore outsourcing. Some of the issues such as job losses, intellectual property losses, decision making process and contracts were adequately addressed by the

researchers. While some other phases like the outsourcing partner search, collaborative relationships in organizing offshore outsourcing i.e implementation, critical evaluation of the outsourcing projects, soft issues like customer satisfaction, faster product cycle and decision to review or terminate have not been researched in detail. In this section, we identified specific research gaps and opportunities for future research in each phase.

Outsourcing Decision Making Process

A vast majority of research articles have focused on the outsourcing decision by presenting various explanations of why organizations choose to outsource part of their activities. Most view the outsourcing decision as a rational decision based on economic or resource-based factors. Goo et al. (2000) identified 14 theory-based drivers of outsourcing decision. However, most of the studies focused primarily on economic drivers. It is commonly assumed that an outside specialized firm can provide the same level of service at a lower cost than if the non-core products were made internally while the firm can focus on its core competencies. However, there is no study that has empirically investigated this important issue as a whole. Also, most research studies have focused on rational decision making based on transaction cost and resource-based theories. Alternative decision models based on institutional and political theories as well as inter-firm synergetic benefits and learning and innovation have been largely ignored. With the current rush to outsourcing, there seems to be a bandwagon effect in outsourcing decision making (Lacity & Hirchheim, 1993). There is clearly a need for more research investigating the underlying process leading to outsourcing decisions. Most studies have not distinguished the differences between the decision-making processes at small & medium sizes (SMEs) and large organizations. There is a need to investigate how the processes and decision drivers differ at organizations with different sizes and scales of resources. Furthermore, offshore outsourcing is on the rise. The decision process in offshore outsourcing may differ significantly from that in on-shore outsourcing. There is a need to study those differences in processes as well as offshore outsourcing decision criteria and drivers.

Offshore Outsourcing Partner Search and Selection

After deciding to outsource, the firm goes to the next step of selecting the most suitable outsourcing service provider who can offer the products and services at the appropriate cost. There are very few studies were done on this issue. Authors like Michell & Fitzgerald, (1997) focused exclusively on outsourcing provider firm selection and search. Few others touched on the idea of partner firm selection in a broader context of the overall outsourcing process or contract negotiation and/or partnership formation (Barthélemy, 2003; Lacity & Willcocks, 1998; Lee & Kim, 1999). Often partner firms are selected based on perceived complementaries between the organization's capabilities and partner firm's capabilities (Levina & Ross, 2003).

There is a need to develop matrices for finding and matching the gaps in internal firm resources and partner firm's resources for objective partner firm selection.

Outsourcing Contracting Process

A relatively large body of literature has focused on the outsourcing contract between the client organization and provider firm with the theoretical bases of social contract theory and social exchange theory. The outsourcing contract specifies in detail the exchanges of services and/or products, financial matters, assets and/or staff transfers, communication and information exchanges, service enforcements and monitoring methods, key personnel, dispute resolution procedures and other formal issues (Halvey & Murphy, 1996; Willkocks & Kern, 1998, cited in the 'Virginia Ilie and Mihir Parikh AMCIS 2004 Proceedings).

Most researchers have looked at the outsourcing contract as the mechanism to develop a balance of power between the client organization and partner firms. There is a need to evaluate the balance between the rigor and flexibility in contracts. Rigor can reduce the threat of opportunism by a partner firm (Lacity & Hirschheim, 1993), but it can develop an arm's length relationship with the partner firm. There is a need to investigate the impact of outsourcing contract complexity on outsourcing relationship and success.

Furthermore, contract governance structure may have impact on successful negotiation and development of contract and on the quality of future partnership. It has been pointed out that a well-developed contract greatly influences the resulting quality of the relationship (Lacity & Hirschheim, 1993). However, no study empirically investigated this proposition. Contracts may also play a significant role in reducing technical and business uncertainties by transferring them from the client organization to the partner firm and vice versa. There is a need for additional studies that focus on contract governance structure and the role of contract in reducing these types of uncertainties.

Questions Related to Implementation of Offshore Outsourcing Projects

The actual implementation phase in the overall outsourcing process has not received much attention in the research. There is a clear need for empirical studies that investigate the conditions that assure or inhibit a smooth implementation, the process of knowledge and assets transfer to partner firm/s and the cost and potential pitfalls in implementation process. Implementing an outsourcing agreement is often a complex process requiring effective management. Future research should focus on studying the effectiveness of project management concepts and practices in successful outsourcing implementation.

Strategy on Operations and Relationship

A vast majority of studies have investigated the relationship in an outsourcing arrangement. In fact, the relationship between the client organization and the partner firm is the second most researched topic in the overall outsourcing process, in the literature, after the initial decision to outsource. The outsourcing relationship has been studied mostly in an inter-organizational relationship framework using resource-dependence, transaction cost and agency theory, from an economic standpoint and social exchange theory and power-political theory. Previous research has classified the outsourcing relationship between organizations in two types (Lee & Kim, 1999): transactional style and partnership style. A transactional style relationship (Lacity & Hirschheim, 1993; Fitzgerald & Willcocks, 1994; Grover et al., 1996) develops through the formal contract in which rules of the game are well specified and the failure to deliver on commitments by either party should be resolved through litigation or penalty clauses in the contract. This approach can be traced down to the supplier-customer type of relationship. A partnership approach (Lee & Kim, 1999; Saunders et al., 1997) includes risk and benefits sharing, the need to view the relationship as a series of exchanges without a definite endpoint based on trust and mutual understanding. This approach tends to view the relationship as an ongoing alliance. However, other authors (Lacity & Hirschheim, 1993) have posited that outsourcing providers cannot be strategic partners because they do not share the same profit motive. In order to resolve such differences, future studies can investigate the mechanisms that promote and factors that inhibit the evolution from an arm's length relationship to strategic partnership over time.

Critical Performance Evaluation of Offshore Outsourcing

Evaluation is the phase where the outcome of the outsourcing decision is measured against contract clauses such as the service level or performance goals (Lee & Kim, 1999). Performance has been found in the literature to be a major factor when it comes to the evaluation of outsourcing projects. It is common to measure the outcome in terms of service satisfaction, system satisfaction, user satisfaction, service quality, cost-reduction, financial, or technical performance (Lee & Kim, 1999).

However, our analysis uncovered that there is no common instrument for evaluating the outcome of outsourcing. Objective and perceptive measures on different dimensions (such as project quality, partner firm performance, productivity, financial issues, effectiveness, and technical, data security, and employee morale) need to be developed and tested. There is also a need for a comprehensive, framework that integrates various performance measures in outsourcing. Having such a framework can also help develop more effective and detailed contracts.

Decision to Renew or Terminate the Outsourcing Relationship

t the end of the outsourcing period, a decision needs to be made whether to extend or terminate the current relationship with the current partner firm. Lacity & Willcocks (1998) identified three options available to the client organization: extend the contract with the current partner firm, switch to a new partner firm or bring the outsourced work back in house. Studies on the decision at the end of the outsourcing contract are inexistent in the existing literature on offshore outsourcing. There is a clear need for a lot of research in this area. For instance, there is a need to investigate the impact of client lock-in situations such as asset specificity, and lack of internal skills on the decision to renew or terminate.

CONCLUSION

Academic interest in outsourcing continues to rise in parallel to increased interest in practice. Previous researches have focused more on some phases of the outsourcing process and much less on other. Even within more researched phases, studies have tended to focus more on one or few theories and not on many other plausible theories. For example, in outsourcing decision making, most studies have focused on transaction costs and resource availability, while not on other factors such as knowledge and innovation seeking partnerships and coopetition in offshore outsourcing. Though its widely believed the benefits of offshore outsourcing at least among the research and academic community however, few research exist with empirical data on outsourcing success or failure in offshore outsourcing. The field of firm level critical performance evaluation with intangible indicators of offshore outsourcing is extremely necessary in order to propose a sustainable offshore outsourcing strategy of the Canadian manufacturing SMEs to the practitioner as well as for the policy makers.

Based on the extensive literature review, it can be concluded that the offshore outsourcing research have many directions to which the outsourcing research can be taken in the near future. What seems to be the broad underlying managerial interest is to receive more insights about the success factors in outsourcing which is dependent on the correct management of offshore outsourcing process from A to Z. There are at least four research questions are emerging prominent are:

- Firstly, the management of versatile outsourcing relationship portfolios appears to be one of the current and future managerial challenges.
- Secondly, the appropriate timing of the offshore outsourcing
- Thirdly, The cultural differences management in offshore outsourcing dealings with ever increasing service providers from different part of the planet.
- Fourthly, offshore outsourcing of manufacturing SMEs, its performance measures and strategic management options.

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THE IMPACT OF THE SPECIAL DIVIDEND ANNOUNCEMENT ON THE STOCK RETURN: THE CASE OF MALAYSIA

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ABSTRACT

The method of distributing excess cash among investors is determined by dividend policies taken by each company. Usually, there are three alternatives of the excess cash distribution; offering special dividend, initiating or increasing regular dividend and repurchase share. Special dividend that is a one-time payment rather than the permanent increase in cash payment conveys the good news that although the current financial situation of the firm might not be sustainable, but distribution of the special dividend reduces the free cash flow problems. Furthermore, distribution excess cash via a special dividend would suggest that managers believe that the current share price of company is not undervalued. This study investigates the impact of the special dividend announcement on the stock returns of the Malaysian stock market. Using the standard event study methodology, the findings indicate that, the special dividend announcement signals good news to investors in the overall market and when the analysis expanded to the sector level. That causes the stock returns to react positively and immediately when the news is announced. These findings are in line with the findings of previous studies carried out in US and Australia.

INTRODUCTION

The amount of dividend that a firm should pay to its stockholders is usually determined through dividend policy of the firm. There are three alternatives available to managers for distributing excess cash to shareholders. A firm could choose to initiate or increase dividends, repurchase shares, or pay a special dividend. The selection of the each of the above alternative will depend on expected future cash flows and the firm's prior share price performance. Jagannathan, et al. (2000) finds that dividends are initiated or increased following "permanent" increases in cash flows. If the current cash flow level does not appear sustainable, a firm is unlikely to initiate or increase dividend levels because of the negative consequences that would occur if it were subsequently forced to decrease or suspend the dividend. Stephens and Weisbach (1999) and Jagannathan et al. (2000) find that firms are more likely to repurchase stock following a period of poor stock performance. Therefore, a firm would be reluctant to use share repurchase as a means of distributing excess cash following a significant run-up in the share

price. As such, firms choose special dividends as a means of distributing cash in a setting characterized by temporary increases in cash flows and prior positive share price performance.

Special dividends have salient characteristics that make them a better choice in distributing the excess cash in comparison to the regular dividend and cash repurchase. The decision to issue a special dividend reduces the free cash flow problems by the potential managers who might squander excess cash either on executive perks or negative net present value projects (Jensen, 1986). Therefore, the use of a special dividend conveys the positive news and thus increases the stock price. Under the signaling theory (Miller and Rock, 1985), the choice to pay a special dividend rather than initiating regular dividends or announcing a permanent dividend increase, may indicate that although investors can earn superior returns, the current earnings performance level is unsustainable. In addition, announcement of the special dividend rather than increase in the regular dividend conveys positive implication to the investors that these companies would reinvest the excess cash of the company for future expansion rather than increasing the dividend payment. As a result announcement of the special dividend conveys good news in comparison of the bad news inherent in the regular dividend increase. Furthermore, the decision to distribute excess cash to shareholders via a special dividend rather than through share repurchase would suggest that managers believe the current share price is not undervalued.

The studies on the impact of the special dividend announcements generally investigates the relationship between the special dividend announcement and the stock return which is also supported by Dividend Irrelevance Theory, The Cash Flow Signaling Hypothesis, The Dividend Clientele Hypothesis and The Free Cash flow hypothesis (Lang and Litzenberger, 1989; Howe et al., 1992; Gombola and Liu, 1999). However, these studies are mostly limited to developed capital markets such as the US and Australia in which the relationship between the special dividend announcement and the stock return is investigated (Brickley, 1983; Jayaraman and Shastri, 1988; Ikenberry et al., 1995; Gombola and Liu, 1999; DeAngelo et al., 2000; and Crutchley et al., 2003in the US and Balachandran and Nguyen, 2004; and Balachandran et al., 2006; in the Australia).

However, considering the fact that different countries have different business policies, which are also affected by different factors such as the culture and the investors' behavior of that country and the fact that Malaysia is a multicultural country, consequently, findings of the previous studies might not be applicable in Malaysia. In addition, previous studies in Malaysia did not evaluate the impact of the special dividend announcement on the stock return, this study is conducted to examine the impact of the special dividend announcement as one of the methods of dividend policy in cash distribution, on the overall stock market return and in different sectors in the market by observing the respond of the investors in the market and from different sectors.

The studies related to dividends in Malaysia considered did not focus on the announcement effect of the specially designated dividends, but regular dividends. Annuar and Shamsher (1993) investigated the relationship between dividends and earnings behavior of firms

of listed in the KLSE for the period 1975 to 1989. They used simple model and Linter's model to establish the relationship between dividends and earnings. Their findings indicate that the dividend decisions of the firms partly depends on the current earnings and past dividends and firms have long-term target dividend that is based upon their earnings ability.

Mansor and Subramaniam (1992) examine the effect of the dividend and earnings announcements on share price in the KLSE for the period 1970 to 1984 using weekly data and the market model to determine the abnormal returns from the announcements. They find that when firms increase or decrease dividends; there is a significant increase or decrease in stock prices. They also find that Malaysian investors react independently to dividends and earnings.

Nur- Adiana et al. (2002) examine the effect of the dividend announcements on stock prices. Their sample constitutes 120 observations covering the period from 1996 to 2002. They use market adjusted return to estimate abnormal returns. The result is that dividend increases lead to positive abnormal returns; however, dividend decreases do not lead to decrease in stock prices. In addition, their evidence appears to support for cash flow signaling and free cash flow hypotheses. They find significant increase in stock prices after dividend increase announcement.

DATA AND METHODOLOGY

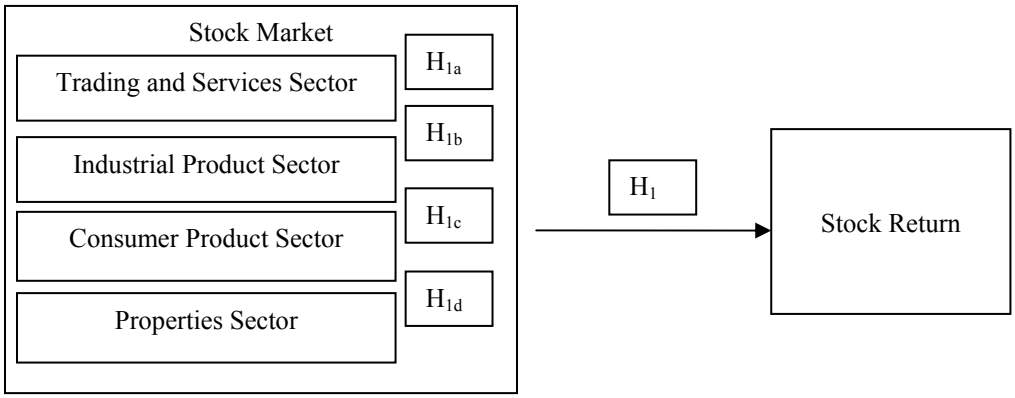
At first, our data include ninety-three companies that had announced the special dividend during 2003 to 2006. These companies were selected from the KLSE listed companies. The selected companies were arranged into ten sectors (MESDAQ, trading and services, industrial products, consumer products, plantation, finance, properties, construction, technology and mining). To prevent the influence of other announcements of the special dividend during these four years, the companies that had more than one announcement of the special dividend either in one year or in different years, were excluded. Next, the sectors that had less than four companies were also excluded, for a better sampling result and preventing of being bias. Finally, because there was not enough information for some companies, overall, our sample narrowed to fifty-one companies in six sectors (trading and services, industrial products, consumer products, plantation, finance, properties).

The sampled data used in this study are gathered from two sources. First, all listed companies in the KLSE that have announced the special dividend during 2003 to 2006 were selected from the Star Online Business. The second source of the information Meta-stock Data used to collect the closing stock price of the companies employed in this study. The same data were collected for the Kuala Lumpur Composite Index (KLCI). Daily intervals have been adopted in this study, as a shorter measurement interval is better at detecting information effects during the event window period (Brown and Warner, 1980, 1985; Dyckman et al., 1984). Daily intervals will be able to capture any market reactions that may occur before and after the announcement date. The date of the announcement of the special dividend for each company was put as the era to gather the daily closing stock price for the period of two years before and one

month after the announcement date by the company. The daily closing stock price of the KLCI index was collected for each company for the same period that the daily closing stock prices gathered for that company.

The research is a historical review using the event study that analyzes the statistical significant reaction in financial markets to past occurrences of the special dividend announcement, which is hypothesized to affect the stock return. To examine this objective the following framework is developed.

Figure1: Research Model



At first, the event window for this study considered -30 to +30 days around the announcement date of the special dividend but after leveling the days for all the companies included in our sample -17 and +18 working days left. This period can capture the price effects of the announcement day by examining the pre-event and post-event returns. The estimation period for this study include two years (roughly 734 days) daily information until thirty days before (-30) the announcement date which resulted in 468 working days after the leveling done for all the companies.

The daily stock price and daily Composite Index prices were used to calculate the daily return for each company and for the index based on the following formula.

$$Ri = \frac{Pt - Pt-1}{Pt-1} \quad (1)$$

Where:

$Ri = StockReturn$

$Pt = StockPriceatTimet$

$Pt - 1 = StockPriceatTimet - 1$

The same formula is used to calculate the market return as well. Simple regression is used to calculate Alpha and Beta:

$$Ri = \alpha + \beta iRm + \varepsilon \quad (2)$$

Where

$Ri = ReturnontheStocki$

$Rm = ReturnontheMarketPortfolio$

Abnormal return is calculated for each firm for all the days. The abnormal return for firm i is then determined by subtracting the expected return, E (R_i), from the actual return, R_i, (each company's daily return that is that had been calculated from each company's daily price).

$$AR = \varepsilon = Ri - E(Ri) \quad (3)$$

However, the prerequisite for ε to be considered as abnormal return is thatRi, should be stationary overtime. This feature of all return should be tested, using Augmented Dickey Fuller, ADF, and Phillips-Perron, PP, test.

The return generating model was a market model to benchmark the abnormal return. Market model developed by Sharpe (1964) and have been used for event studies in developing countries (Annuar, 1991; Cheng, 2000; Huson, 2000). In addition, Klein and Rosenfeld (1987) in the examining of the influence of market conditions on event study residuals indicate that the market model is not affected by bull or bear market period.

The abnormal return for all the firms on each day of the event and estimation window is then aggregated and averaged. The result is the Average Abnormal Return (AAR).Given N for the number of the companies, the AAR for one working day for stock i is:

$$AAR = 1/N \sum_{i=1}^{N} ARi \quad (4)$$

The standard deviation of the AAR of the estimated window calculated as well to test and analyze the AAR of the event window using t-statistic based on the assumption that the Average Abnormal Returns are significantly different from zero:

$$t - statistic = {}^{AAR}/_{\sigma} \quad (5)$$

The average abnormal returns are then aggregated over the event window to give the Cumulative abnormal returns (CAR). For any interval in the event window:

$$CAR(t1, t2) = \sum_{t1}^{t2} AAR \quad (6)$$

The same as for AAR, the standard deviation of the CAR of the estimated window calculated as well to test and analyze the CAR of the event window using t-statistic based on the assumption that the Cumulative Average Abnormal Returns are significantly different from zero:

$$t - statistic = CAR/\sigma \quad (7)$$

For a better observation of the changing return, the holding period return also calculated from -10 to +1, for each day in comparison to day 1, based on the following formula:

$$HoldingPeriodReturn(Dayx, 1) = DayOneRturn - Dayxreturn \quad (8)$$

Besides, the same calculation of AAR, AAR t-statistics, CAR and CAR t-statistics are done separately, for the four sectors that include more companies (Trading Services, industrial products, consumer products and properties) to determine how the announcement of the special dividend in the companies belonging to these sectors in the industry contribute to the overall reaction of the stock return during the special dividend announcement. The results for AAR and CAR in the event window can be used to draw one over all graphs and each sector's graph to help the interpretation and analyzing of the findings. While AAR graphs present everyday average abnormal return for the event period, CAR provides explanation for behavior of the stock return in this period.

RESULTS

Index Average Abnormal Return, Cumulative Abnormal Return and the T-statistics

The results for ADF and PP tests supported that all company's returns are level stationary or all returns are I (0).Table 1 reports the overall market AAR and CAR and the t-statistics for the event period, from day -17 to the day +18 (Day zero is the announcement day). The AAR for the announcement date is 0.001300 with the t-statistics of 0.501164 which is insignificant. The reason is that in the Malaysian market, the new information may release after five PM and this affects the stock prices the next morning consequently the t-statistics for day +1 increases to 10.874618 which are highly significant at 0.05 level. The positive and significant t-statistic indicates that investors perceive such news as good news.

The significant AARs t-statistics, before the special dividend announcement date might be due to the information leakage. Negative sign indicates the bad news for investors as it reports the negative abnormal return and positive sign indicates the good news representing positive abnormal return. Another reason for significant values of the AAR t-statistics for days before and days after the announcement date is due to daily information based in this study that can catch

the noise of the market. The actual market behavior is more obvious in the significant values of the CAR t-statistics that start from day +1 and continue till day +11.

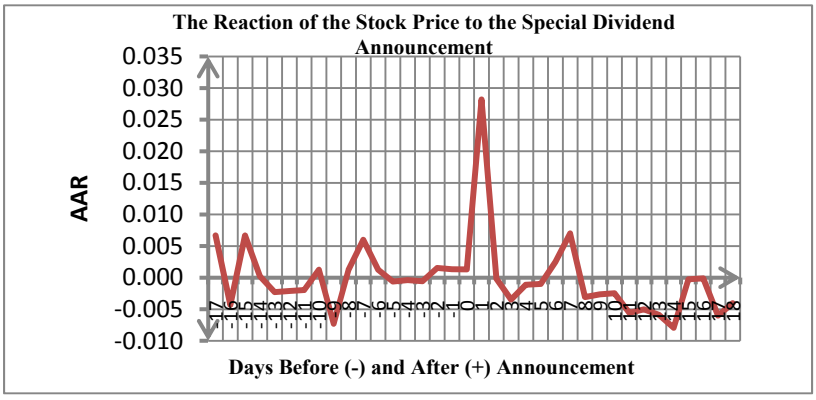
Table 1: Overall Average Abnormal Return, Cumulative Abnormal Return and the t-statistics for the event period

Event Period	AAR	AAR t-statistics	CAR	CAR t-statistics
-17	0.006671	2.572512*	0.006671	0.52195022
-15	-0.004305	-1.660289	0.002365	0.18508571
-15	0.006674	2.573702*	0.009039	0.707277373
-14	0.000219	0.084476	0.009258	0.724417161
-13	-0.002296	-0.885486	0.006962	0.54475628
-12	-0.002119	-0.817385	0.004843	0.378912754
-11	-0.001953	-0.753252	0.002889	0.226081566
-10	0.001266	0.488111	0.004155	0.325116949
-9	-0.007299	-2.815071*	-0.003144	-0.246047309
-8	0.001257	0.484659	-0.001888	-0.147712359
-7	0.005997	2.312577*	0.004109	0.321498354
-6	0.001264	0.487305	0.005372	0.420370234
-5	-0.000631	-0.243307	0.004741	0.371004365
-4	-0.000403	-0.155292	0.004339	0.339496362
-3	-0.000557	-0.214763	0.003782	0.295921944
-2	0.001528	0.589301	0.005310	0.415488309
-1	0.001332	0.513526	0.006642	0.519680245
0	0.001300	0.501164	0.007941	0.621363965
1	0.028198	10.874618*	0.036139	2.827771156*
2	-0.000166	-0.063891	0.035973	2.814807881*
3	-0.003472	-1.339092	0.032501	2.543112557*
4	-0.001136	-0.438268	0.031365	2.454190064*
5	-0.000998	-0.384926	0.030366	2.376090421*
6	0.002491	0.960797	0.032858	2.571031383*
7	0.007004	2.701190*	0.039862	3.119089671*
8	-0.003070	-1.183805	0.036792	2.878901371*
9	-0.002648	-1.021127	0.034145	2.671719722*
10	-0.002461	-0.949158	0.031683	2.479140095*
11	-0.005583	-2.153156*	0.026100	2.0422752*
12	-0.005023	-1.937022*	0.021078	1.649262781

Table 1: Overall Average Abnormal Return, Cumulative Abnormal Return and the t-statistics for the event period				
Event Period	**AAR**	**AAR t-statistics**	**CAR**	**CAR t-statistics**
13	-0.005888	-2.270687*	0.015190	1.188551319
14	-0.007932	-3.058856*	0.007258	0.567924345
15	-0.000268	-0.103236	0.006990	0.546978192
16	-0.000110	-0.042506	0.006880	0.538353854
17	-0.006018	-2.320717*	0.000863	0.067491546
18	-0.004032	-1.554929	-0.003169	-0.247996034
*Significant at 0.05 level Critical value of t-statistics at 5% level of significant equals to 1.96.				

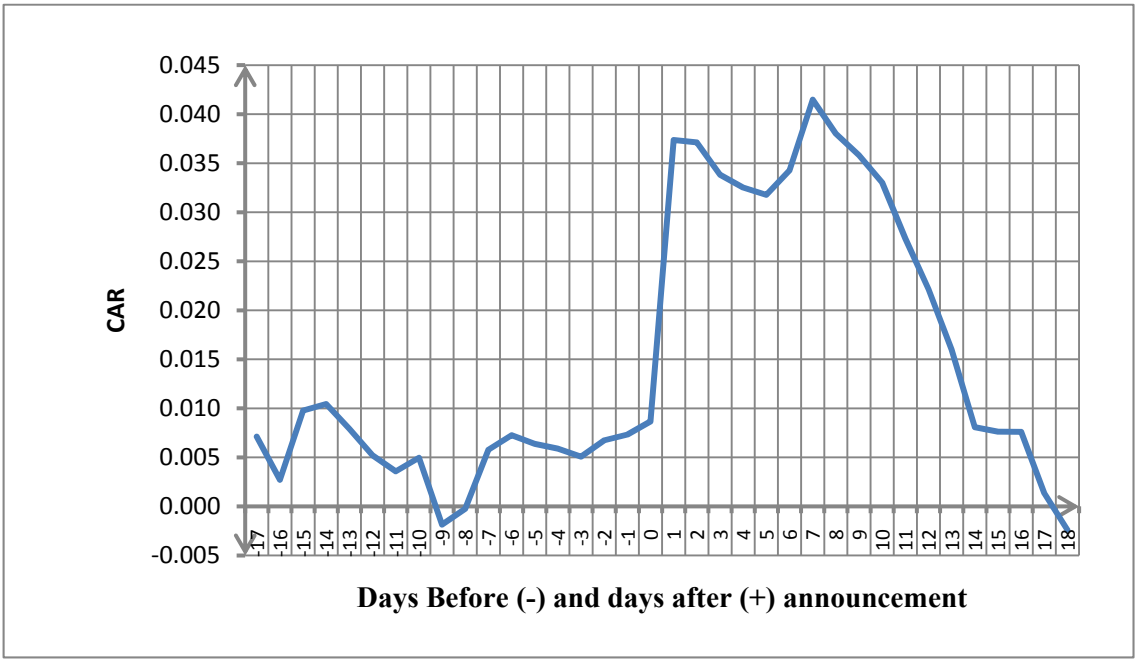
The impact of the special dividend announcement on the stock return is also observable in the AAR and CAR graph. Figure 2 provides daily information of the average abnormal return of the industry. One observation is that although there are fluctuations in everyday average abnormal returns, the AAR rises suddenly from 0.001300 to 0.028198, from day zero to day +1 meaning that the impact of the special dividend announcement on the stock return delayed to one day after announcement day. This is because in the Malaysian market, the new information may release after five PM, and this affects the stock prices the next morning. After day +1 the AAR declines sharply and even takes a negative amount in day +2 after the announcement. This is due to the Malaysian investors' behavior of selling-off the stock at the time of unexpected increase in the stock price regarding the announcement of the special dividend. Normally when many investors began to sell their stocks the price will fall rapidly. Afterwards fluctuations continue until day +18.

Figure 2: Overall market reaction in the form of average abnormal return to the special dividend announcement



While the AAR graph shows the daily information of the market average abnormal return around the announcement date, the CAR graph (figure 3) demonstrates the market behavior and trends regarding this announcement. The CAR has been falling and rising before until day -9. After this day, generally there is an increasing trend except for day -3 in which the AAR declines slightly in comparison to the previous day. The increasing trend in the CAR might be due to the leakage of the information before the announcement. There is a sudden increase from day 0 to day +1, indicating the significant announcement effect (CAR t-statistics 2.827771156). After day +1, there is a moderate fall in the CAR graph that might be due to profit taking based on the overreaction. The fall continues for four days and after a gradual rise from day +5 to day +7, the market gradually goes back to its normal trend. This might be due to the revaluation of the investors' after the announcement of the special dividend.

Figure 3: Overall market reaction in the form of cumulative abnormal return to the special dividend announcement



Holding Period Return

Cumulative Abnormal Return for day zero is 0.007941 and for one day after the announcement day is 0.036139, which results in the one-day holding return of about 2.8 percent. Daily holding period return for the day -17 to day +1 are presented in table 2.

Table 2: Daily holding period return for the day -17 to day +1			
	CAR		**Holding Period Return**
-17	0.006671	(-17,1)	0.029468
-16	0.002365	(-16,1)	0.033774
-15	0.009039	(-15,1)	0.027100
-14	0.009258	(-14,1)	0.026881
-13	0.006962	(-13,1)	0.029177
-12	0.004843	(-12,1)	0.031296
-11	0.002889	(-11,1)	0.033250
-10	0.004155	(-10,1)	0.031984
-9	-0.003144	(-9,1)	0.039283
-8	-0.001888	(-8,1)	0.038027
-7	0.004109	(-7,1)	0.032030
-6	0.005372	(-6,1)	0.030767
-5	0.004741	(-5,1)	0.031398
-4	0.004339	(-4,1)	0.031800
-3	0.003782	(-3,1)	0.032357
-2	0.005310	(-2,1)	0.030829
-1	0.006642	(-1,1)	0.029497
0	0.007941	(0,1)	0.028198
1	0.036139		

Average Abnormal Return, Cumulative Abnormal Return and the T-Statistics in the Sector Level

The impact of the special dividend announcement is also investigated in four sectors. The same as for the whole market, for industrial products, consumer products and properties AAR t-statistics is not significant in the announcement day (day zero) but for day +1. The AAR for the three mentioned sectors for day +1 is 0.0197, 0.0921 and 0.0488 with highly significant t-statistics of 4.3650, 12.7985, and 6.8079 respectively. These results support H_{1b}, H_{1c} and H_{1d}, in the other word, there is a positive and significant impact of the special dividend announcement on these three sectors. However, for trading and service sector the AAR is 0.0053 with the insignificant t-statistics of 1.1770. The overall results for this sector do not support the hypothesis H_{1a} and thus it is rejected indicating that there is no impact of the special dividend announcements on the stock return. Maybe the reason is that the trading sector and services sector are merged and analyzed together and the results of a new announcement on the stock

return cannot be detected. The tables and figures for each sector are represented in the in appendices.

CONCLUSION

This paper aims to investigate the impact of the special dividend announcement on the stock return in the overall market and in the sector level. Using the standard event study methodology, the findings indicate that, the special dividend announcement signals good news to investors in the overall market and sector level, that causes the stock returns to react positively and immediately when the news is announced. Considering the fact that different countries have different business policies, which are also affected by different factors such as the culture, stage of capital market efficiency and the investors' behavior of that country, thus findings of the previous studies might not be applicable in Malaysia as it is a multi cultural country, and also because the previous studies did not evaluate the impact of the special dividend announcement in Malaysia, the finding of this study would be helpful for investors for a better investment decision making.

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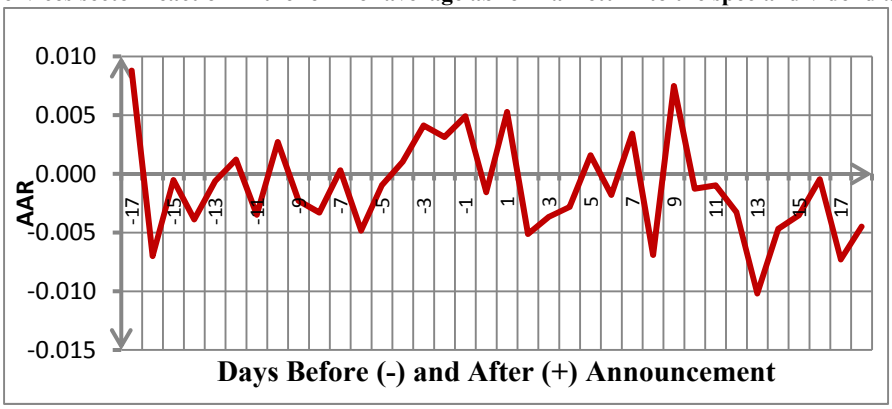
APPENDICES

Average Abnormal Return, Cumulative Abnormal Return and the t-statistics for Trading and Services Sector

Event Period	AAR	AAR t-statistics	CAR	CAR t-statistics
-17	0.0088	1.9624*	0.0088	0.5618
-16	-0.0070	-1.5627	0.0018	0.1144
-15	-0.0005	-0.1181	0.0013	0.0806
-14	-0.0039	-0.8671	-0.0026	-0.1676
-13	-0.0006	-0.1367	-0.0032	-0.2068
-12	0.0012	0.2716	-0.0020	-0.1290
-11	-0.0035	-0.7775	-0.0055	-0.3516
-10	0.0027	0.6060	-0.0028	-0.1781
-9	-0.0023	-0.5103	-0.0051	-0.3242
-8	-0.0033	-0.7371	-0.0084	-0.5352

Average Abnormal Return, Cumulative Abnormal Return and the t-statistics for Trading and Services Sector				
Event Period	**AAR**	**AAR t-statistics**	**CAR**	**CAR t-statistics**
-7	0.0003	0.0674	-0.0081	-0.5159
-6	-0.0048	-1.0797	-0.0129	-0.8250
-5	-0.0010	-0.2153	-0.0139	-0.8867
-4	0.0011	0.2346	-0.0128	-0.8195
-3	0.0041	0.9190	-0.0087	-0.5564
-2	0.0031	0.7001	-0.0056	-0.3560
-1	0.0049	1.0962	-0.0007	-0.0421
0	-0.0016	-0.3491	-0.0022	-0.1421
1	0.0053	1.1770	0.0030	0.1949
2	-0.0051	-1.1440	-0.0021	-0.1326
3	-0.0037	-0.8191	-0.0057	-0.3671
4	-0.0028	-0.6291	-0.0086	-0.5472
5	0.0016	0.3537	-0.0070	-0.4460
6	-0.0018	-0.4001	-0.0088	-0.5605
7	0.0034	0.7649	-0.0053	-0.3415
8	-0.0069	-1.5440	-0.0123	-0.7836
9	0.0075	1.6729	-0.0048	-0.3046
10	-0.0013	-0.2815	-0.0060	-0.3852
11	-0.0010	-0.2178	-0.0070	-0.4476
12	-0.0033	-0.7313	-0.0103	-0.6569
13	-0.0102	-2.2763*	-0.0205	-1.3086
14	-0.0047	-1.0472	-0.0252	-1.6084
15	-0.0035	-0.7834	-0.0287	-1.8327
16	-0.0005	-0.1017	-0.0291	-1.8618
17	-0.0073	-1.6265	-0.0364	-2.3274*
18	-0.0045	-1.0049	-0.0409	-2.6152*
*Significant at 0.05 level Critical value of t-statistics at 5% level of significant equals to 1.96				

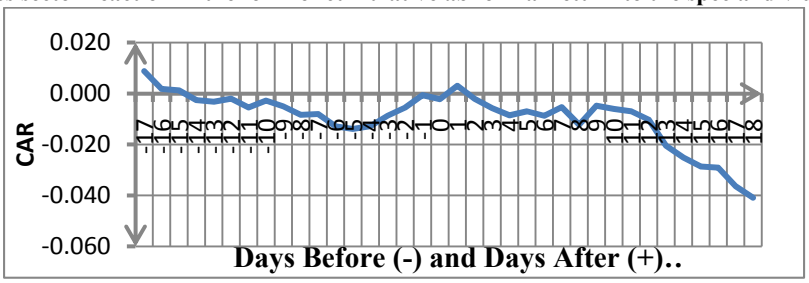
Trading and services sector reaction in the form of average abnormal return to the special dividend announcement



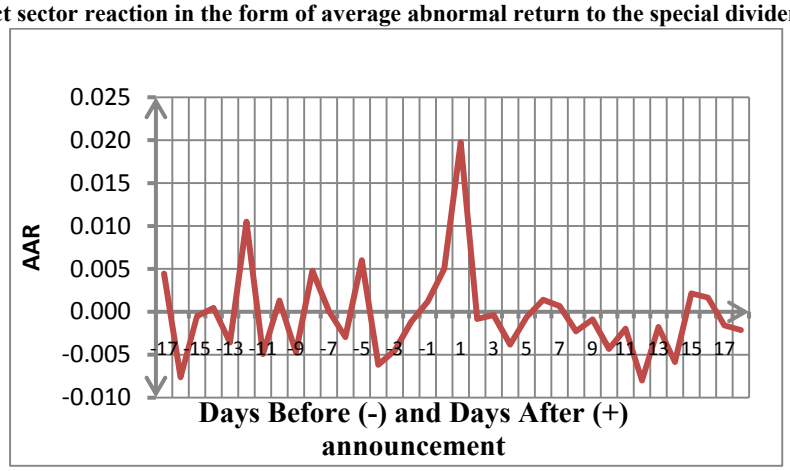
Average Abnormal Return, Cumulative Abnormal Return and the t-statistics for Industrial Products Sector				
Event period	**AAR**	**AAR t-statistics**	**CAR**	**CAR t-statistics**
-17	0.0044	0.9824	0.0044	0.2841
-16	-0.0076	-1.6868	-0.0032	-0.2038
-15	-0.0005	-0.1087	-0.0037	-0.2352
-14	0.0005	0.1013	-0.0032	-0.2059
-13	-0.0036	-0.7902	-0.0068	-0.4345
-12	0.0105	2.3205*	0.0037	0.2367
-11	-0.0049	-1.0878	-0.0012	-0.0779
-10	0.0013	0.2910	0.0001	0.0063
-9	-0.0047	-1.0416	-0.0046	-0.2950
-8	0.0048	1.0557	0.0002	0.0103
-7	0.0001	0.0173	0.0002	0.0153
-6	-0.0029	-0.6503	-0.0027	-0.1728
-5	0.0060	1.3263	0.0033	0.2109
-4	-0.0062	-1.3633	-0.0029	-0.1835
-3	-0.0045	-0.9974	-0.0074	-0.4719
-2	-0.0012	-0.2547	-0.0085	-0.5456
-1	0.0012	0.2634	-0.0073	-0.4694
0	0.0050	1.1037	-0.0023	-0.1502
1	0.0197	4.3650*	0.0174	1.1123
2	-0.0008	-0.1866	0.0166	1.0583
3	-0.0004	-0.0839	0.0162	1.0341
4	-0.0038	-0.8460	0.0123	0.7894
5	-0.0006	-0.1346	0.0117	0.7505
6	0.0014	0.3095	0.0131	0.8400
7	0.0007	0.1510	0.0138	0.8837
8	-0.0023	-0.5004	0.0116	0.7389
9	-0.0009	-0.1968	0.0107	0.6820
10	-0.0043	-0.9576	0.0063	0.4050
11	-0.0020	-0.4347	0.0044	0.2793
12	-0.0080	-1.7695	-0.0036	-0.2325
13	-0.0018	-0.3901	-0.0054	-0.3453
14	-0.0059	-1.2954	-0.0113	-0.7200
15	0.0021	0.4750	-0.0091	-0.5826
16	0.0017	0.3686	-0.0074	-0.4760
17	-0.0016	-0.3515	-0.0090	-0.5776
18	-0.0021	-0.4681	-0.0112	-0.7130

*Significant at 0.05 level
Critical value of t-statistics at 5% level of significant equals to 1.96.

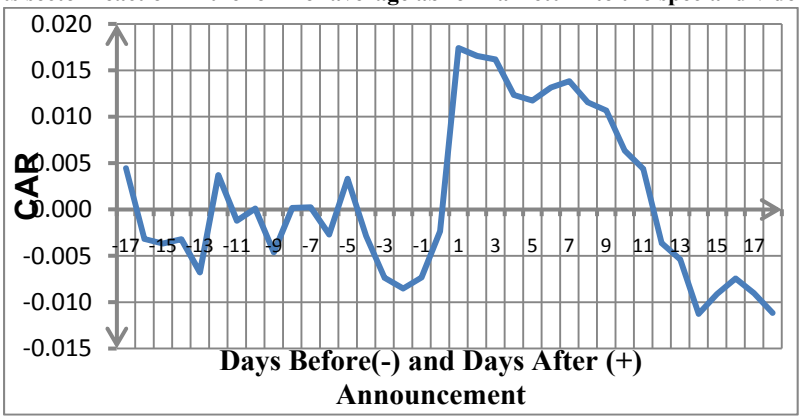
Trading and services sector reaction in the form of cumulative abnormal return to the special dividend announcement



Industrial product sector reaction in the form of average abnormal return to the special dividend announcement



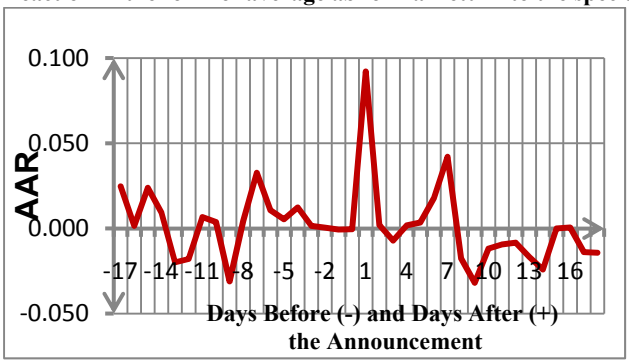
Industrial products sector reaction in the form of average abnormal return to the special dividend announcement



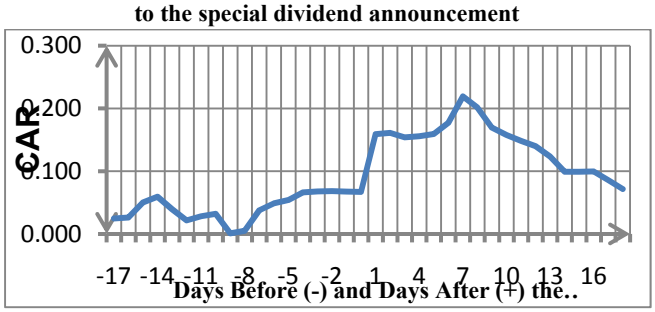
Average Abnormal Return, Cumulative Abnormal Return and the t-statistics for Consumer Product Sector				
Event Period	**AAR**	**AAR t- statistics**	**CAR**	**CAR t-statistics**
-17	0.0247	3.4308*	0.0247	0.8487
-16	0.0015	0.2067	0.0262	0.8998
-15	0.0239	3.3197*	0.0501	1.7210
-14	0.0093	1.2901	0.0593	2.0401*
-13	-0.0199	-2.7707*	0.0394	1.3548
-12	-0.0179	-2.4905*	0.0215	0.7387
-11	0.0067	0.9245	0.0281	0.9674
-10	0.0038	0.5252	0.0319	1.0973
-9	-0.0311	4.3232*	0.0008	0.0279
-8	0.0043	0.5943	0.0051	0.1749
-7	0.0327	4.5438*	0.0378	1.2989
-6	0.0107	1.4891	0.0485	1.6672
-5	0.0054	0.7491	0.0539	1.8525
-4	0.0123	1.7085	0.0662	2.2752*
-3	0.0015	0.2120	0.0677	2.3276*
-2	0.0004	0.0591	0.0681	2.3422*
-1	-0.0006	-0.0859	0.0675	2.3210*
0	-0.0004	-0.0610	0.0671	2.3059*
1	0.0921	12.7985*	0.1592	5.4719*
2	0.0019	0.2689	0.1611	5.5384*
3	-0.0071	-0.9861	0.1540	5.2945*
4	0.0018	0.2492	0.1558	5.3561*
5	0.0035	0.4879	0.1593	5.4768*
6	0.0178	2.4676*	0.1771	6.0872*
7	0.0421	5.8522*	0.2192	7.5349*
8	-0.0176	-2.4481*	0.2015	6.9293*
9	-0.0320	-4.4412*	0.1696	5.8307*
10	-0.0118	-1.6408	0.1578	5.4248*
11	-0.0094	-1.3097	0.1484	5.1008*
12	-0.0084	-1.1664	0.1400	4.8123*
13	-0.0167	-2.3207*	0.1233	4.2382*
14	-0.0241	-3.3529*	0.0991	3.4088*
15	0.0000	-0.0043	0.0991	3.4077*
16	0.0006	0.0771	0.0997	3.4268*
17	-0.0139	-1.9317	0.0858	2.9490*
18	-0.0143	-1.9846*	0.0715	2.4580*

*Significant at 0.05 level
Critical value of t-statistics at 5% level of significant equals to 1.96.

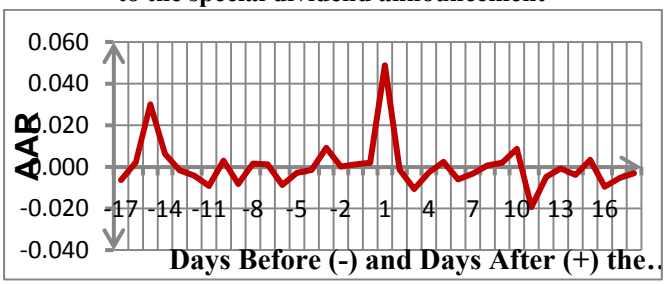
Consumer products sector reaction in the form of average abnormal return to the special dividend announcement



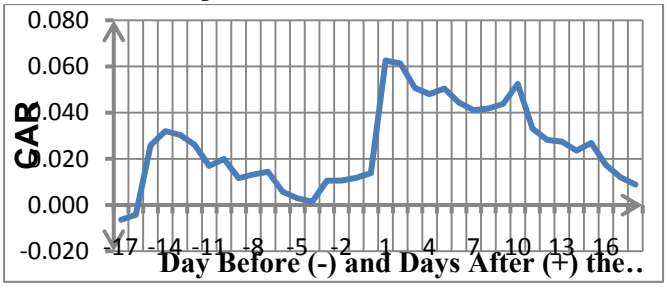
Consumer products sector reaction in the form of cumulative abnormal return to the special dividend announcement



Properties sector reaction in the form of average abnormal return to the special dividend announcement



Properties sector reaction in the form of cumulative abnormal return to the special dividend announcement



Average Abnormal Return, Cumulative Abnormal Return and t-statistics for Properties Sector				
Event Period	**AAR**	**AAR t-statistics**	**CAR**	**CAR t-statistics**
-17	-0.0063	-0.8860	-0.0064	-0.1773
-16	0.0021	0.2974	-0.0042	-0.1178
-15	0.0300	4.1920*	0.0258	0.7209
-14	0.0062	0.8637	0.0320	0.8937
-13	-0.0016	-0.2263	0.0304	0.8484
-12	-0.0043	-0.5982	0.0261	0.7287
-11	-0.0092	-1.2825	0.0169	0.4721
-10	0.0030	0.4187	0.0199	0.5559
-9	-0.0083	-1.1530	0.0117	0.3252
-8	0.0016	0.2212	0.0132	0.3695
-7	0.0012	0.1639	0.0144	0.4023
-6	-0.0087	-1.2111	0.0057	0.1600
-5	-0.0028	-0.3971	0.0029	0.0806
-4	-0.0015	-0.2095	0.0014	0.0386
-3	0.0091	1.2708	0.0105	0.2929
-2	0.0001	0.0167	0.0106	0.2962
-1	0.0012	0.1662	0.0118	0.3295
0	0.0020	0.2782	0.0138	0.3851
1	0.0488	6.8079*	0.0626	1.7472
2	-0.0013	-0.1806	0.0613	1.7110
3	-0.0106	-1.4812	0.0507	1.4147
4	-0.0027	-0.3775	0.0480	1.3392
5	0.0024	0.3418	0.0504	1.4076
6	-0.0061	-0.8451	0.0444	1.2385
7	-0.0033	-0.4546	0.0411	1.1475
8	0.0007	0.0961	0.0418	1.1668
9	0.0020	0.2762	0.0438	1.2220
10	0.0086	1.2058	0.0524	1.4632
11	-0.0193	-2.6967*	0.0331	0.9237
12	-0.0049	-0.6817	0.0282	0.7873
13	-0.0008	-0.1109	0.0274	0.7652
14	-0.0039	-0.5395	0.0235	0.6572
15	0.0033	0.4644	0.0269	0.7501
16	-0.0095	-1.3302	0.0173	0.4840
17	-0.0054	-0.7521	0.0119	0.3335
18	-0.0031	-0.4348	0.0088	0.2465
*Significant at 0.05 level Critical value of t-statistics at 5% level of significant equals to 1.96.				

A MULTINATIONAL ANALYSIS OF TAX RATES AND ECONOMIC ACTIVITY

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L. Murphy Smith, Texas A&M University
William C. Gruben, Texas A&M International University

ABSTRACT

The relationship between taxes and economic activity is a complex one. While there are various types of taxes, such as income tax, sales tax, and property tax, the tax that receives the most scrutiny is the income tax. The relationship between taxes, particularly the income tax, and economic activity is a factor in the economic progress and development of a national economy. The purpose of this study is to examine the relationship between tax rates in selected countries and economic activity, including GDP growth, unemployment, and savings. The sample of countries used in the study consists of the Organization of Economic Cooperation and Development (OECD) countries. Results indicate that lower tax rates are associated with more favorable economic activity, including growth in GDP, change in unemployment, and change in savings. At the macro level, these relationships should be considered by policy makers who are considering changes to tax laws, particularly regarding the extent that tax rates affect micro-level decisions of corporate managers to locate or not locate business operations within a given country.

INTRODUCTION

The relationship between taxes and economic activity is a complex one. While there are various types of taxes, such as income tax, sales tax, and property tax, the tax that receives the most scrutiny is the income tax. Income tax rates vary significantly among countries. The relationship between taxes, particularly the income tax, and economic activity is a factor in the economic progress and development of a national economy.

The purpose of this study is to examine the relationship between tax rates in selected countries and economic activity, including GDP growth, unemployment, and savings. The sample of countries used in the study consists of the Organization of Economic Cooperation and Development (OECD) countries. This study provides some background information regarding the OECD. This study also offers a brief review of past research concerning taxation and its impact on economic activity.

Results are mixed but reveal some meaningful relationships between tax rates and economic activity. At the macro level, these relationships should be considered by policy makers

who are considering changes to tax laws. At the micro level, these relationships should be considered by corporate managers who are making decisions on where to set up business operations. The two levels are plainly connected, as macro level decisions of policy makers will affect the micro level decisions of corporate managers.

TAXES

Taxes can be dichotomized into direct taxes and indirect taxes. The income tax is a direct tax. Indirect taxes include the sales tax, also called consumption tax. Other indirect taxes include the value added tax (VAT), excise tax, estate tax, gift tax, employment tax, and user fees. In Europe, VAT is a major source of tax revenue. The VAT is applied at each stage of production for the value added to the goods. As with all taxes, the tax burden ultimately falls on the consumer because companies can reclaim taxes paid.

The income tax is the most widely used as a source of revenues for national governments around the world. The income tax has a direct impact on corporate profit, that is, reducing it. Determining how much tax an individual or a corporation pays depends on more than the tax rate alone. Other key factors include what income is taxable and what expenses are deductible. Regarding corporations, a key concern is when taxes are assessed and payable to the government. In the US, for example, earnings of foreign subsidiaries are generally not taxed until dividends are paid by the subsidiary located in the foreign country to the parent corporation located in the US. This postponement of taxes is referred to as deferral.

To fund growth in the size of federal governments, in recent decades, the amount of income tax collected has substantially increased in most countries. In the US, for example, total government expenditures relative to GDP are now more than three times higher than before the Great Depression. Total government expenditures rose to 42.7 percent of GDP in 2009, a proportion higher than any year except for three years of World War II, 1943 to 1945 (Chantrill 2010). Prior to the Great Depression, state and local government expenditures were much higher than federal expenditures. Subsequent to 1939, that situation is the opposite. Government expenditures on defense as a percentage of GDP are at historic lows, comparable to the 1920s. Most US government expenditures are on nondefense items such as health, income support, and education. That is true in most countries.

Another important issue regarding taxation regarding multinational companies is on what foreign source income is tax assessed. There are two approaches to taxation of foreign source income: the territorial approach and the worldwide approach. Under the territorial approach, only income earned within the nation's borders is taxed. For example, in Hong Kong, only income earned there is subject to Hong Kong tax. Under the worldwide approach, both domestic and foreign source income is taxed. For instance, in the US, a corporation must pay taxes on its earnings made domestically within the US but also on earnings from foreign sources, such as the earnings of the corporation's foreign subsidiaries.

A problem associated with the worldwide approach to taxation is that it can lead to double taxation. For example, the earnings of a foreign subsidiary of a US company will be taxed in the foreign country and also in the US. This double taxation can be minimized through tax credits and tax treaties. Minimizing double taxation is important, as double taxation is a major disincentive to establishing business operations in other countries. In addition, corporate earnings are actually taxed a third time, when the corporation distributes dividends to its shareholders, thus leading to triple taxation.

ORGANIZATION OF ECONOMIC COOPERATION AND DEVELOPMENT (OECD)

The countries included in this study are members of the Organization for Economic Cooperation and Development (OECD). The OECD countries were used in the study for several reasons, principally because they have been used in numerous other research studies, economic data is available, and their experiences regarding tax and economic activity should be of interest to anyone interested in this subject. The OECD is a Paris-based international economic organization that includes 30 countries. OECD members are mostly high-income economies with a high Human Development Index (HDI) and considered developed nations (OECD 2010a, Wikipedia 2010).

The OECD had its origin in the Organization for European Economic Cooperation (OEEC), led by Robert Marjolin of France, which helped administer the Marshall Plan for the reconstruction of Europe after World War II. Subsequently, membership was extended to non-European nations. In 1961, the OEEC was reformed into the OECD by the Convention on the Organization for Economic Cooperation and Development. The OECD's headquarters is located at the Château de la Muette in Paris, France (OECD 2010a, Wikipedia 2010).

The mission of the OECD is to bring together the governments of countries committed to democracy and the market economy from around the world to do the following:

- Support sustainable economic growth
- Boost employment
- Raise living standards
- Maintain financial stability
- Assist other countries' economic development
- Contribute to growth in world trade

The OECD provides a structure in which governments can compare policy experiences, seek answers to common problems, identify good practice and coordinate domestic and international policies. In 1989, following political changes in Central and Eastern Europe, the OECD began assisting these countries to prepare market economy reforms. In 1990, the Centre for

Cooperation with European Economies in Transition (now succeeded by the Centre for Cooperation with Non-Members) was established, and in 1991, the Program "Partners in Transition" was initiated for the cooperation with Czechoslovakia, Hungary and Poland. During 1994–2000 Poland, Hungary, Czech Republic, Slovakia, Mexico, and the Republic of Korea became members of the OECD (OECD 2010a). Member countries of the OECD are shown in Exhibit 1.

Exhibit 1: OECD Member Countries

Founding members (1961):	
Austria	Luxembourg
Belgium	Netherlands
Canada	Norway
Denmark	Portugal
France	Spain
Germany	Sweden
Greece	Switzerland
Iceland	Turkey*
Ireland	United Kingdom
Italy	United States
Admitted later (listed chronologically with year of admission):	
Japan (1964)	Czech Republic (1995)
Finland (1969)	Hungary (1996)
Australia (1971)	Poland* (1996)
New Zealand (1973)	Republic of Korea (1996)
Mexico* (1994)	Slovakia (2000)

Note: Currently there are 30 full members of the OECD. Among these, Mexico, Poland and Turkey (identified with *) are characterized as upper middle-income economies by the World Bank. The other 27 members are characterized as high-income economies.

The OECD shares expertise and exchanges views with more than 100 other nations. In 2007, the OECD countries agreed to invite Chile, Estonia, Israel, Russia and Slovenia to open discussions for membership and offered enhanced engagement to Brazil, China, India, Indonesia and South Africa. Although enhanced engagement is not the same as accession to the OECD, it has the potential to lead to future membership. Approval of so-called "road maps" marks the start of accession talks with Chile, Estonia, Israel, Russia and Slovenia (OECD 2010a).

For over four decades, the OECD has been one of the world's largest and most reliable sources of comparable statistics and economic and social data. In addition to collecting data, the OECD monitors trends, analyzes and forecasts economic developments, and studies social changes or evolving patterns in trade, environment, agriculture, technology, and taxation. The OECD is one of the largest publishers in the area of economics and public policy.

Regarding taxation, collaboration among OECD nations has fostered the growth of a global web of bilateral tax treaties. The OECD publishes and updates a model tax convention which serves as a model for bilateral negotiations concerning tax coordination and cooperation. The model generally allocates the right to tax to the country from which capital investment originates (i.e., the home, or resident country) rather than the country in which the investment is made (the host, or source country). Consequently, the model is most effective for two countries which have reciprocal investment flows, but can be very unbalanced when one of the signatory countries is economically weaker than the other (Wikipedia 2010).

Beginning in the late 1990s, the OECD has made efforts to reduce harmful tax practices, focusing on activities of tax havens (while generally accepting policies of its member nations which would generally encourage tax competition). Mixed results have followed these efforts. The main objection is that the sanctity of tax policy is a matter of sovereign entitlement (Christians 2008). The OECD identifies nations it considers uncooperative in the efforts to improve transparency of tax affairs and meaningful exchange of information. This "blacklist" of uncooperative nations is officially titled "The List of Uncooperative Tax Havens" (BBC News 2000). Following reform efforts by these nations, all had been removed from the blacklist as of May 2009 (OECD 2009). Thus, the OECD program seems to have generated the desired result.

Tax havens remain a subject of concern to the OECD and other countries. Recently, a number of countries requested that the OECD investigate about 40 new tax havens in the world where undeclared revenues are hidden and which host many of the non-regulated hedge funds that have come under fire during the 2008 financial crisis. Some countries, including Germany and France have asked that the OECD specifically add Switzerland to a blacklist of countries which encourage tax fraud (Euronews 2008).

Other areas in which the OECD has made notable efforts to improve global economic activity include coordinating international action on corruption and bribery, creating the OECD Anti-Bribery Convention, which took effect in February 1999. This Convention has been ratified by 38 countries, all 30 OECD countries and 8 non-OECD countries (OECD 2010b). The OECD has implemented an anti-spam task force, which submitted a detailed report, with several background papers on spam problems in developing countries. The OECD is studying the effects of the information economy and the future of the Internet economy. The OECD publishes the Program for International Student Assessment (PISA) which is an assessment that facilitates comparison of educational performances among countries (OECD 2010a).

The structure of the OECD consists of three major bodies: (1) OECD Member Countries, (2) OECD Secretariat, and (3) OECD Committees. Each member country is represented by a delegation led by an ambassador. The OECD Secretariat is led by the Secretary-General. Delegates from member countries participate in committee and other meetings, chiefly arranged by the Secretariat. OECD Committee members are usually subject-matter experts from member and non-member countries. Representatives of all 30 OECD member countries plus representatives from some observer countries attend specialized committee meetings regarding

policy areas, such as financial markets, trade, and economics. The OECD has approximately 200 committees, working groups and expert groups (Wikipedia 2010).

RELATED LITERATURE

Extensive research has been conducted regarding taxation and its relationship to economic activity, both at the micro, firm level, and the macro, national and international level. Tax policies have been used to create incentives for corporations to engage in various types of business activity. Of particular importance is the use of tax policies to provide incentives for businesses to relocate operations from one nation to another (cf., Wilson 1999 and Stewart 2009). International business and related taxation have been a part of business activity since early times, including ancient Asia, Mesopotamia, and among nations along the Mediterranean Sea. In modern times, international trade rapidly increased in the years following World War Two (Gray et al. 2001).

In foundational work on taxes and economic activity, Richman (1963) notes that countries may simultaneously want to tax the worldwide capital income of domestic residents, suggesting that taxes paid to foreign governments should be merely deductible from domestic taxable income. Prior research on international taxation examine its impact on multinational firms in developed countries (Adams and Whalley 1977), its relationship to foreign direct investment (Hartman 1984, 1985), its relationship to saving s (Gordon 1986), its relationship to strategic decision making (Bond and Samuelson 1989), and its economic premises (Ault and Bradford 1990).

In a seminal study regarding taxation and production, Diamond and Mirrlees (1971) observe that small open economies result in extremely high costs in efforts to tax the returns to local capital investment, since local factors bear the burden of such taxes in the form of productive inefficiencies. Janeba (1995) analyzes the issues of corporate tax competition among countries, double taxation, and foreign direct investment. Wilson (1999) reviews theories of tax competition among countries. Baccheta and Espinosa (2000) examine international tax treaties. Gordon and Hines (2002) evaluate research findings on international taxation, noting connections and inconsistencies between theoretical and empirical observations. DeArcangelis and Lamartina (2003) identify fiscal policy shocks associated with different categories of expenditure and taxation, and simulate their impact on economic activity.

Kaplow (2005) studies the question of whether first-best prescriptions for government policy require modification because redistributive income taxation distorts labor supply and cannot achieve the distributive ideal. He suggest that perhaps second-best rules for public goods provision, corrective taxation, public sector pricing, and other government activity should reflect concerns about distribution and labor supply distortion. Haufler et al. (2006) examine the increase in foreign direct investment and the expanding activity of multinational firms in

exposing national corporate tax bases to cross-country profit shifting, which can lead to rising profitability in the corporate sector.

Schreiber and Fuehrich (2007) examine a proposal by the European Commission to establish a common corporate tax base for the purpose of decreasing compliance and administrative costs for European groups. Under the Commission's proposal separate entity accounting would be replaced by a profit allocation based on formula apportionment. Given that formula apportionment is based on the source principle, the group is motivated to invest in low tax member states. Consequently, some member states would potentially confront decreases in both real economic activity and tax revenue.

Devereux (2008) reviews economic principles for optimality of the taxation of international profit, from both a domestic and international viewpoint. He makes the case for traditional systems based on the residence of the investor or the source of the income and that nothing short of total harmonization across countries can achieve global optimality. He argues that conditions for national optimality are more difficult to identify, but are most likely to imply source-based taxation.

Haufler et al. (2008) present a simple political economy model where the median voter decides on a redistributive income tax rate. Based on their analysis, economic integration may raise or lower the equilibrium tax rate, and it is more likely to raise the tax rate of a low-tax country. The results are consistent with empirical observations that effective corporate tax rates have not fallen in all OECD countries, and that corporate tax revenues have generally risen. Zaman (2008) observes that widely accepted approaches to business and taxation in the West may be incompatible with practices in Islamic countries. Stewart (2009) discusses tax law and policy for indigenous economic development, with emphasis on business taxation. Kenny and Winer (2009) examine tax systems worldwide, including tax bases, collection costs, and political regime.

ANALYSIS AND RESULTS

Using data available from the OECD (OECD 2010a) and the Tax Foundation (Tax Foundation 2010), data was compiled regarding income tax rates and gross domestic product (GDP). GDP is the total market value of all the goods and services produced within the borders of a nation during a specified period. Exhibit 2 shows the federal, state, combined federal and state income tax rates along with GDP for four years, 2005 to 2008, for the 30 nations comprising the OECD. As shown, the average federal income tax rate is 25.49 percent, the average state income tax rate is 2.51 percent, and the average combined federal and state income tax rate is 27.65 percent. Average GDP increased from $1.184 billion in 2005 to $1.455 billion in 2008.

Exhibit 2: Income Tax Rates and Nominal GDP in US$ by Country by Year

Rank	Country	Federal Corporate Income Tax Rate Adjusted	Top State Corporate Income Tax Rate	Combined Federal and State Rate (Adjusted)	GDP Nominal – US$ Yr1	GDP Nominal – US$ Yr2	GDP Nominal – US$ Yr3	GDP Nominal – US$ Yr4
1	Japan	30	11.56	39.54	4,552.19	4,362.58	4,380.39	4,910.69
2	United States	35	6.57	39.27	12,638.38	13,398.93	14,077.65	14,441.43
3	Germany	26.38	17	38.9	2,793.23	2,919.51	3,328.18	3,673.11
4	Canada	22.1	14	36.1	1,133.76	1,277.56	1,427.19	1,499.55
5	France	34.43	0	34.4	2,147.76	2,270.35	2,597.70	2,866.95
6	Belgium	33.99	0	33.99	376.99	400.30	459.03	506.18
7	Italy	33	0	33	1,780.78	1,865.11	2,117.52	2,313.89
8	New Zealand	33	0	33	109.49	106.11	129.00	128.41
9	Spain	32.5	0	32.5	1,132.13	1,235.92	1,442.91	1,601.96
10	Luxembourg	22.88	7.5	30.38	37.67	42.59	49.72	54.97
11	Australia	30	0	30	713.21	755.20	910.33	1,013.46
12	United Kingdom	30	0	30	2,282.89	2,442.95	2,800.11	2,680.00
13	Mexico	28	0	28	849.03	952.34	1,025.43	1,088.13
14	Norway	28	0	28	302.01	336.73	388.48	451.83
15	Sweden	28	0	28	366.01	393.15	453.32	478.96
16	Korea	25	2.5	27.5	844.87	951.77	1,049.24	929.12
17	Portugal	25	1.5	26.5	185.77	195.19	223.66	244.64
18	Finland	26	0	26	195.67	209.71	246.25	271.87
19	Netherlands	25.5	0	25.5	639.58	678.32	779.43	876.97
20	Austria	25	0	25	303.45	321.65	371.14	414.83
21	Denmark	25	0	25	257.68	273.87	310.06	340.03
22	Greece	25	0	25	246.22	267.71	312.75	357.55
23	Czech Republic	24	0	24	124.55	142.61	174.22	216.35
24	Switzerland	8.5	14.64	21.32	372.48	391.23	434.09	500.26
25	Hungary	20	0	20	110.20	113.01	138.76	155.93
26	Turkey	20	0	20	482.69	529.19	649.13	729.98
27	Poland	19	0	19	303.98	341.67	425.32	527.87
28	Slovak Republic	19	0	19	47.98	56.00	75.21	95.40
29	Iceland	18	0	18	16.30	16.65	20.32	16.79
30	Ireland	12.5	0	12.5	201.93	221.95	260.08	267.58
	AVERAGE	**25.49**	**2.51**	**27.65**	**1,184.96**	**1,249.00**	**1,368.55**	**1,455.16**

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008

Sources: The Tax Foundation 2008; OECD 2010.

As shown in Exhibit 2, among the nations of the world, the US is one of only eight nations that include additional corporate income taxes assessed by state or local levels of government. The cost to business of these state-level taxes is partly reduced because they can be deducted from federal taxes. Nevertheless they add a second layer of tax and also add considerable complexity for multi-state and multinational businesses (Hodge 2008). Beyond the burden of simply paying the amount of taxes owed, complexity of taxes present huge difficulties to corporations, leading to significant compliance costs (Lassila and Smith 1997).

Exhibit 3 shows the change in GDP by country by year for the 30 countries of the OECD. The average change in GDP from 2005 to 2006 was 7.45 percent, from 2006 to 2007 was16.05 percent, and 2007 to 2008 was 9.12 percent. Exhibit 4 shows the percent change in GDP by country by year and split into two groups. The countries with the higher combined income tax are compared to the countries with the lower combined income tax. T-tests were used to analyze differences. In the higher tax group, which includes Japan with the highest combined tax rate of 39.54 percent, the average combined tax rate is 33.01 percent. In the lower tax group, the

average combined tax is 22.29 percent, which is significantly different from the higher tax group ($p<.001$).

Exhibit 3: Change in GDP by Country by Year

Rank	Country	Combined Federal and State Rate (Adjusted)	GDP Constant – % Change, Yr1 to Yr2	GDP Constant – % Change, Yr2 to Yr3	GDP Constant – % Change, Yr3 to Yr4
1	Japan	39.54	(4.17)	0.41	12.11
2	United States	39.27	6.02	5.07	2.58
3	Germany	38.9	4.52	14.00	10.36
4	Canada	36.1	12.68	11.71	5.07
5	France	34.4	5.71	14.42	10.36
6	Belgium	33.99	6.18	14.67	10.27
7	Italy	33	4.74	13.53	9.27
8	New Zealand	33	(3.09)	21.57	(0.45)
9	Spain	32.5	9.17	16.75	11.02
10	Luxembourg	30.38	13.07	16.74	10.56
11	Australia	30	5.89	20.54	11.33
12	United Kingdom	30	7.01	14.62	(4.29)
13	Mexico	28	12.17	7.67	6.11
14	Norway	28	11.50	15.37	16.31
15	Sweden	28	7.42	15.30	5.66
16	Korea	27.5	12.65	10.24	(11.45)
17	Portugal	26.5	5.07	14.59	9.38
18	Finland	26	7.17	17.43	10.40
19	Netherlands	25.5	6.06	14.91	12.51
20	Austria	25	6.00	15.39	11.77
21	Denmark	25	6.28	13.22	9.66
22	Greece	25	8.73	16.82	14.32
23	Czech Republic	24	14.50	22.16	24.19
24	Switzerland	21.32	5.04	10.95	15.24
25	Hungary	20	2.55	22.79	12.38
26	Turkey	20	9.63	22.66	12.46
27	Poland	19	12.40	24.48	24.11
28	Slovak Republic	19	16.71	34.30	26.86
29	Iceland	18	2.11	22.05	(17.37)
30	Ireland	12.5	9.92	17.18	2.88
	AVERAGE	**27.65**	**7.45**	**16.05**	**9.12**

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008

As shown in Exhibit 4, the average percent change in GDP was higher in all three time periods for the lower tax group than for the higher tax group. For example, in the first time period, 2005 to 2006, the average percent change in GDP was 6.59 percent for the higher tax group and 8.32 percent for the lower tax group. For 2006 to 2007, the average percent change in GDP was 13.49 percent for the higher tax group and 18.61 percent for the lower tax group. For 2007 to 2008, the average percent change in GDP was 7.75 percent for the higher tax group and 10.49 percent for the lower tax group. The difference was significant only in the middle time period, 2006 to 2007 ($p<.01$).

Exhibit 4: Percent Change in GDP by Country by Year Grouped by High/Low Tax Rates

Rank	Country	Combined Federal and State Rate (Adjusted)	GDP Constant – % Change, Yr1 to Yr2	GDP Constant – % Change, Yr2 to Yr3	GDP Constant – % Change, Yr3 to Yr4
1	Japan	39.54	(4.17)	0.41	12.11
2	United States	39.27	6.02	5.07	2.58
3	Germany	38.9	4.52	14.00	10.36
4	Canada	36.1	12.68	11.71	5.07
5	France	34.4	5.71	14.42	10.36
6	Belgium	33.99	6.18	14.87	10.27
7	Italy	33	4.74	13.53	9.27
8	New Zealand	33	(3.09)	21.57	(0.45)
9	Spain	32.5	9.17	19.75	11.02
10	Luxembourg	30.38	13.07	18.74	10.68
11	Australia	30	6.89	20.61	11.33
12	United Kingdom	30	7.01	14.62	(4.29)
13	Mexico	28	12.17	7.87	6.11
14	Norway	28	11.50	15.37	18.31
15	Sweden	28	7.42	15.30	5.86
	AVERAGE	33.01	6.89	13.49	7.75
16	Korea	27.5	12.85	10.24	(11.45)
17	Portugal	26.5	5.07	14.59	9.38
18	Finland	26	7.17	17.43	10.40
19	Netherlands	25.5	6.06	14.91	12.51
20	Austria	25	6.00	15.39	11.77
21	Denmark	25	0.26	13.22	9.00
22	Greece	25	0.73	18.02	14.32
23	Czech Republic	21	14.60	22.18	24.10
24	Switzerland	21.32	6.01	10.95	16.21
25	Hungary	20	2.55	22.79	12.38
26	Turkey	20	9.83	22.86	12.46
27	Poland	19	12.40	24.48	24.11
28	Sovak Republic	19	16.71	34.30	28.86
29	Iceland	18	2.11	22.05	(17.37)
30	Ireland	12.5	9.92	17.18	2.88
	AVERAGE	22.29	6.32	18.61	10.49
		**		**	

DATES: YR1 = 2006 YR2 = 2008 YR3 = 2007 YR4 =2008
NOTE: **=Significant at P<.01, ***=Significant at P<.001.

Exhibit 5: Tax and Unemployment Rates by Country by Year

Rank	Country	Combined Federal and State Rate (Adjusted)	Unemploym-ent Rate Yr1	Unemploym-ent Rate Yr2	Unemploym-ent Rate Yr3	Unemploym-ent Rate Yr4
1	Japan	39.54	4.40	4.10	3.90	4.00
2	United States	39.27	5.10	4.60	4.60	5.80
3	Germany	38.9	11.10	10.30	8.60	7.50
4	Canada	36.1	6.80	6.30	6.00	6.10
5	France	34.4	8.90	8.80	8.00	7.40
6	Belgium	33.99	8.50	8.30	7.50	7.00
7	Italy	33	7.70	6.80	6.10	6.70
8	New Zealand	33	3.80	3.80	3.70	4.20
9	Spain	32.5	9.20	8.51	8.30	11.34
10	Luxembourg	30.38	na	na	na	4.80
11	Australia	30	5.00	4.80	4.40	4.20
12	United Kingdom	30	4.60	5.40	5.30	5.30
13	Mexico	28	3.51	3.16	3.39	3.50
14	Norway	28	4.60	3.40	2.50	2.60
15	Sweden	28	6.00	5.40	6.10	6.20
16	Korea	27.5	3.70	3.50	3.20	3.20
17	Portugal	26.5	7.60	7.70	8.00	7.60
18	Finland	26	8.30	7.70	6.80	6.40
19	Netherlands	25.5	5.10	4.20	3.50	3.00
20	Austria	25	5.20	4.70	4.40	3.80
21	Denmark	25	5.00	4.10	4.00	3.40
22	Greece	25	9.60	8.80	8.10	7.20
23	Czech Republic	24	7.90	7.10	5.30	4.40
24	Switzerland	21.32	4.40	4.00	3.60	3.40
25	Hungary	20	7.20	7.50	7.40	7.80
26	Turkey	20	10.30	9.90	10.30	11.00
27	Poland	19	17.70	13.80	9.60	7.10
28	Slovak Republic	19	16.20	13.30	11.00	9.60
29	Iceland	18	2.60	2.90	2.30	3.00
30	Ireland	12.5	4.30	4.00	4.00	5.20
	AVERAGE	**27.65**	**7.05**	**6.44**	**5.86**	**5.76**

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008

Unemployment is defined as the percentage of the total labor force that is unemployed but actively seeking employment and willing to work. Exhibit 5 shows the combined tax compared to the unemployment rate for Years 1 to 4 (i.e., 2005 to 2008). During these four years, the average unemployment rate declined from a high of 7.05 percent in 2005 to 5.76 percent in 2008. Exhibit 6 shows the percent change in unemployment for three time periods. The percent change in unemployment decreased by 7.09 percent from 2005 to 2006, decreased by 7.80 percent from 2006 to 2007, and increased by 0.49 percent from 2007 to 2008.

Exhibit 6: Percent Change in Unemployment Rate by Country by Year

Rank	Country	Combined Federal and State Rate (Adjusted)	% Change in Unem-ployment Rate Yr1 to Yr2	% Change in Unem-ployment Rate Yr2 to Yr3	% Change in Unem-ployment Rate Yr3 to Yr4
1	Japan	39.54	(6.82)	(4.88)	2.56
2	United States	39.27	(9.80)	0.00	26.09
3	Germany	38.9	(7.21)	(16.50)	(12.79)
4	Canada	36.1	(7.35)	(4.76)	1.67
5	France	34.4	(1.12)	(9.09)	(7.50)
6	Belgium	33.99	(2.35)	(9.64)	(6.67)
7	Italy	33	(11.69)	(10.29)	9.84
8	New Zealand	33	0.00	(2.63)	13.51
9	Spain	32.5	(7.50)	(2.47)	36.63
10	Luxembourg	30.38	N/A	N/A	N/A
11	Australia	30	(4.00)	(8.33)	(4.55)
12	United Kingdom	30	17.39	(1.85)	0.00
13	Mexico	28	(9.84)	7.18	3.42
14	Norway	28	(26.09)	(26.47)	4.00
15	Sweden	28	(10.00)	12.96	1.64
16	Korea	27.5	(5.41)	(8.57)	0.00
17	Portugal	26.5	1.32	3.90	(5.00)
18	Finland	26	(7.23)	(11.69)	(5.88)
19	Netherlands	25.5	(17.65)	(16.67)	(14.29)
20	Austria	25	(9.62)	(6.38)	(13.64)
21	Denmark	25	(18.00)	(2.44)	(15.00)
22	Greece	25	(8.33)	(7.95)	(11.11)
23	Czech Republic	24	(10.13)	(25.35)	(16.98)
24	Switzerland	21.32	(9.09)	(10.00)	(5.56)
25	Hungary	20	4.17	(1.33)	5.41
26	Turkey	20	(3.88)	4.04	6.80
27	Poland	19	(22.03)	(30.43)	(26.04)
28	Slovak Republic	19	(17.90)	(17.29)	(12.73)
29	Iceland	18	11.54	(20.69)	30.43
30	Ireland	12.5	(6.98)	0.00	30.00
	AVERAGE	**27.65**	**(7.09)**	**(7.85)**	**0.49**

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008

Exhibit 7 shows the percent change in unemployment by country by year, and split into two groups. The countries with the higher combined income tax are compared to the countries with the lower combined income tax. As shown, the average percent change in unemployment was a negative 6.17 percent for the higher tax rate countries for 2005 to 2006. The average percent change was negative 7.06 percent for the lower tax rate countries in the same time period. Thus, the rate of unemployment was reduced more in the lower tax rate countries than in the higher tax rate countries for this time period.

Exhibit 7: Percent Change in Unemployment by Country by Year - Grouped by High/Low Tax Rates

Rank	Country	Combined Federal and State Rate (Adjusted)	% Change in Unem-ployment Rate Yr1 to Yr2	% Change in Unem-ployment Rate Yr2 to Yr3	% Change in Unem-ployment Rate Yr3 to Yr4
1	Japan	39.54	(6.82)	(4.88)	2.56
2	United States	39.27	(9.80)	0.00	26.09
3	Germany	38.9	(7.21)	(16.50)	(12.79)
4	Canada	36.1	(7.35)	(4.76)	1.67
5	France	34.4	(1.12)	(9.09)	(7.50)
6	Belgium	33.99	(2.35)	(9.64)	(6.67)
7	Italy	33	(11.69)	(10.29)	9.84
8	New Zealand	33	0.00	(2.63)	13.51
9	Spain	32.5	(7.50)	(2.47)	36.63
10	Luxembourg	30.38	N/A	N/A	N/A
11	Australia	30	(4.00)	(8.33)	(4.55)
12	United Kingdom	30	17.39	(1.85)	0.00
13	Mexico	28	(9.84)	7.18	3.42
14	Norway	28	(26.09)	(26.47)	4.00
15	Sweden	28	(10.00)	12.96	1.64
16	Korea	27.5	(5.41)	(8.57)	0.00
17	Portugal	26.5	1.32	3.90	(5.00)
18	Finland	26	(7.23)	(11.69)	(5.88)
19	Netherlands	25.5	(17.65)	(16.67)	(14.29)
20	Austria	25	(9.62)	(6.38)	(13.64)
21	Denmark	25	(18.00)	(2.44)	(15.00)
22	Greece	25	(8.33)	(7.95)	(11.11)
23	Czech Republic	24	(10.13)	(25.35)	(16.98)
24	Switzerland	21.32	(9.09)	(10.00)	(5.56)
25	Hungary	20	4.17	(1.33)	5.41
26	Turkey	20	(3.88)	4.04	6.80
27	Poland	19	(22.03)	(30.43)	(26.04)
28	Slovak Republic	19	(17.90)	(17.29)	(12.73)
29	Iceland	18	11.54	(20.69)	30.43
30	Ireland	12.5	(6.98)	0.00	30.00
	AVERAGE	**27.65**	**(7.09)**	**(7.85)**	**0.49**

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008

Changes in unemployment for the other two time periods maintained the same relationship as in the first time period, that is, lower tax countries experienced more favorable changes in unemployment. During 2006 to 2007, the change in unemployment was a negative 5.47 percent for the higher tax rate countries and a negative 7.69 percent for the lower tax rate countries. Thus, unemployment decreased more for the lower tax rate countries than for the higher tax rate countries. During 2007 to 2008, the change in unemployment was a positive 4.85 percent for the higher tax rate countries and a positive 0.77 percent for the lower tax rate countries. Thus, unemployment increased more rapidly in the higher tax rate countries. The changes in unemployment of the higher and lower tax rate countries were significantly different in the second and third time periods.

Gross savings is defined as gross disposable income less final consumption expenditures. Exhibit 8 shows the gross savings as percent of GDP by country by year for 2005 to 2007. The date for 2008 was unavailable at the time of this writing. As shown, the gross savings rate increased slightly from an average of 24.26 percent in 2005 to 26.59 percent in 2007. Exhibit 9 shows the gross savings rate by country by year, and split into two groups. The countries with the higher combined income tax are compared to the countries with the lower combined income tax. Higher savings rates were found in all three years for the lower tax rate countries, but the difference were not significant.

Exhibit 8: Tax and Gross Savings as a % of GDP by Country by Year

Rank	Country	Combined Federal and State Rate (Adjusted)	Gross Savings as % of GDP Yr1	Gross Savings as % of GDP Yr2	Gross Savings as % of GDP Yr3
1	Japan	39.54	25.08	24.91	24.88
2	United States	39.27	14.11	15.19	14.21
3	Germany	38.9	23.46	25.31	27.90
4	Canada	36.1	26.23	27.63	27.68
5	France	34.4	20.46	21.51	22.28
6	Belgium	33.99	23.13	24.58	25.60
7	Italy	33	22.47	22.80	23.50
8	New Zealand	33			
9	Spain	32.5	31.17	32.15	31.98
10	Luxembourg	30.38			
11	Australia	30	20.80	22.02	
12	United Kingdom	30	14.61	14.54	15.55
13	Mexico	28			
14	Norway	28	34.51	39.04	39.97
15	Sweden	28	25.04	29.16	32.21
16	Korea	27.5	31.95	30.71	31.36
17	Portugal	26.5	14.90	14.09	15.01
18	Finland	26	26.97	28.49	31.43
19	Netherlands	25.5	30.34	34.38	35.11
20	Austria	25	27.18	27.65	29.37
21	Denmark	25	28.24	28.86	27.52
22	Greece	25	12.33	13.81	
23	Czech Republic	24	27.15	27.79	29.62
24	Switzerland	21.32	36.79	38.15	
25	Hungary	20	21.17	23.03	25.52
26	Turkey	20			
27	Poland	19	20.46	20.81	22.93
28	Slovak Republic	19	25.19	26.15	29.49
29	Iceland	18			
30	Ireland	12.5	22.87	24.56	21.91
	AVERAGE	**27.65**	**24.26**	**25.49**	**26.59**

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008 - not available.

Exhibit 9: Tax and Gross Savings as a % of GDP by Country by Year - Grouped by High/Low Tax Rates

Rank	Country	Combined Federal and State Rate (Adjusted)	Gross Savings as % of GDP Yr1	Gross Savings as % of GDP Yr2	Gross Savings as % of GDP Yr3
[illegible]	Japan	39 54	25 08	24 91	24 68
2	United States	39 27	14 11	15 19	14 21
3	Germany	38 9	23 46	25 31	27 90
4	Canada	36 1	26 23	27 63	27 68
5	France	34 4	20 46	21 51	22 26
6	Belgium	33 99	23 13	24 58	25 60
7	Italy	33	22 47	22 80	23 50
8	New Zealand	33			
9	Spain	32 5	31 17	32 15	31 98
10	Luxembourg	30 38			
11	Australia	30	20 60	22 02	
12	United Kingdom	30	14 61	14 54	15 55
13	Mexico	28			
14	Norway	28	34 51	39 04	39 97
15	Sweden	28	25 04	29 16	32 21
	AVERAGE	**33.01**	**23.42**	**24.80**	**25 98**
16	Korea	27 5	31 95	30 71	31 36
17	Portugal	26.5	14 90	14 09	15 01
18	Finland	26	26 97	28 49	31 43
19	Netherlands	25 5	30 34	34 38	35 11
20	Austria	25	27 18	27 65	29 37
21	Denmark	25	26 24	26 86	27 52
22	Greece	25	12 33	13 81	
23	Czech Republic	24	27 15	27 79	29 62
24	Switzerland	2' 32	36 79	38 15	
25	Hungary	20	21 17	23 03	25 52
26	Turkey	20			
27	Poland	19	20 46	20 81	22 93
28	Slovak Republic	19	25 19	26 15	29 49
29	Iceland	18			
30	Ireland	12 5	22 87	24 56	21 91
	AVERAGE	**22.29** ***	**25.04**	**26.04**	**27.21**

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008 - Not Available.
NOTE: *=Significant at P<.10, **=Significant at P<.01, ***=Significant at P<.001.

Exhibit 10 shows the percent change in the savings rate (gross savings as a percent of GDP) by country by year, and split into two groups. The countries with the higher combined income tax are compared to the countries with the lower combined income tax. During 2005 to 2006, the change in the savings rate was 8.99 percent for the higher tax rate countries and 8.96 percent for the lower tax rate countries. During 2006 to 2007, the change in the savings rate was 5.68 percent for the higher tax rate countries and 9.60 percent for the lower tax rate countries. The difference between the groups was significant in the second time period.

Exhibit 10: Percent Change in Gross Savings as a % of GDP by Country by Year Grouped by High/Low Tax Rates

Rank	Country	Combined Federal and State Rate (Adjusted)	% Change in Gross Savings Yr1 to Yr2	% Change in Gross Savings Yr2 to Yr3
1	Japan	39.54	1.36	2.21
2	United States	39.27	10.49	-4.42
3	Germany	38.9	11.35	12.97
4	Canada	36.1	8.34	2.69
5	France	34.4	7.66	5.94
6	Belgium	33.99	9.46	6.84
7	Italy	33	3.57	4.68
8	New Zealand	33	N/A	N/A
9	Spain	32.5	7.28	3.02
10	Luxembourg	30.38	N/A	N/A
11	Australia	30	8.89	N/A
12	United Kingdom	30	2.33	9.68
13	Mexico	28	N/A	N/A
14	Norway	28	15.72	5.58
15	Sweden	28	21.40	13.28
	AVERAGE	33.01	8.99	6.68
16	Korea	27.5	1.09	7.35
17	Portugal	26.5	-4.14	8.57
18	Finland	26	10.81	14.98
19	Netherlands	25.5	17.17	5.80
20	Austria	25	5.25	9.98
21	Denmark	25	5.62	-3.08
22	Greece	25	17.04	N/A
23	Czech Republic	24	9.33	13.09
24	Switzerland	21.32	7.47	N/A
25	Hungary	20	13.01	12.19
26	Turkey	20	N/A	N/A
27	Poland	19	8.06	17.62
28	Slovak Republic	19	12.65	24.52
29	Iceland	18	N/A	N/A
30	Ireland	12.5	13.13	-5.39
	AVERAGE	22.29	8.96	9.60
		***		*

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008 - Not Available.
NOTE: *=Significant at P<.10, **=Significant at P<.01, ***=Significant at P<,001.

CONCLUSIONS

This study examines the relationship between tax rates in selected countries and economic activity, including GDP growth, unemployment, and savings. The sample of countries used in the study consists of the Organization of Economic Cooperation and Development (OECD) countries. This study provides some background information regarding the OECD. This study also offers a brief review of past research concerning taxation and its impact on economic activity.

During the time period of the study, 2005 to 2008, average GDP increased from $1,184 billion to $1,455 billion. When comparing the higher tax rate countries to lower tax rate countries, average increase in GDP was higher for the lower tax rate countries. Over the time period of the study, average unemployment decreased from 7.05 percent in 2005 to 5.76 percent in 2008. When comparing the higher tax rate countries to lower tax rate countries, average percent change in the unemployment rate was more favorable for the lower tax rate countries than the higher tax rate countries. During the time period of the study, the average gross savings rate increased from 24.26 percent to 26.50 percent. Compared to higher tax rate countries, lower tax rate countries experienced a significantly higher proportionate increase in the gross savings rate.

Results are mixed but reveal some meaningful relationships between tax rates and economic activity. Generally lower tax rate countries have experienced more favorable economic activity, at least regarding the variable examined in this study, than higher tax rate countries. At the macro level, these relationships should be considered by policy makers who are considering changes to tax laws. At the micro level, these relationships should be considered by corporate managers who are making decisions on where to set up business operations. The two levels are plainly connected, as macro level decisions of policy makers will affect the micro level decisions of corporate managers.

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SPECULATIVE AND PURE RISKS: THEIR IMPACT ON FIRMS' EARNINGS PER SHARE

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ABSTRACT

A fast and growing management approach which is currently gaining confidence from the managers is Enterprise Risk Management (ERM). Risk is an investor's uncertainty about the economic gains or losses that will result from particular investment.(Hitt, 2006). Returns are often measured in terms of accounting figures such as return on assets, return on equity or return on sales. Returns can also be measured on the basis of stock market returns such as monthly returns (the end of the period stock price minus the beginning stock price divided by the beginning stock price, yielding a percentage return). Earnings per share is another means to gauge performance. Reduction in costs, expenses and losses increases income thereby creating value for the investors. More investors would mean more employment generation and growth perspective at the Bataan Economic Zone.

This study investigated risk exposures such as speculative and pure risks and their impact on firms' earnings per share. The venue was Bataan Economic Zone in the Philippines comprising of 38 companies or 100% locators as survey participants, all manufacturing firms. The companies were moderately exposed in terms of speculative risks namely output and input commodity price risk, foreign exchange risk, interest rate risk, and credit risk and rarely exposed to pure risks covering physical assets, human resource, legal liabilities and work related injuries.

Furthermore, the use of Earnings per share as proxy variable, based on the statistical evidence from regression analysis, failed to establish significant relationship and causal link between EPS and speculative and pure risks, of 38 companies in Bataan Economic Zone in the Philippines. It further identified that the variables of the study do not exert significant impact on firms' earnings per share.

Keywords: Risk exposures, Speculative risk, Pure risk, Economic Zone and Earnings per share.

INTRODUCTION

Two months after the imposition of martial law, Marcos issued Presidential Decree 66 (PD 66) to facilitate the development of the Bataan Export Processing Zone (BEPZ, now Bataan Economic Zone), providing incentives specifically for export production. PD 66 gave firms that

exported at least 70 percent of their products "permission for 100 percent foreign ownership; permission to impose a lower minimum wage than in Manila; tax exemption privileges, including tax credits on domestic capital equipment, tax exemptions on imported raw materials and equipment, exemption from the export tax and from municipal and provincial taxes; priority to Central Bank foreign exchange allocations for exports; low rents for land and water; government financing of infrastructure and factory buildings, which could then be rented out or purchased by companies at a low price; and accelerated depreciation of fixed assets." The incentives worked: "By 1980, the Bataan EPZ had attracted 57 enterprises, the great majority foreign owned, employing some 28,000 workers.

With the available venue to house a medium industry, Bataan Economic Zone was then a haven for foreign investments. Export production in BEPZ grew steadily for the first 10 years but then significantly declined throughout the rest of the Martial Law. Several reasons may have brought the slow down and among which are the various risks to which the companies were exposed to. What matters was how risks were handled and the culture in which the company operates.

A fast and growing management approach which is currently gaining confidence from the managers is Enterprise Risk Management (ERM). Risk is an investor's uncertainty about the economic gains or losses that will result from particular investment. Returns are often measured in terms of accounting figures such as return on assets, return on equity or return on sales. Returns can also be measured on the basis of stock market returns such as monthly returns (the end of the period stock price minus the beginning stock price divided by the beginning stock price, yielding a percentage return). Earnings per share is another means to gauge performance. Reduction in costs, expenses and losses increases income thereby creating value for the investors. More investors would mean more employment generation and growth perspective at the Bataan Economic Zone.

ERM enables management to effectively deal with uncertainty and associated risk and opportunity, enhancing the capacity to build value. Value is maximized when management sets strategy and objectives to strike an optimal balance between growth and return goals and related risks and efficiently and effectively deploys resources in pursuit of the entities objectives. Every stakeholder's needs must be protected and any unanswered need exposes the company to risk. Risk can be considered as "value killer" as it may put an end to a business firm if not properly addressed. The management must be able to know the existence of this "killer" and when it may probably strike in order to combat or to minimize the harm it may bring to the firm. The ultimate goal of business existence is to maximize the result of its operations thereby enhancing sustainable growth. Objectives as to increase in sales and decrease in cost and expenses are good gauge for business performance. While the focus of strategic management is to tap opportunities, risk management then sees to it that threats to these opportunities are checked. Although risk is inherent in an organization's existence, it can either paralyze a potentially successful growth strategy or, if managed properly, it can set the stage for profitable growth.

In ideal risk management, a prioritization process is followed whereby the risks with the greatest loss and the greatest probability of occurring are handled first, and risks with lower probability of occurrence and lower loss are handled in descending order. In practice the process can be very difficult, and balancing between risks with a high probability of occurrence but lower loss versus a risk with high loss but lower probability of occurrence can often be mishandled.

In today's competitive, innovative environment, there is variety of solutions for almost all problems. Consequently, when faced with any of a myriad of risks, businesses are no longer restricted to purchasing insurance. Many approaches for managing those risks can be considered, and insurance may or may not be a part of the optimal solution for a particular firm.

Risk management is the systematic and ongoing process of risk identification, assessment, treatment and monitoring. The process as in any other strategies may have an impact on company's earnings. Performance is an indicator of good governance, both on the company level and in terms of government support. Investments in the Bataan Economic Zone must be enhanced in order to develop its competitive edge in the presence of several economic zones in the Philippines. This study attempted to test the effect of risk exposures on earnings per share.

THEORETICAL FRAMEWORK

This investigation is anchored on the theory of Enterprise Risk Management. Over the years, the theory of typologies or categories of business risk have been developed to classify risk exposures. While all have uses, the most commonly cited construction is based on speculative and pure risks. Other pertinent theories were mentioned relevant to the study. The developments in theories in business risks have had a significant impact on the different management approaches in the 90's. Although no single approach could confirm absolute effectivity, risk management poses a vital role in the field of management.

Basically, the research took off from the work of Woodluck (2001) which states that enterprise risk management involves identifying all risks faced by a company, analyzing and quantifying these risks, and then determining the optimal means of limiting, absorbing, or transferring these risks. This approach to risk management creates a centralized risk management function whose role is to consider the risks faced by the firm as changes occur in the firm's strategies, structures, systems, staffing, management styles, skill sets, and shared values. In essence then, enterprise risk management forces the entire firm to rethink how changes in the organization will affect the company's risk exposure. It allows the company to respond to risks more proactively and lead to fewer surprises. As such, enterprise risk management represents a departure from the so-called silo approach to risk management in which individual departments or disciplines act in their own ways to changes in risk exposures. The primary advantage of enterprise risk management over the silo approach is that it provides

the potential to manage risks in their entirety and not on a piecemeal basis. When individual departments are given the responsibility for managing risks, the possibility exists that departments will adopt some common approach to handling some form of risk, without fully considering the range of options available to the firm.

Organizations by nature manage risks and have a variety of existing specialized departments or functions that identify and manage particular risks. However, each risk function varies in capability and how it coordinates with other risk functions. A central goal and challenge of ERM is improving this capability and coordination, while integrating the output to provide unified picture of risk for stakeholders and improving the organization's ability to manage risk effectively.

In the same manner, COSO (2004) defined ERM as a process, affected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objective.

Although similar in the ultimate objective, the Casualty Actuarial Society (CAS 2003) has defined ERM as the discipline by which an organization in any industry assesses, controls, exploits, finances and monitors risks from all sources for the purpose of increasing the organization's short- and long-term value to its stakeholders. Implicit in this definition is the recognition of ERM as a strategic decision support framework for management. It improves decision making at all levels of the organization.

As stated in the accounting dictionary (answers.com), enterprise risk management makes each area manager responsible for documenting and evaluating financial controls in his or her own area. People closest to each business unit manage the data, which improves accuracy and completeness and identifies areas with inadequate control measures so action plans can be initiated to resolve problems. A broad term for risk management system that: tracks the progress of outstanding action plans, describes who is responsible for those actions, and sets the expected time for resolution. ERM protects against fraud with systematic data management that ensures multiple reviews and verification raises the level and precision of reporting to management and puts "localized knowledge" to work. Area managers become empowered to understand the impact of their roles on corporate results.

The work of Williams Jr., Smith and Young (1998) identified sources of business risk as the potential variation in outcomes, either a gain or a loss. Uncertainty creates doubts in man's minds concerning his ability to predict the future. Exposure to risk is a situation created whenever the act gives rise to possible gain or loss that cannot be predicted.

Trieschman and Gustavson (1995) pointed out business risk as speculative and pure risk. Speculative risk exists when there is uncertainty about an event that could produce either a profit or a loss. In pure risk no possibility of gain is presented, only the potential for loss.

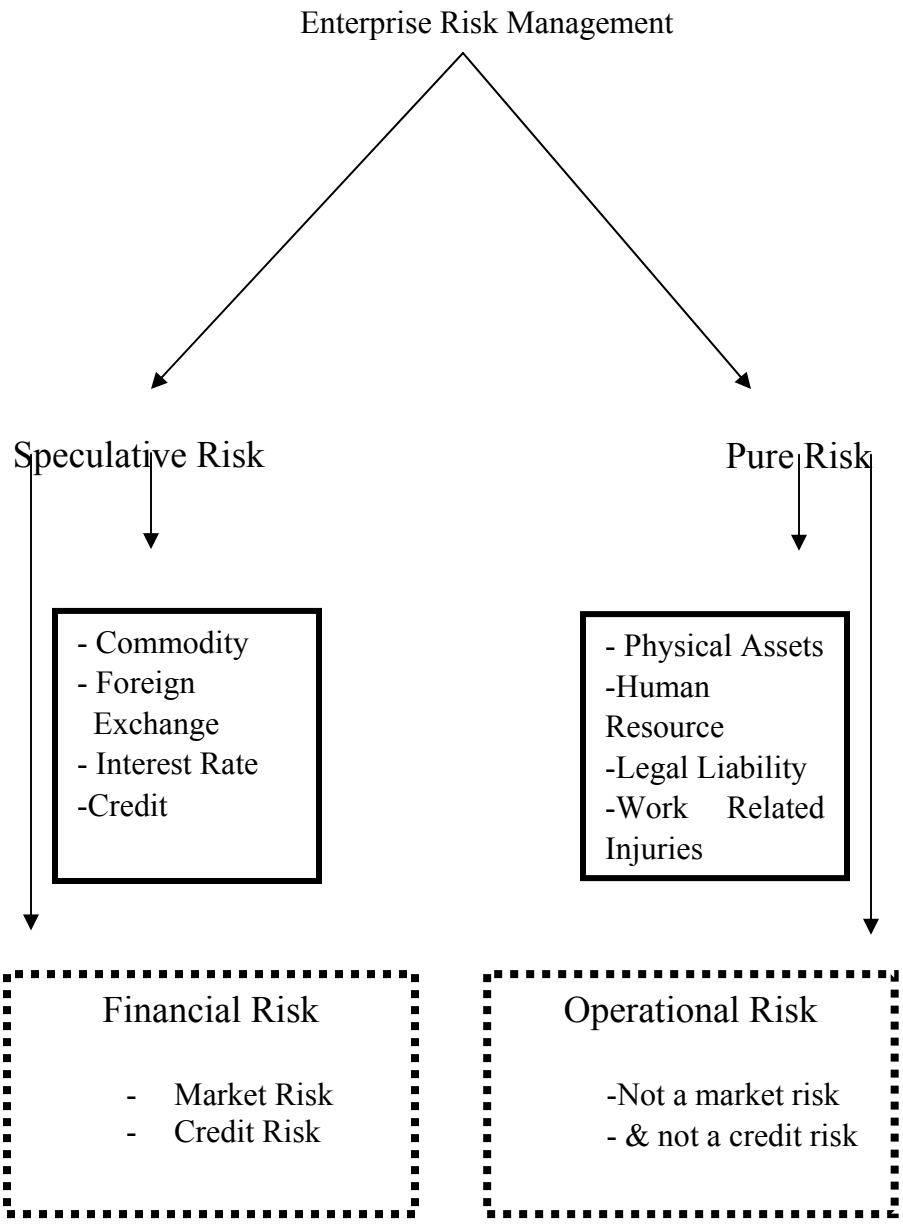
The work of Harrington and Niehaus (1999) breaks down speculative risk into commodity price, foreign exchange, interest rate and credit risks. Examples are buying new machinery in the production of goods, acquiring more inventory, investments in bonds and stocks, sales may be made but non collections of accounts may hamper operations, and loans acquired in foreign currencies fluctuate because of changes in exchange rate. Pure risk involves losses due to physical assets, human resources, legal liabilities and work related injuries. If such events occur, the company loses money, but if the event does not happen, the company gains nothing because of the principle of indemnification. Indemnification is used in insurance policy agreements as a compensation for damages or loss up to the extent of the value of the property lost. Although business risk involves both speculative and pure risks, the focus of this study is on pure risk.

Relevant to speculative risk is financial risk which deals with risk exposures particularly credit and market risk (Charles, 2004). Market risks cover commodity, foreign exchange, and interest rate risks. Financial risk management is directly and importantly, the result of the emergence of financial tools for controlling interest rate, price, currency, credit and other financial risks (Young, 2001). Corporations, particularly financial institutions, have long had exposure to such risks, but the rise of exchanges and capital market innovation in the 1970s, 1980s and 1990s have contributed to the expansion of many financial risk management tools such as forwards, futures, options and other types of derivatives. Given the dynamism present in both the investment world and in corporate financial management circles, it shouldn't be too surprising to learn that the financial risk manager presently is in the ascendancy and has some chance of claiming the ultimate title of corporate risk manager. Much of the academic research and higher level practitioner literature today reflects an assumption that all organizational risk management derives from financial risk management.

Operational risks are all business risks which are neither market nor credit risks which are associated with operating a business (Carouhy, 2001). This is divided into two components, operational failure risk and operational strategic risk. Operational failure risk is an internal failure which is encountered in the pursuit of a particular strategy due to people, process and technology while operational strategic risk is an external failure which is the risk of choosing an inappropriate strategy in response to environmental factors such as political, taxation, regulation, government, societal, competition and others.

The classification of the business risk exposures are used to explain the theoretical framework. The components and structure is illustrated in figure 1.

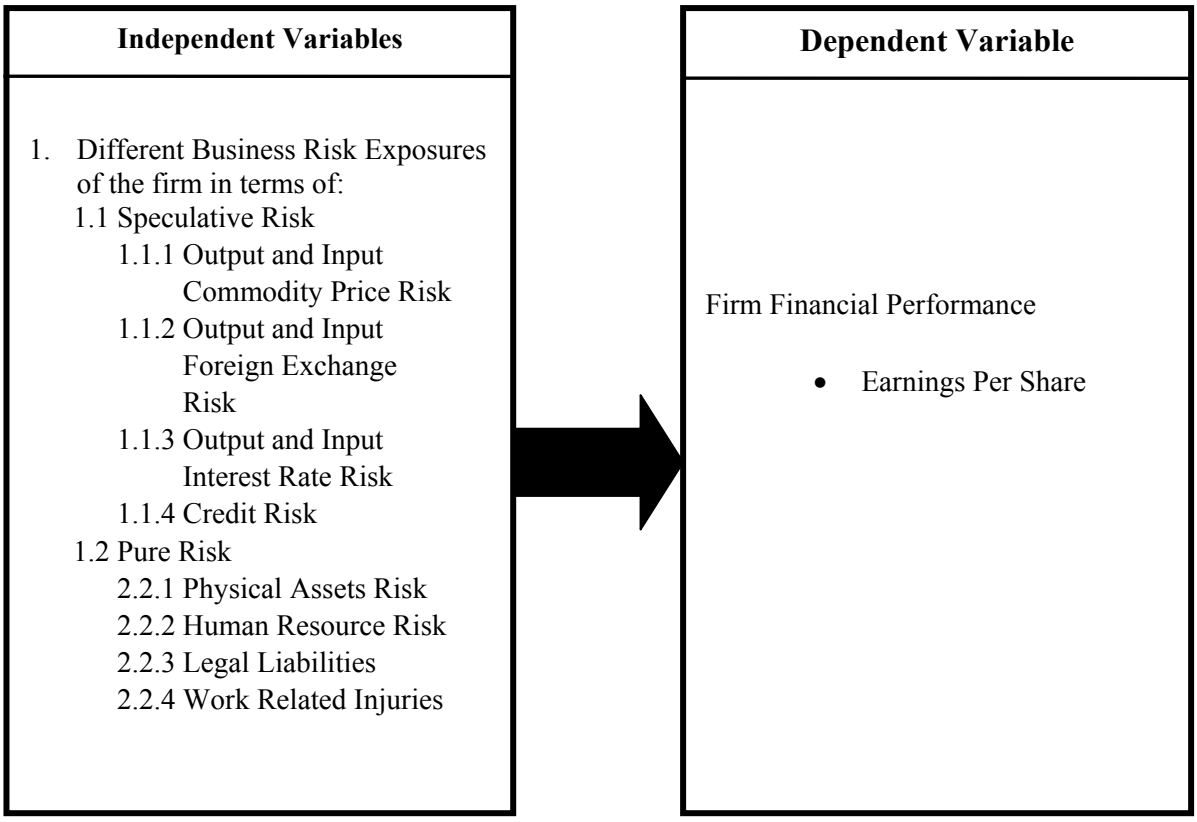
Figure 1: Theoretical Framework



CONCEPTUAL FRAMEWORK

A well implemented organized risk management programs may lead to a favorable effect on firm's performance. Prior research work has not explored the effect of risk management processes taken as a whole on the firm's performance in terms of earnings per share. This study is one such step taken in that direction.

Figure 2: Conceptual Paradigm



STATEMENT OF THE PROBLEM

1. What is the firm's level of risk exposures in terms of speculative risks namely commodity, foreign exchange and interest rate risks and pure risks namely physical assets, human resource, legal liabilities and work related risks?

2. Do the risk exposures in terms of speculative and pure risks exert significant effect on the firms' earnings per share?

SIGNIFICANCE OF THE STUDY

As businesses become more conscious of risks and the means of managing them, recent development necessitates more researches to study risk management in all dimensions. Management researchers continuously recognize the importance of risk management the concepts of which evolve and change dramatically over the years. In this direction, this study, the researchers hope, might prove useful and serve as possible reference materials for managers in the private sector, public sector and non-profit organizations in formulating policies and guidelines.

The insights from this study can also enrich and provide relevant information to the academe and future researchers who may wish to conduct relative studies specifically in the context of risk management.

Related studies which are more focused on pure risks because they have more tangible effects on the enterprises might prove useful to employees because of their susceptibility to some kind of risk exposures and workers injuries. Manufacturers and buyers of goods may be well guided in terms of product liabilities. Insurance agents and brokers might find the study useful as complementary materials with respect to risk coverage.

Investors are always on the lookout about the risk exposures that hamper investments. This paper would somehow give useful information to prospective locators and developers of an economic zone which is the venue of this research. Information may suggest effective plan for program implementation which will strengthen the appropriate risk management approaches that may be used.

Knowledge in recent development in risk management and its continuing evolution is a plus factor. This study will on its way be of help to the researcher because of the opportunity to have an in-depth understanding of the different manufacturing processes of various industries covered by the research.

RESEARCH METHODOLOGY

The research method used, population of the study, instrumentation, data gathering procedures, and statistical treatment of data are embodied in the following discussions.

Research Method

Quantitative research according to Zulueta (2006) is characterized by the use of statistical analysis. The three basic quantitative research objectives are to describe, to compare and to attribute causality. Each of these objectives is done through the assignment of numerical values to variables and the mathematical analysis of those values. In quantitative descriptive research, the researchers' purpose is to answer questions about a variable status by creating numerical descriptions of the frequency with which one of the variables occurs.

A multiple regression analysis was performed to test the if the EPS is affected by the speculative and pure risks. The regression equation is as follows:

$$CPR = ß_0 + ß_1 EPSInd_i + e_i$$
$$FERR = C_0 + C_1 EPSInd_i + e_i$$
$$IRR = D_0 + D_1 EPSInd_i + e_i$$
$$CR = E_0 + E_1 EPSInd_i + e_i$$
$$PA = F_0 + F_1 EPSInd_i + e_i$$
$$HRA = G_0 + G_1 EPSInd_i + e_i$$
$$LL = H_0 + H_1 EPSInd_i + e_i$$
$$WRI = I_0 + I_1 EPSInd_i + e_i$$

where:

$EPSInd_i$ = basic earnings per share of a firm;
CPR = commodity price risk;
FERR = foreign exchange rate risk;
IRR = interest rate risk;
CR = credit risk;
PA = physical assets;
HRA = human resource assets;
LL = legal liabilities;
WRI = work related injuries;

Bs, Cs, Ds, Es, Fs, Gs, Hs and Is = parameters of the model or the estimated marginal effects of individual explanatory variables on the dependent variables;

e_1 = Error term or disturbance term attributable to unknown factors.

The statistical significance of the individual regression coefficients were tested using the Studentized residual or t-test.

$$\text{t-ratio} = \frac{\text{regression coefficient}}{\text{standard error of coefficient}}$$

while the overall significance of each regression model was determined by calculating the corresponding coefficient of determination or R^2 and its corresponding F-ratio, viz:

$$R^2 = 1 - \frac{\Sigma e^2}{\Sigma y^2}$$

where

$\sum e^2$ = squared deviations of estimates from actual observation
$\sum y^2$ = squared difference of actual data from its mean

And

$$\text{F-ratio} = \frac{R^2 / k - 1}{(1 - R^2) / n - k}$$

where

k = number of explanatory variables
n = sample size

If the computed F-ratio exceeds critical values at a specified level of significance, say 5 percent, and degrees of freedom, then the regression model is deemed statistically significantly different from zero. In other words, the explanatory variables, taken collectively, exert a significant effect on the dependent variable of choice. It is also a test of significance of the R^2 which in turn measures the "goodness of fit" of the model.

POPULATION OF THE STUDY

A total of 38 companies currently operating at the Bataan Economic Zone were the subject of this study. These companies represent 100% of the total population, all manufacturing firms.

The respondents were the people performing the functions of the risk/general managers, production managers, marketing managers, finance managers and human resource managers of the companies who accomplished the questionnaire. However, there was no clear cut indication as to the specific position each one has accomplished as the questionnaire was taken as a whole. One person may be performing one, two or even all the functions. He may be the highest executive of the firm who is the focal point of decision making.

INSTRUMENTATION

This study made use of the primary and secondary sources of data. The primary sources were researchers-made questionnaire, interviews and observation.

The questionnaire was formulated and designed to obtain data pertinent to the sub problems covered by this study. This instrument was validated by conducting a dry run among

parties who were not involved in this study. They were the faculty members of the engineering department BEZ Campus. Items left unanswered during the dry-run of the questionnaire were revised and simplified for reason of being unclear. The instrument was finally subjected to face and content validity by the researcher's adviser and evaluators after which the final form of the questionnaire were made ready for use to the subjects of this study.

With the aim of enriching, reinforcing and strengthening the findings and to gather further information, personal unstructured interviews were also used to get comprehensive picture of the corporate culture and the practices of the companies. In addition, observation through personal inspection of the premises was done to complement the survey questionnaire and interviews.

The researchers also relied on the following secondary sources of data: a) Library services - vital information on literature reviews were gathered from various libraries, b) Internet services, c) Data from Securities and Exchange Commission for Financial Statements, d) Pertinent Republic Acts for the study, e) Fire Department Records for previous fire experiences at the Zone, f) Safety Department Records for health safety and work related injuries of the employees, g) Police Blotter for any reported incidence of theft and pilferages and problems encountered by the locators with respect to the zigzag road hazards, h) Bank managers for export and import experiences of the enterprises and their collections and payments activities, i) Industrial doctors and nurses for the day to day health and accident problems of the employees, j) Social Security System to verify if the contributions for SSS premiums are updated, k) Municipal Office for any concern regarding risks exposures of the enterprises, m) Department of Labor and Employment, and n) "Assessment of Risk" similar to marketing intelligence done by the researchers from jeepneys and bus stops for any information that may be gathered direct from the employees uttered informal statements.

DATA GATHERING PROCEDURE

The researchers started by visiting the Administration Office of BEZ Industrial Promotions Division Chief in order to know exactly the manufacturing company locators presently operating at the Bataan Economic Zone. There were thirty eight manufacturing companies still actively operating. To collect meaningful and accurate data relevant to the study, a survey questionnaire was designed to enable the researchers gather all the necessary information regarding risk management of the companies. These were sent to the risk/general managers, production managers, marketing managers, finance managers and human resource managers of the companies who accomplished the questionnaire. Each of the respondents answered the portion of the questionnaire which are applicable to his line of expertise and they came up with one set of accomplished instrument.

PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

Speculative Risk

Speculative risk is a risk in which either a gain or loss may occur. This kind of risk covers output and input commodity price, output and input foreign exchange risk and output and input interest rate risk and credit risk.

Table 1: Weighted Mean and Verbal Interpretation of Output and Input Commodity Price Risk		
Output Commodity Price Risk: Decrease in Sales & Other Income	Weighted Mean	Verbal Interpretation
Due to Competition	3.58	Exposed
Due to late delivery	2.45	Rarely Exposed
Due to export quota	1.82	Rarely Exposed
Due to cancelled / recalled orders	2.37	Rarely Exposed
Due to product quality	2.27	Rarely Exposed
Input Commodity Price Risk: Increase in Cost & Expenses	Weighted Mean	Verbal Interpretation
Due to increase in cost of raw materials & supplies	4.18	Exposed
Due to increase in manpower & salaries & wages	4.16	Exposed
Due to unattained production quota	3.08	Moderately Exposed
Due to increase in power rate & power consumption	3.58	Exposed
Due to spoilage & shrinkage	2.43	Rarely Exposed
Grand Weighted Mean	*2.98*	*Moderately Exposed*

Data from Table 1 suggest that output commodity price risk covering decrease in sales and other income due to competition (weighted mean: 3.58) due to late delivery (weighted mean: 2.45) due to export quota (weighted mean: 1.82) due to cancelled / recalled orders (weighted mean: 2.27). Input commodity price risk covering increase in cost and expenses due to increase in cost of raw materials and supplies (weighted mean: 4.18) due to increase in manpower and salaries and wages (weighted mean: 4.16) due to unattained production quota (weighted mean: 3.08) due to increase in power rate and power consumption (weighted mean: 3.58) due to spoilage and shrinkage (weighted mean: 2.43)

Competition pauses difficult factor to overcome because of emerging of more cheap products which are manufactured from other Asian countries such as China, Vietnam, Korea, Macau and India. Market forces are difficult to counteract because of cheap labor & other manufacturing expenses in other countries which tend to make selling price much lower as compared to Philippines made products. The rest to which the companies are exposed to are

controllable such as late delivery which may bring about cancelled or recalled order and product quality. Export quota is rarely imposed on products being manufactured in BEZ.

Input commodity price risk increases cost of production and other expenses. With a mean of 4.18, 4.16 and 3.58, the companies are exposed in increase in cost of raw materials & supplies, increase in manpower & salaries and wages and increase in power rate and power consumption. That means cost of product produced tend to become expensive. High cost of production with no corresponding increase in selling price tends to reduce profit. Unattained production quota has a mean of 3.08 which makes the company moderately exposed. Again, the tendency of the product produced if the required quantity to be produced is not reached, then cost of the product will be high because the fixed cost will not be fully utilized. Spoilage & shrinkage has a mean value of 2.43 which makes the company rarely exposed to. In some production process, shrinkage & evaporation cannot be avoided and therefore the cost of remaining products absorbs the total cost. As a result, the cost of the product then increases.

The average mean is 2.98 which corresponds to moderate exposure to output and input commodity price risk.

Table 2: Weighted Mean and Verbal Interpretation of Speculative Risk Covering Foreign Exchange Rate Risk

	Weighted Mean	Verbal Interpretation
Output Exchange Rate Risk : Decrease in Sales & Other Income due to decrease in Exchange rate	3.87	Exposed
Input Exchange Rate Risk: Decrease in Sales & Other Income due to increase in Exchange rate	3.58	Exposed
Grand Weighted Mean	*3.72*	*Exposed*

It is observed in table 2 that the mean of 3.87 tends to expose the companies in decrease in sales and other income due to decrease in exchange rate. Lesser pesos per dollar would mean lesser total sales in terms of pesos and lesser amount to pay labor cost & expenses which is denominated in terms of pesos. Whereas decrease in sales & other income due to increase in foreign exchange has a mean of 3.58 which also makes the companies exposed to foreign exchange risk. This means that more pesos are required to purchase the same quantity of materials & supplies.

Table 3: Weighted Mean and Verbal Interpretation of Speculative Risk Covering Interest Rate Risk		
	Weighted Mean	Verbal Interpretation
Output Interest Rate Risk: Decrease in Sales & Other Income due to decrease in interest rate	2.53	Rarely Exposed
Input Exchange Rate Risk: Decrease in Sales & Other Income due to decrease in interest rate	3.00	Moderately Exposed
Grand Weighted Mean	*2.79*	*Moderately Exposed*

Table 3 revealed that the mean is 2.53 which is rarely exposed because of decrease in interest rate. Some companies have loan exposures to related parties for quite a period of time which are non interest bearing. There are opportunity costs on these loan exposures which mean that an income may have been generated with other ventures using the amount. While some companies have advances from related parties, other companies on the other hand have loans acquired which are interest bearing. This places them in a risk exposure of 3.0 which is moderately exposed.

The average of the mean which is 2.79 places the companies in a moderate exposure to interest rate risk.

Table 4: Weighted Mean and Verbal Interpretation of Credit Risk Exposures		
	Weighted Mean	Verbal Interpretation
Risk of Non Collection of Accounts	2.37	Rarely Exposed
Risk of Non Payment of Liabilities	2.58	Moderately Exposed
Grand Weighted Mean	*2.47*	*Rarely Exposed*

Table 4 projected measure of credit risk exposures. Production for exports is normally made thru telegraphic transfer which eases up collections. Still a few transactions are covered by letters of credit. That is why a mean of 2.37 or rarely exposed is derived from the survey. For the payment of liability, some companies are indebted to related parties such as parent company, another subsidiary company or even from stockholders. More often than not, these kinds of loan are none interest bearing and may be good to a considerable period of time. Other loans obtained by some companies are export advances which are readily paid upon collections of exported products. Collection of receivables on exported sales does not pause much problem because these are usually made by telegraphic transfer which is fast and easy. Sometimes, about 20% of export transactions use letters of credit. Never a transaction happened with an open account. Risk exposures on payment of liabilities are put at a mean of 2.58 which is moderately exposed.

An average mean of 2.47 places the companies in a rarely exposed position when it comes to credit risk.

Pure Risk

Pure risk exposure is a risk in which a gain is not possible, only a loss. This covers risk exposures of physical assets, human resources, legal liabilities and work related injuries.

Table 5: Weighted Mean and Verbal Interpretation of Pure Risk Involving Physical Assets

Building Improvement and Betterments/ Machineries/ Equipments	Weighted Mean	Verbal Interpretation
Fire	2.95	Moderately Exposed
Electrical Disturbances	2.95	Moderately Exposed
Installation and Construction Hazard	2.37	Rarely Exposed
Breakdown	2.73	Moderately Exposed
Obsolescence	2.35	Rarely Exposed
Inventories	Weighted Mean	Verbal Interpretation
Fire	2.66	Moderately Exposed
Spoilage	2.24	Rarely Exposed
Inventory shortage due to shrinkage / evaporation	2.11	Rarely Exposed
Pilferage	2.55	Rarely Exposed
Obsolescence	2.25	Rarely Exposed
Vehicles	Weighted Mean	Verbal Interpretation
Accident	2.43	Rarely Exposed
Breakdown	2.41	Rarely Exposed
Operations of vehicle	2.46	Rarely Exposed
Loss of integral part of set, pair or group	2.14	Rarely Exposed
Valuable Files	Weighted Mean	Verbal Interpretation
Fire	2.39	Rarely Exposed
Losses resulting from records destruction	2.68	Moderately Exposed
Technology risks	2.50	Rarely Exposed
Locational	Weighted Mean	Verbal Interpretation
Zigzag road hazards	2.76	Moderately Exposed
Water supply shortage/ Inaccessibility to firefighters	2.18	Rarely Exposed
Concentration of physical assets in one area	2.18	Rarely Exposed
Grand Weighted Mean	*2.48*	*Rarely Exposed*

It can be gleaned from table 5 that pure risk exposures involving physical assets are characterized as follows: On building improvements and betterments/ machineries and equipments: Fire (weighted mean: 2.95) electrical disturbances (weighted mean: 2.95) installation and construction hazard (weighted means: 2.37) breakdown (weighted mean: 2.73) obsolescence (weighted mean: 2.35). On inventories: fire (weighted mean: 2.66) spoilage (weighted mean: 2.24) inventory shortage due to shrinkage/evaporation (weighted mean: 2.11) pilferage (weighted mean: 2.55) obsolescence (weighted mean: 2.25) On vehicles: accident (weighted means: 2.43) breakdown (weighted mean: 2.41) operations of vehicle (weighted mean: 2.46) loss of integral part of set, pair or group (weighted mean: 2.14). On valuable files: fire (weighted mean: 2.39) losses resulting from records destruction (weighted mean: 2.68) technology risks (weighted mean: 2.50) Locational: zigzag road hazards (weighted mean: 2.76) water supply shortage/ inaccessibility to firefighters (weighted mean: 2.18) concentration of physical assets in one area (weighted mean: 2.18).

Table 5 shows physical assets risk exposures of building, improvements, mechanics and equipment, inventories, vehicles, valuable files and locational factors.

Risk exposures of building, improvements, machineries and equipment consisting of fire and electrical disturbances are the highest risk exposures because although the standard factory buildings are made from concrete materials, they have been constructed for more than 30 years already. On the other hand,, being on an economic zone, the buildings and machineries are periodically checked by the safety department. Machine breakdown is possible as this may be used at its maximum capacity with a work schedule of 6-2, 2-10 and 10-6. As long as the machines are being used in current operations, obsolescence is a minimal source of risk exposure.

Fire is the normal highest source of risk exposure in inventories. Spoilage may be brought about by handling or exposure to light and humidity. For B grade products, these are saleable locally during the trade fair being held during year end. Inventory shortage due to shrinkage results to scrap materials recovery but normal losses due to shrinkage and evaporation are observed. Pilferage may be the result of laxed security guards or even collusion among employees. Fast turnover of materials and reasonable economic order quantity enables the company to keep obsolescence of inventory to the minimum. Interview with fire and industrial safety division reinforces the response of the company which is business interruption brought about by fire and other catastrophe. In terms of pilferage police blotters show a low incident of reported cases reinforces the findings which is rarely exposed.

The foreigners are very particular about accidents and maintenance of their vehicles because of the legal liabilities that go along with this risk exposure. Good garage minimizes loss of integral parts and repair parts.

Valuable files usually are kept in fireproof vaults for safekeeping. Back up files are maintained for computer-based records to minimize losses resulting from records destruction, antivirus mechanism may be installed, and safety sequences may be used to file important

records. These measures may be used by the companies having risk exposures from rarely to moderately exposed.

Locational factors affect the company in one way or another. Some companies with heavy loads get stuck up in the zigzag road leading to delays in going to and from the zone affecting other road users. Zigzag road hazard is minimized by imposing a fine of P500 by per hour by the local ordinance for every vehicle that will encounter a problem and will block the passage. BEZ is located in a condition where there is good water supply and very accessible to firefighters.

The building structure minimizes the concentration of physical assets in one area.

The average of the mean of 2.48, rarely exposed, indicates that the companies' exposures to pure risk involving physical assets are kept at the minimum.

Table 6: Weighted Mean and Verbal Interpretation of Pure Risk Involving Human Resource Assets

	Weighted Mean	Verbal Interpretation
Illness	2.71	Moderately Exposed
Retirement	2.18	Rarely Exposed
Disability	2.26	Rarely Exposed
Death	2.08	Rarely Exposed
Grand Weighted Mean	*2.31*	*Rarely Exposed*

In table 6, the credit risk exposures are characterized as follows: Illness (weighted mean: 2.71) retirement (weighted mean: 2.18) disability (weighted mean: 2.26) death (weighted mean: 2.08).

Employees of the company are sources of strength although at times they are also sources of risk which tends to increase cost and losses thereby reducing value for the stockholders. Human assets exposures are possible pure risk resulting from death, poor health, retirement or unemployment of an organization's employees. With the presence of company doctors and nurses, a regular check up may be made on the employees for possible illness and weak resistance to diseases. There are some companies which carry retirement plans and employee benefits as reflected in the financial statements. However, most companies hire new breed of workers on a contractual basis, who are easily replenishable and not subject to regularization. Companies are rarely exposed to disability and death because of the insurance with Social Security System and group insurance which are carried by some companies. Hiring of skilled workers ensures a smooth sailing flow of production with less interruption.

Table 7: Weighted Mean and Verbal Interpretation of Pure Risks Involving Legal Liabilities		
Legal Liabilities	Weighted Mean	Verbal Interpretation
Product Liabilities	2.58	Moderately Exposed
Liability arising from negligence	2.54	Moderately Exposed
Contract Liabilities	2.35	Rarely Exposed
Failure on environmental control	2.32	Rarely Exposed
Work related injuries of employees	2.58	Moderately Exposed
Non compliance with statutory requirements	2.03	Rarely Exposed
Grand Weighted Mean	*2.38*	*Rarely Exposed*

Table 7 depicts that credit risk exposures are characterized as follows: Product liabilities (weighted mean: 2.58) liability arising from negligence (weighted mean: 2.54) contract liabilities (weighted mean: 2.35) failure on environmental control (weighted mean: 2.32) work related injuries of employees (weighted mean: 2.58) non compliance with statutory requirements (weighted mean: 2.03).

Warranties on products produced have a mean of 2.58, moderately exposed. Some companies have buyer's representative to look into its quality control for a stringent screening of the products. A recent issue on product liability shook the world with the discovery of Melamine in milk which was produced in China. Negligence accounts for 2.54, also moderately exposed. Product mishandling may bring about unfavorable results. Contracts entered into by Zone Enterprises are complied with at BEZ, environmental control is very strict and regulatory bodies are very active in implementing policies and guidelines. Work related injuries of employees resulted to a mean of 2.58 moderately exposed. Since only regular employees are covered by the mandatory SSS coverage and Employees Compensation, injuries sustained by contractual employees are shouldered by their respective companies without the aid of SSS or Phil health, non compliance with statutory requirements resulted to a mean of 2.03 rarely exposed. Being a BEZ registrant, there are several rules and regulations that a locator must comply with and that in order to avoid revocation of their registration, companies comply with statutory requirements. SSS office and Philhealth office at BEZ are very strict in premiums collections. Frequent visits are made to the offices which are not updated in the remittances of premiums. In case of health failure or accidents, the employees are assured of SSS and Philhealth benefits. Municipal office of Mariveles sees to it that compliance with the required documentations are observed before a business permit is given. SSS clearance, BIR, sanitary permit, engineering and fire safety certifications to name some of these requirements.

As a whole legal liabilities risk exposure average of the mean is 2.38, rarely exposed, probably because their existence is co-terminus with the compliance with what is legal.

Table 8: Weighted Mean and Verbal Interpretation of Pure Risks Involving Work Related Injuries		
Accidents	Weighted Mean	Verbal Interpretation
Falls on slippery or greasy floor	2.18	Rarely Exposed
Accident from machine operations	2.55	Moderately Exposed
Fumes from chemicals	2.18	Rarely Exposed
Sparks / harmful rays, heat	2.13	Rarely Exposed
Unsafe protective approaches	2.03	Rarely Exposed
Work Condition	Weighted Mean	Verbal Interpretation
Poor lighting due to missing lamps	2.00	Rarely Exposed
Dirty fixtures	2.05	Rarely Exposed
Poor ventilation	2.16	Rarely Exposed
Extreme noise exposures	2.21	Rarely Exposed
Exposure to computers	2.45	Rarely Exposed
Grand Weighted Mean	*2.19*	*Rarely Exposed*

Table 8 shows that credit risk exposures are characterized as follows: Falls on slippery or greasy floor (weighted mean: 2.18) accident from machine operations (weighted mean: 2.55) fumes from chemicals (weighted mean: 2.18) sparks/ harmful rays, heat (weighted mean: 2.13) unsafe protective approaches (weighted mean: 2.03) poor lighting due to missing lamps (weighted mean: 2.00) dirty fixtures (weighted mean: 2.05) poor ventilation (weighted mean: 2.16) extreme noise exposures (weighted mean: 2.21) exposure to computers (weighted mean: 2.45).

Table 8 summarizes the risk involving work-related injuries. Risk prevention and risk reduction are the mitigating means of the companies to counteract accidents and poor working condition. Constant checking and regular cleaning time of janitors decreases the probability of falls on slippery or greasy floor and dirty fixtures. Proper disposal and safekeeping of chemicals and wearing appropriate apparel makes employees avoid fumes from chemicals and unsafe protective approaches as well as sparks/harmful rays and heat. Work conditions such as poor lighting is minimized by immediate replacement of missing lamps. Buildings are so designed to ensure good source of ventilation of fresh air. Extreme noise happens only in cases where repairs are ongoing. However, in cases where the normal operations involve extreme noise, workers are limited to shorter number of hours of exposure. In a highly mechanized business, use of computers is a must and exposure to it cannot be avoided. Industrial safety division report incidents on health and work related injuries which are in consonance with the result of the survey which is rarely exposed. Information from industrial doctors and nurses indicates only minor occurrences of injuries maybe because of the following reasons: (a) workers are

considered skilled and are careful enough to be injured by the equipment and (b) modern machineries and equipments have guards and gadgets so as to minimize accidents. The average mean is 2.19 which is rarely exposed.

Table 9: Regression of EPS on Speculative and Pure Risks				
Earnings per share	Coefficients	t-computed	p-value	Remarks
(Constant)	-5401.562	-.339	.741	Not Significant
Speculative Risks Covering Commodity Price Risks	19404.338	2.635	.063	Not Significant
Speculative Risks Covering Foreign Exchange Rate Risks	-5124.782	-1.555	.148	Not Significant
Speculative Risks Covering Interest Rate Risks	-561.066	-.188	.854	Not Significant
Speculative Risks Covering Credit Risk	-3983.540	-2.052	.065	Not Significant
Pure Risks Involving Physical Assets	-5108.146	-1.144	.277	Not Significant
Pure Risks Covering Human Resource Assets	-4671.718	-.880	.398	Not Significant
Pure Risks Covering Legal Liabilities	-5353.280	-1.117	.288	Not Significant
Pure Risks Covering Work Related Injuries	12799.656	2.151	.055	Not Significant

An important component of the study is to test the if risk exposures such as speculative and pure risks exert significant effect on firms' earnings per share. As presented in table 9, all the variables showed no significant effect on earnings per share. However, at 5%, level of significance, commodity price risk, credit risk and work related injuries almost showed significant effect at .063%, .065%, and .055% respectively. The foreign exchange and monitoring techniques at .148% and .165% also present a higher than .05 level of significance. Further, no significant effect on earnings per share are shown by physical assets risks at .277 legal liabilities at .288, human resource at .398, risk treatments at .354 and risk management policies and guidelines at .504. The interest rate risk is the least significant with p-value of .854. Findings suggest that risk exposures such as speculative and pure risks do not have significant effect on firms' earnings per share.

CONCLUSION

Based on the findings presented, the researchers came up with the following conclusions: At 5% level of significance, pure risk such as work related injuries; speculative risks such as commodity price and credit risks presented an almost significant impact on earnings per share at p-value of .055, .063 and .065 respectively. However, for foreign exchange rate risk, physical assets, human resources and interest rate have varying degrees of insignificance with earnings per share. The impact to earnings per share is complemented by sufficiency of existing risk

management policies and guidelines, the level of implementation of risk treatments and their monitoring practices. Therefore, risk exposures standing alone may not be a sufficient gauge to measure the impact on earnings per share because of the underlying factors.

The use of Earnings per share as exogeneous variable, based on the statistical evidence from regression analysis, failed to establish significant relationship and causal link between EPS and speculative and pure risks, of 38 manufacturing companies in Bataan Economic Zone in the Philippines. Or, it could be that risk exposures such as speculative and pure risks do not exert significant effect on firms' earnings per share.

RECOMMENDATIONS

In view of the findings of this study, the researchers made the following recommendations and hope that they would contribute to the attainment of the goal.

Levels of risk exposures must always be checked because this cannot be totally eliminated: One of the companies out of 38 is hedging as a way of mitigating loss from foreign exchange. May the companies do not stop to find ways and means to mitigate risk that may add to their staying power. That the increase in foreign exchange may not bring about an accompanying increase in interest rate in order not to disrupt strategies and budget plans earlier established. To those companies which are pioneer exporters, reciprocal accounts of receivables and payables may be sustained at some point in time. The regulators must always see to it that reports made by the companies are properly and correctly stated. This ensures organized system of reporting. Since risk exposures has no significant relationship on earnings per share, the installation of a qualified risk manager is necessary who would take charge of the full implementation of the whole risk management process.

The success of Bataan Economic Zone in promoting business and attracting foreign investors depends on the factors that lower cost and ensure better investment climate. By scanning the internal and external environment, analysis of strength, weaknesses, opportunities and threats in the zone must be considered.

The SWOT analysis must be well addressed and reviewed. Timely actions must be done in order to maximize utilization of the Bataan Economic Zone which has been waiting for a big leap for quite some time now. 1) Harmony between PEZA and the provincial government must be enhanced in order to attract more investors. 2) A strong and sensitive approach of regulatory framework must be adapted. 3) Full implementation of what is embodied in the IRR of RA 7916 otherwise known as Special Economic Act of 1995 as amended by RA 8748.

Other studies using the same venue may further be made on the following issues: social responsibility of the zone enterprises which enhances community development and social acceptance Human Rights issues because the fact that there are no strikes does not mean no human rights are violated. Transfer pricing issues for taxes lost.

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A STUDY ON CORPORATE GOVERNANCE OF CHINA'S STATE-OWNED ENTERPRISES - FOCUS ON THE ROLE OF BAOSTEEL CCP ORGANIZATION

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ABSTRACT

This study is focused on Corporate Governance of China's State-Owned Enterprises(SOEs)in which research was studied on the role of State-Owned Enterprises(SOEs) under Corporate Governance of CCP(China Communist Party) organization that has been not studied a lot in previous research. As a result of the case study of Baosteel, though China's State-Owned Enterprises(SOEs) accommodated western corporate governance system, the CCP organization in the corporate has been carried out the role of internal control mechanism which complements weakness of governance structure, and is giving positive influence on governance structure of SOEs as a distinctive character of China's State-Owned Enterprises through performance of political core function.

Key words: China's SOEs, Governance Structure, the CCP organization, internal control mechanism, Baosteel.

Abbreviations: CCP, China Communist Party; SOEs, State-Owned Enterprises; COSO, Committee of Sponsoring Organizations of the Tread-way Commission; CICSC, China Internal Control Standards Committee; SASAC, State-owned Assets Supervision and Administration Commission; PSC, Party Standing Committee; CPCC, China Party Central Committee;

INTRODUCTION

There is a common understanding that the economic development of China has been commenced since the Third Plenary session of the 11th Central Committee of the China Communist Party, and at the same time initiating open door policy from that time Chinese Government launched the first step of reformation targeting SOEs. The history of Chinese economic development acquires brilliant record of economic growth at this time, could be said fairly that it was the reforming history of China's SOEs. Before reform and opening-up policy was launched, all the corporations in China were owned by the Chinese government, for the reason that the productivity of SOEs was declined and the financial performance of the SOEs was in deficit in many years. Since 1978 Chinese government considered economic growth as

the major issue to reflect the Advanced Socialist, and started process of structure renovation in versatile perspectives including ownership, management pattern, supervising and incentive mechanism of SOEs. Having proceeded reforming measure for SOEs for several times gradually for 30 years, and it looks China's SOEs have formed management structure as modern enterprise, but undeniably there is the fact that those are still behind management efficiency than western enterprise, and have many problems in ruling structure. Also because there is political peculiarity as socialist system, we could understand that China's SOEs has distinctive characteristics apparently different from the moment western countries accommodate the Capitalism. Due to these distinctive characteristics and because achievement and problems occurred in China's SOEs cannot be explained by theories of management formed based on western enterprise, so to explain the record and problems occurring from China's SOEs it is necessary to complement strategic management theories developed by other countries to adjust the Chinese situation.

This study commenced by the analysis of reforming history of ruling structure of China's SOEs which tries to find discord with strategic management theories developed previously through the case study on the ruling structure of Chinese style SOEs. Especially it aims to examine the role of CCP organization which the portion is never been discussed in the existing study on the ruling structure of China's SOEs. The interesting thing is that China's SOEs didn't remove CCP organization already in the inside the corporation during in the process of accommodating the modern enterprise system, and enforced structure renovation by strengthening the systematic function of this part's role. Therefore, it needs to investigate not only the role play of CCP organization the characteristics of China's SOEs but also what sort of relationship CCP organization has with other organizations among the system, and what kind of influence it gives to achievement of the corporation, and it is assumed by this approach it will help to understand the characteristics of ruling structure of China's SOEs more clearly.

The structure of this study is as followings. Theoretical background of governance structure was investigated, and reformation of governance structure of China's SOEs was reviewed. Case study of Baosteel the number 1 steel manufacturing company in China has been provided, propositions for empirical study on the basis of case study, and finally the conclusion of the study, suggestion of the study and limitation were provided.

THEORETICAL BACKGROUND

Corporate governance structure

For the study of governance structure theoretical background varies according to how to look at the corporation. If we see corporation in perspective of Static Contract Theory it is asserted representing body and minimization of transaction costs would be the biggest issue of corporation in relation with resource distribution for maximization of the corporation

values(Williamson, 1985; Coase, 1989). Instead, in theory of Property Theory which sees corporation as complex of property assets owned by joint union, distribution of ownership and residual claims shall be considered important(Hart & Moore, 1990).

In relationship between corporate governance structure and corporate achievement major study theories are developed as 3 as followings. First, convergence of interest hypothesis based on Agency Theory of Berle & Means(1967) or Jensen & Meckling(1976). This is the advocacy if stock ownership of corporate management is getting increased, activity costs having no relation with corporate values, so to speak, agency costs will be reduced and it forms the same interest with owners. Second, managerial entrenchment hypothesis in opposition to Agency Theory, if stock ownership of management is getting increased, then business owner tends to obtain private interest than maximization of the corporate values and values of the corporation getting decreased. Third, compromise hypothesis between Agency Theory and the managerial entrenchment hypothesis asserts that stock proportion of management and corporate values are not in linear relationship but non-linear relationship where the positive and the negative coexist according to stock holding rate(McConnell & Servaes, 1990).

According to western literature study, corporation with good governing hierarchy deals better with agency issues(Aoki & Qian, 1995). Cochran & Wartick(1988) claims that central issues of corporate governance structure derives from the facts that those should take the profit does not coincide with those taken the profit actually by strategic behavior of top management. Problems to be solved basically from the governance structure is how to secure the interest of capital supplier of the corporation and governance structure should protect the interest of capital investors of capital(Heier, Dugan & Sayers, 2004).

When considering the study of Chinese scholars on governing hierarchy of China's SOEs, due to extraordinary social and political circumstances of China, there are many asserts that stockholders-proxy representative issue of western market economy have appeared different pattern in China(Fu, 2006; Ouyang, 2003; Zhang & Han, 2008). Fu(2006) argued that the problem of governance structure of China's SOEs comes directly from characters of China's SOEs and reforming process of SOEs. They assert China's SOEs during economy transformation period due to its abstractive ownership of national property and it lacks corporate ownership which causes agency problem, and they claim ownership of national property should be clarified to solve such problem(Ouyang, 2003; Zhang & Han, 2008). Also for reformation of governance structure of China's SOEs there are claims which assert proper outside circumstance(Zou & Hu, 2004; Lv, 2008).

Also some experts claim when discussing governance structure of SOEs, problems of governance structure would be improved only when internal control mechanism of the corporation and external control mechanism of the corporation work together at the same time(Guo, 2004; Zhu, 2005). In case of the U.S. due to corruption of Enron in 2002 when the administration announced Sarbanes-Oxley Act which enforces internal control mechanism of corporation to respond the problems of governance hierarchy unbalance of American enterprise

and defects of external control system, then it became a case control mechanism has drawn attention not much dealt in previous study so far.

Internal control mechanism

The concept of internal control originates from when "Internal accounting control system" was defined for the first time in <Securities Exchange Act> of U.S. in 1934. However it was defined as definition of accounting at that time and had no organizing meaning. In 1992 the United States established Committee of Sponsoring Organizations of the Tread-way Commission(COSO), and announced Internal Control- Integrated Framework which is the professional study report on internal control. According to the report COSO Committee prepared, internal control can be defined as followings: " Internal control is a process, effected by entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding achievement of objectives in the following categories. Combining with business management internal control mechanism includes control environment, risk appraisal, control activity, information and communication and monitoring, and in modern corporate system soundness of corporate governance structure could be evaluated by internal control mechanism" (COSO, 1994).

Though China became to have interest in internal control mechanism lately since 2005 compared to western countries, they attracted worldly attention by its rapid legalization process. Chinese finance department incorporated "China Internal Control Standards Committee(CICSC)" on July 15th in 2005, and acknowledgement was spread out fast during 2005-2007, and Basic standard for enterprise internal control was into effectuation on July 1st in 2009 legally prepared by CICSC since March 2007.

By developing standards of corporate internal control mechanism in such a short period of time, obviously China is still in immature situation, and has many difference from internal control mechanism western scholars claimed (Liu, et al., 2009). Though there are many problems in China's SOEs, but what is the reason for China's SOEs not only achieved brilliant economic growth and gave positive social influence? To explain these questions let us take a look at unique organization of China's SOEs only had, the role of CCP organization performed in corporation.

REFORMING GOVERNANCE STRUCTURE OF CHINA'S SOES

By In later 20th centuries, governments around the world initiated reforming SOEs to cope with fiercely increased market competition. To face this confrontation each government by enlarging operational autonomy used various resolving methods including renovation of corporate management mechanism. By launching reforming open door policy since 1978, China has pushed firm reforming policy of SOEs by targeting effective union between state economy and market economy continuously. Reforming SOEs since 1993 has focused on systematic

renovation, initiated by launching the reformation on the ownership introduced modern corporate system into SOEs. By this measure China's SOEs could develop capability according to law, make their own decisions regarding their operations, be responsible for their own losses and profits and be capable of expanding or contracting themselves to compete international enterprise, and corporate management mechanism became systemized also. To summarize reforming history of China's SOEs would be divided as followings.

Table 1
REFORMING PROCESS AND REFORMATION RESULTS OF CHINA'S SOE's

Reformation Time	1978-1985	1986-1991	1992-2002	2003-Now
Main Contents	Delegate the decision right to factory director holding profit into SOEs Expanded management autonomy	Management responsibility system Separation of Ownership & managerial authority	Modern Corporate System Incorporation introduced reformation, Laws Strengthening	The SASAC (State-owned Assets Supervision and Administration Commission) Establishment. Enhance supervision and service of State-owned assets
Reformation Results	Performance Evaluation System inexistence External Environment Shortage of reformation State-owned Assets Invasion victims	Short-term performance Excessive pursuit Government administrative department Corruption deepening	Despite some achievements, owner of state-owned assets is still issue	Emphasize the political core role of the CCP organization for the corporate governance structure

Though reformation of China's SOEs since 1978 has not ended yet, but acquired much achievement. Those are summarized as 3 points as followings. First, governance structure of SOEs has been improved. More than 50% of major SOEs achieved stock share system. Especially in case of SOEs directly controlled by central government of China, more than 65% among those achieved in inducing modern corporation system successfully. Second, it improved influence of state-owned economy. Total amount of State-owned capital by 2007 was 11,620 billion RMB, and total assets of SOEs was 29,464 billion RMB, and tax payment of SOEs in 2007 was 880 billion RMB which acquires 17.6% among national fiscal income reporting, and 20 China's SOEs have been grown as the Fortune 500 companies. Third, by establishing State-owned Assets Supervision and Administration Commission (SASAC), and supervised investors of State-owned assets, supervising management for State-owned assets was strengthened.

Though China's SOEs achieved great results in systematic and economic perspective for 30 years reforming drive, still there are problems remained. In legal modern enterprise system at

SOEs it shows shortcomings at supervising mechanism for corporate directors due to functional absence of board of directors , and this is an assignment to be resolved by SOEs in the future. Though it is required for China's SOEs legal governance system to be adjusted to market economy to achieve target of continuing operation, but legal governance system is stationed at early primary stage so the development of SOEs is being restricted.

Wu(2008) claims the process of systematic change of China's SOEs has been restricted by political circumstance of SOEs is faced. He suggested when talking systematic reformation of China's SOEs, involvement of CCP and Chinese government, and political precondition like Socialism are operated as indispensable elements of environment, and when political roots of SOEs behind governance structure change, then we could understand the changes of governance structure in SOEs. Therefore, on the issue of what kind of role CCP organization does in China's of SOEs, and what sort of role CCP organization does in governance structure shall be investigated in details by the case study of Baosteel, the biggest Chinese steel company.

CASE STUDY OF BAOSTEEL

Introduction of company

Baosteel is Chinese representative State-owned Enterprise which is directly controlled by the SASAC what is the subsidiary department of State Council in Chinese government execute the responsibility as owner for Baosteel.

Baosteel is the most competitive steel company in China, and obtained No. 3 position in world steel industry by acquiring 38,870 thousand ton(2009) in steel production. According to survey of National Bureau of Statistics of China, Baosteel accomplished No. 1 among Chinese engineering enterprise for consecutive 6 years, and annual corporate income in 2009 was 195.3 billion RMB, and net profit was 14,900 million RMB, total assets amount 402 billion RMB, number of employee was 106,914, and ranked 220th in Fortune500.

Baosteel invested R&D budget focused into high additive value steel products and produced steel products requiring to industry as automobile, home electronics, petroleum chemistry, space aircraft and electronics, and selling those steel products by exporting to 40 countries and regions through global sales network.

In recent years Baosteel by establishing strategy which integrates steel supply chain, technological chain and resource chain and stationed itself as competent excellent corporation based on steel industry by unifying external materials through M & A.

In reforming China's SOEs Baosteel became a model enterprise inducing modern corporate system like outside director for the first time as central enterprise in October, 2005, and improved system of board of directors continuously. At the same time SASAC provided strategic reforming mission as "Combining the system of board of directors and the political core function of the CCP organization" to Baosteel and Baosteel performed reformation by focusing

on relation and connection of the CCP organization and corporate governance structure continuously for that.

Furthermore, we'll take a look at governance hierarchy of Baosteel, and will analysis what kind of role the CCP organization played in the governance structure.

Baosteel started to apply modern corporate system by introducing board of directors from October in 2005. Though governance structure of Baosteel is similar to western enterprise as composed of board of directors and top management team, Party Standing Committee(PSC: top Party organization in corporation) which is the CCP organization exist both at board of directors and top management team included by overlapping, so this is different from that of United States and Europe. Detailed governance structure is as following <figuer1> and <figure2>.

Figure 1
BOD MEMBERS OF BAOSTEEL(2009)

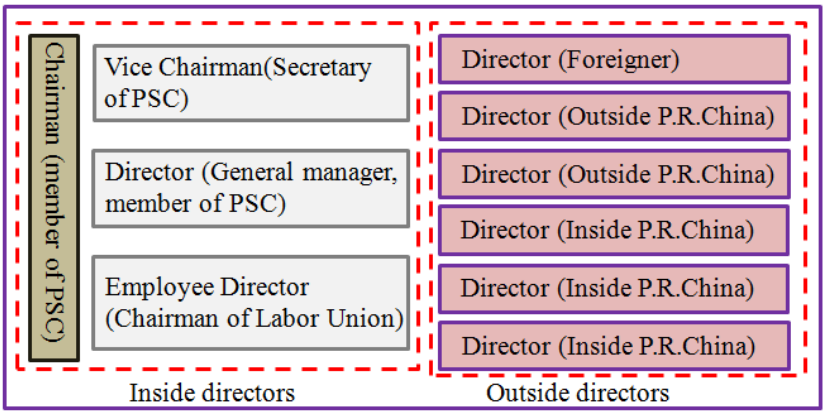
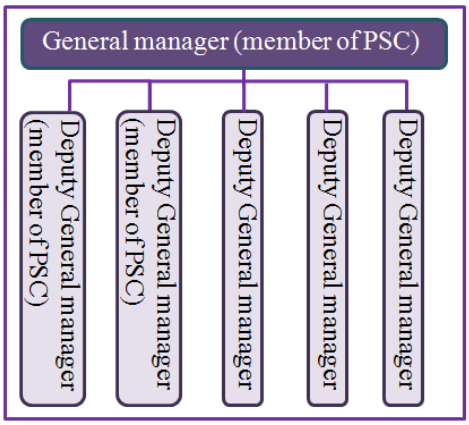


Figure 2
TMT MEMBERS OF BAOSTEEL(2009)



As in figure 1 and figure 2, member of the PSC of Baosteel seated member of board of directors and also participates top management as "Cross into each organization, holding two

positions at the same time". This is the result after Baosteel induced system of board of directors members of PSC were reorganized to meet modern corporate system again. Contrary to top administrators executing strategy in SOEs or board of directors deciding the strategy, the Party organization of SOEs exist as role player of supervising the policy and guidelines of the State or CCP accommodated by SOEs and applied practically, PSC of Baosteel placed members of PSC into both board of directors and top management in the formation of holding additional position of board of directors and top management team from the judgment that it is not necessary to institute PSC in addition to board of directors and top management in the corporation. Therefore, though it is less than 5 years since board of directors of Baosteel instituted, and no matter what shortage of experience and know-how to perform the role of board of directors actually, because PSC developed continuously since incorporation of Baosteel exists there, so it is considered it performed as the role of supervision and assistance in some extent to top management team. And let us take a look into what kind of role the PSC does when detailed decision is made at Baosteel.

Political core function of Party organization

Party organization of corporation has similarity and difference comparing to that of non-profit organization like local community and school. As a common element party organization in all organization has responsibility to preach communist philosophy and policy to lower organization and does the role of supervising whether such cell organization learn the thoughts of the China Party Central Committee(CPCC), and whether they follow administration and policy of CPCC. Difference between Party organizations in other organization, in the corporation the CCP organization provides Communism philosophy learning activities with the view to getting economic profit. So to speak, the PSC in the company not only play the role of supervising in modern corporate system but also provide support and assistance. Vital obligation of corporation is defined to create national economic interest by achieving economic effects, and accordingly corporate PSC not only provides support to corporate economic production activities but also provides necessary support and assistance to corporate administrators through unifying with national interest in the limits not violating policy principles of CPCC and central government.
There is complicated issue that "whether the PSC make a decision directly?" in case of strategic decision making process for corporation. Actually before Chinese reforming open door policy in 1978 all the Chinese enterprises belonged to state, and it can be said top corporate administrators and the Party committee were overlapped and all the strategic decision making of corporation was decided by the CCP organization. But from early stage of open door policy Deng Xiaoping pointed it was not effective for the CCP organization to manage the corporation directly, after that the role of the CCP organization was changed to focusing political core function(Deng, 1994). The CCP organization was required to promote spiritual attainments of the corporate members and do function as political brain to moderate purpose conflict between corporation and

government. Actually the CCP organization on the matter of corporate management and production perform not a decisive opinion but an assistant or supervising role. Especially in the process of introducing board of directors which is a modern corporate system the CCP organization does not replace the function of board of directors but provide assistance and support to board of directors to promote the function of supervising and decision making process. And for top management teams it does not provide intervention and policy pressure from the CCP organization, instead it would be proper interpretation for political core function of the CCP organization in SOEs to be understood as perform assistant job for administrators to establish harmonious strategy with State progress.

To consider above, corporate PSC exist having connection with organization of the modern corporate system as board of directors, top management teams and audit committee, at the same time it exists as independent political hierarchy, the role of PSC is distinctively different from those of other organizations'. Especially while audit committee does provide supervision function to administrators and board of directors, the PSC is difference from audit committee that it provides support and assistance required to top management teams and board of directors while it supervise them simultaneously.

PSC and Internal control mechanism

The PSC of Baosteel provides following 4 function in performing the political core function:

First, the PSC supervises the corporation whether they actually practice principles and policy of CCP and government.

Second, the PSC provides support and assistance in the realms of political authority to board of directors, meeting of stockholders and management team according to the law.

Third, the PSC participates in major important decision making of corporation and mitigates discord between board of directors and top management teams, also reports and advises negative opinion to top management teams on corporate strategy disagreement with management principles of State or CPCC. Important corporate decision makings the corporate PSC participate includes, for example, corporate development strategy, important personnel movement, management of human resources, salary distribution related to employees benefit, strategy on production and important decision making for corporate reformation.

Fourth, the PSC provides ideological and political education to enhance the Socialism construction of ideological infrastructure, and leads the management of constituent members including Labor Union and Communist Youth League which are the subsidiaries workers organization of corporation.

Considering above, the PSC of Baosteel is functioning organizing structure which proceeds performing of control environment the elements of internal control mechanism, risk evaluation of important corporate strategy and control activity, sharing the information of corporate top management team and board of directors with interactional communication, and supervising the top management teams, so the PSC of Baosteel could be understood it performs the role of internal control mechanism.

PSC and External control mechanism

As discussed above the CCP organization of Baosteel, PSC performs as corporate internal control mechanism. According to previous study most desirable governance structure is combination of internal control mechanism and external control mechanism, and this structure could remove agency problem most effectively. Actually considering external control mechanism of Baosteel the SASAC positioned as an owner and external circumstances which Baosteel is faced with. Therefore, the government has more tendencies to involve and advise on corporate strategic decision making process through SASAC to supervise Baosteel. If governing administrators get much restriction and intervention from SASAC. It is getting difficult to establish optimal strategy for growth of the corporation. At this time the PSC motivated as internal control mechanism connect with the CCP organization of SASAC which as external control mechanism for the corporate in order to accomplish mutual understanding and communication between Baosteel top management and SASAC to provide pleasant development environment to prevent collision between corporate and government. And at the same time it transmits policy and principles of government to top management through the PSC, it could prevent management to establish strategy which are disagreement with State or CPCC.

Human resource training as basic obligation of CCP organization

It is true that China's SOEs is inferior to foreign enterprise on capital, technology, management know-how and etc. However one of the extraordinary superiority that they have CCP organization causes the human resources who have strong will. Party member could be described as excellent man power because they have definite confidence and excellent organization management ability. This excellent human resource is the characteristics that only China's SOEs could have. The fundamental reason Baosteel could achieve great progress as the world most competitive firm in such a short period of time by 30 years history can be found from the fact that they converted promotion and excellent organization management ability of party members into corporate competitive capability.

"As difference of 'Hard Capability' among enterprises is getting reduced day by day, the role of 'Soft Capability' gets more important. Soft capability has been recognized as heart of corporate core competition, and leadership of top manager can be considered as the most important 'soft capability' among them. This could be established through performance of political priority of CCP organization which conceived man as basis."

By CCP's secretary Liu

The CCP organization of Baosteel executed decisive role in leadership training for top management team. In details it did versatile roles including capability enhancement of TMT members of PSC, formulation of responsibility, and supervision of practice process. Theoretical study of the PSC center group ("PSC Center group studying" for short) which head of by CCP organization in Baosteel, established the theme as "discussing important corporate strategic issues based on progress theory of CCP, and implementing creative idea considering overall national economy". Through the PSC center group studying, the PSC top administrators of Baosteel and staff members of board of directors not only enhance individual moral attainments but also promote acquiring capability on corporate strategy, management know-how, government policy regulations. Therefore, we see that the CCP organization provides positive influence on the concept of sustainable management of TMT members and training their leadership competence.

There are 3 major patterns among the PSC center group studying. First, it is held to deliver important document or conference spirit of CPCC and State Council. Second, it is held to report success stories of main company or subsidiaries in regular basis. Third, it is held to discuss some specific issues of corporate development regularly in seminar style. Among these three patterns, the last one "Specific issues discussion" is the most important. For example in 2009, the PSC center group studying discussed for specific issues of Baosteel was held 6 times in regular basis. In the conference active discussion was proceeded among board of directors, top managers and the PSC members in free atmosphere on the issue of future vision or facing structural problem. This has been a help for communication between board of directors and TMT to be in accord each other, and became effective pattern for PSC to participate important strategic decision making process of corporation.

ANALYSIS OF CASE STUDY AND PROPOSITION SETTING

As studied above the CCP organization of Baosteel has been concluded promoting as internal control mechanism in corporate governance structure which coordinates relationship between top management team and board of directors. Accordingly in governance structure of China's SOEs, the PSC which is the highest organization in CCP organization performed the role of right supervision and recommendation to strategic decision making of top management teams by complementing the role of imperfect board of directors in the process of corporate modernizing process for China's SOEs. Through this it is possible for SOEs to have more

rational and long-term base decision making which promote corporate values. Through this case following proposition is available.

Proposition 1 *As relationship among the PSC, board of directors and top managers get closer, interest of corporate board of directors and top management team is in accord with each other and it will give productive influence to corporate performance.*

Prop. 1-1 *If communication among the PSC, board of directors and top managers get increased, collision of opinion will be reduced, and diminishing conflict shall result positive influence to corporate performance.*

Prop. 1-2 *If cross-overlapping members are increased among the PSC, board of directors and management, top managers will consider corporate interest than individual profit, and agency problems of management will reduce which will cause positive influence for corporate performance.*

In the case of Baosteel, China's SOEs once exposed to external environment, the supervision and intervention of State Council or SASAC, in this circumstance SOEs could not only overcome restrictions of external environment by extending the connection of CCP organization but also could establish strategy to face the change of external situation. Ultimately there has positive influence to corporate performance. Therefore, the relationship between the PSC and CCP organization of SASAC as external state organization of supervision provides important element for corporate success. Upon this agenda following proposition could be drawn.

Proposition 2 *The relationship between the PSC and CCP organization of SASAC is getting intimate, external uncertainty of corporation will be reduced and shall give positive influence for corporate performance.*

Prop. 2-1 *If official communication between PSC and CCP organization of SASAC gets increased, intervention of external supervision agency will reduce and that will bring positive influence to corporate performance.*

Prop. 2-2 *If non-official communication among between PSC and CCP organization of SASAC gets increased, interest of the corporation and external supervision agency shall be in accord and will bring positive influence to corporate performance.*

CONCLUSION

This study investigated CCP organization the characteristics of Chinese State-owned corporate governance structure compared to governance structure of advanced Western Corporation not dealt with previous studies by focusing on the Chinese State-owned corporate governance structure. Specifically through the case of Baosteel we've discussed what kind of

role does CCP organization in the SOEs. Looking at the case study result, PSC, the highest CCP organization of China's SOEs promote complementary role for imperfect board of directors in corporate which induced modern enterprise system, and provide supervision and assistance role to corporate top management as internal control mechanism, and also connected to SASAC, the external environment supervising the corporation as the external control mechanism. Through this it has been known that providing unified internal/external circumstance toward management of SOEs, it coordinates corporate strategy and surrounding circumstance for State and CPCC and purpose of corporation to be in accord each other. Through the case study of Baosteel on the issue of reforming governance structure of China's SOEs, the answer has been found why corporate CCP organization should be kept although modern enterprise system induced, and we could affirm the importance of role of CCP organization in the China's SOEs.

To discuss with implications of this study, first, this study is an investigative research by strategy management perspective to the role of CCP organization and it suggests we must consider the role of CCP organization of the China's SOEs when investigating their success. Second, among our study on the governance structure of China's SOEs, it could be a meaning of this study which suggested internal control mechanism the party organization performs for which previous study didn't treat much CCP organization in the SOEs has been analyzed as doing the role of internal control mechanism in the stage of present state of board of directors not mature yet. Finally it provided analysis of the role of CCP organization of China's SOEs as external circumstance coordinate mechanism. This investigated the CCP organization gave positive influence to corporate success by make it possible to respond external environment in a fast and active way. In overall sense, this study has the meaning through making comprehensive pioneer research on governance structure of China's SOEs.

To summarize limitations of this study, it is less persuading for this study to suggest Baosteel the only one case due to versatile administrative environment, industrial environment, regional circumstance and internal situation faced with China's SOEs, so it is necessary to provide empirical study by collecting more cases of China's SOEs in the future. Also there are many difficulties to generalize the role of corporate CCP organization in Socialist country because of the shortage of previous study on the role of corporate CCP organization of other Socialist state other than China. Therefore, in the future we could proceed comparative study on governance structure of China's SOEs with that of other countries by taking SOEs of other Socialist countries as a research target and find some difference among them.

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